

Pham 206508

Index	Name	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End																																																																																																																																																													
51	NiBb	0	10	10	20	20	30	30	40	40	50	50	60	60	70	70	80	80	90	90	100	100	110	110	120	120	130	130	140	140	150	150	160	160	170	170	180	180	190	190	200	200	210	210	220	220	230	230	240	240	250	250	260	260	270	270	280	280	290	290	300	300	310	310	320	320	330	330	340	340	350	350	360	360	370	370	380	380	390	390	400	400	410	410	420	420	430	430	440	440	450	450	460	460	470	470	480	480	490	490	500	500	510	510	520	520	530	530	540	540	550	550	560	560	570	570	580	580	590	590	600	600	610	610	620	620	630	630	640	640	650	650	660	660	670	670	680	680	690	690	700	700	710	710	720	720	730	730	740	740	750	750	760	760	770	770	780	780	790	790	800	800	810	810	820	820	830	830	840	840	850	850	860	860	870	870	880	880	890	890	900	900	910	910	920	920	930	930	940	940	950	950	960	960	970	970	980	980	990	990	1000	1000

r01: Maria	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	600	637	657	685	673	686	708	728	746	753		
r02: Siara	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r03: Taqui	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r04: Omnia	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r05: Collin	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r06: Thyala	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r07: Mirya	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r08: Krati	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r09: Psych	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r10: Dadas	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r11: Fayette	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r12: Atley	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r13: Okir	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r14: SoSe	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r15: Paola	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r16: Rand	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r17: Eduga	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r18: Phel	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r19: Darin	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r20: Krueg	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r21: Bryle	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r22: Nover	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r23: SitPh	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r24: Amgin	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r25: Sha	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r26: Amol	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r27: TCM	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r28: Yuna	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r29: Ximen	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r30: Feler	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r31: Apple	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r32: Sumi	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r33: Syra	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r34: Ivans	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r35: Ekdita	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r36: Elite	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r37: Amig	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753
r38: Bolgate	102	121	151	168	222	223	230	238	323	342	390	451	491	538	538	571	600	621	644	651	685	673	686	708	728	746	753

Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

Pham 206508 Report

This analysis was run 02/22/25 on database version 588.

Pham number 206508 has 287 members, 30 are drafts.

Phages represented in each track:

- Track 1 : 8UZL_19
- Track 2 : Muddy_19
- Track 3 : NoShow_16
- Track 4 : Maco6_17
- Track 5 : FF47_19
- Track 6 : PinkYoshi_16, Darionha_16, CLED96_16, Frosty24_16, ShaboiShabazz_16, Crespo_16, LouisV14_16, Jolene_16, BQuat_16, Jane_16, Zombie_16, TomBrady_16, CassieYates_16, Camri_16, Angel_16, Halo_16, OctaviousRex_16, DMoney_16, ECartman_16, Kasen3_16, Sweets_16, Wendigo_16, Remy19_16, Gomashi_16, BPs_16, ZoMa_16, Gideon_16, Peeb_16, JorRay_16, Coleslaw_16, Avrafan_16, Jonghyun_16, GoldenAsh_16, Cherrybomb426_16, Sizemore_16, Schiebel_16, Plagueis_16, Phreak_16, Olga_16, Aroostook_16, Barkley26_16, Phish_16, Hope_16, DNAIII_0016, Hotshotbaby7_16, Mowgli_16, Kareem_16, Chance64_16, BruceB_16, TinaBug_16, Marmie_16, Cedasite_16, Maliketh_16, Renaissance_16, Annihilator_16, Periodt_16, AzulaCat_16
- Track 7 : Paito_16
- Track 8 : Grizzly_16
- Track 9 : Taheera_16, Terror_16
- Track 10 : Rabbs_16, Sneeze_16
- Track 11 : Liefie_16
- Track 12 : Cambiare_17
- Track 13 : FlagStaff_16
- Track 14 : Avocado_16
- Track 15 : Pace1224_16
- Track 16 : MOOREtheMARYer_16
- Track 17 : Pinnie_17
- Track 18 : Lemuria_16
- Track 19 : Jolie2_16
- Track 20 : Mercurio_17
- Track 21 : Antsirabe_16
- Track 22 : Stargaze_16
- Track 23 : Piatt_21, Durfee_21, BaghaKamala_21, Boiii_21, Peel_21, Dalmuri_21, Blizzard_21, Topper_21, Inky_21, JAWS_21, Asayake_21, BGlluviae_21, Capricorn_21, Jeckyll_21, CREW_21, Padfoot_21, Rosmarinus_21, Twitch_21, BEEST_21, BarrelRoll_21, Hyperbowlee_21, Jarvi_21, Spock_21, ShiaSurprise_21, Lunahalos_21, CaseJules_21

- Track 24 : LilPharaoh_17, Mdavu_17, Nutello_17, Amelie_17, Teejan_17, SgtBeansprout_17, Enkosi_17, Torres_17, Biglebops_17
- Track 25 : Apocalypse_21
- Track 26 : Murucutumbu_21, Ageofdapage_21, Stinson_21, LaterM_21
- Track 27 : Slimphazie_21, Adephagia_21, Jayhawk_21, HedwigODU_21, ActinUp_21, Tachez_21, Zabiza_21, Atiba_21, Ramen_21, TruffulaTree_21, Rapunzel97_21
- Track 28 : Chavito_21
- Track 29 : CrimD_21
- Track 30 : Shaobing_21
- Track 31 : Bella96_21
- Track 32 : McMater_21, Dartin_21, Niklas_21, Richo_21, Peanam_21
- Track 33 : YoureAdopted_20
- Track 34 : Devera_21, Dole_21, Illumine_21
- Track 35 : Joy99_21, MeaningOfLife_21, Geraldini_21
- Track 36 : Mynx_21, Pokerus_20
- Track 37 : Prithvi_21, LindNT_21, TreyKay_21
- Track 38 : Belladonna_21
- Track 39 : MarkPhew_21
- Track 40 : CheetoDust_21
- Track 41 : AlishaPH_21, Emerson_21, Padpat_21
- Track 42 : TaiwanKao_22
- Track 43 : Adonis_21
- Track 44 : Oscar_20
- Track 45 : Zavala_21
- Track 46 : Angelica_21, Deby_21, Sulley_21
- Track 47 : Clipper_23, MackKat_22
- Track 48 : Anaya_22
- Track 49 : Guanica15_21, Yunkel11_21
- Track 50 : Validus_21
- Track 51 : Nibb_20
- Track 52 : Nikao_17
- Track 53 : Curiosium_22
- Track 54 : Beezoo_21
- Track 55 : CallaLilly_22
- Track 56 : LeMond_20
- Track 57 : Scarlett_20
- Track 58 : Veliki_21
- Track 59 : LastHope_21
- Track 60 : Bern_23
- Track 61 : TiniBug_21
- Track 62 : DrHayes_21, Urkel_21, SamuelLPlaqson_21
- Track 63 : KiSi_20
- Track 64 : Chris_20
- Track 65 : Tiri_21
- Track 66 : Efra2_21
- Track 67 : Homura_21
- Track 68 : QuincyRose_20
- Track 69 : Ganymede_22
- Track 70 : Megsy_21
- Track 71 : TingHuaYa_21
- Track 72 : Llorens_21
- Track 73 : ZoeJ_17

- Track 74 : Doughnut_17
- Track 75 : Milly_17
- Track 76 : BoostSeason_17
- Track 77 : Mufasa_17
- Track 78 : Strobilo_17
- Track 79 : DismalFunk_17, Marcoliusprime_17, DismalStressor_17
- Track 80 : Findley_17
- Track 81 : TM4_17
- Track 82 : Neighly_19, Larva_19
- Track 83 : MacnCheese_21
- Track 84 : TBond007_20
- Track 85 : Pharb_20
- Track 86 : Keshu_20
- Track 87 : Hurricane_20
- Track 88 : TribbleTrouble_19
- Track 89 : Lea83_21, ShedlockHolmes_20
- Track 90 : Pixie_20
- Track 91 : OmniCritical_22, Mitti_22, SamScheppers_20
- Track 92 : MissDaisy_22, Patt_22, Reptar3000_22
- Track 93 : Bobquesha_22
- Track 94 : Juliette_22, Ruthiejr_21
- Track 95 : Fionnbharth_22, Wintermute_22
- Track 96 : Chancellor_22
- Track 97 : Lebo14_22
- Track 98 : JF1_22, Y2_22, Y10_22
- Track 99 : Cheetobro_22
- Track 100 : Eponine_22
- Track 101 : Malthus_22, Kraw_22
- Track 102 : Slarp_22
- Track 103 : Taquito_20
- Track 104 : Omnicron_19
- Track 105 : Collard_19, InvictusManeo_19, ViviJ_18, Agent47_19
- Track 106 : Thyatira_19, Waterfoul_19
- Track 107 : Miryou_19
- Track 108 : Kratio_18
- Track 109 : Psycho_19
- Track 110 : Dadosky_19
- Track 111 : Feyre_19
- Track 112 : AlleyCat_19
- Track 113 : OkiRoe_19
- Track 114 : SoSeph_19, Heftyboy_19
- Track 115 : Paola_19, Gengar_19, Guillsminger_19, Leston_19
- Track 116 : Rando14_19
- Track 117 : Edugator_18
- Track 118 : PhelpsODU_20, Unicorn_20
- Track 119 : DARTH_P_20, Hammy_20
- Track 120 : Krueger_20
- Track 121 : Bryler_20, Cain_20, Tierra_20, Phrank_20
- Track 122 : November_20
- Track 123 : SirPhilip_20
- Track 124 : Amgine_19
- Track 125 : Shadow1_19
- Track 126 : Amohnition_20

- Track 127 : TClif_20
- Track 128 : Yuna_21
- Track 129 : Ximenita_21
- Track 130 : Fefferhead_20
- Track 131 : Applecrisp_20
- Track 132 : Sunflower1121_19
- Track 133 : Syra333_20
- Track 134 : Marshawn_22
- Track 135 : Ekdilam_18
- Track 136 : Ellie_18
- Track 137 : Aminay_19
- Track 138 : Boilgate_18

Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 15, it was called in 162 of the 257 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ActinUp_21, Adephegia_21, Adonis_21, Ageofdapage_21, AlishaPH_21, Amelie_17, Amgine_19, Aminay_19, Amohnition_20, Anaya_22, Angel_16, Angelica_21, Annihilator_16, Apocalypse_21, Applecrisp_20, Aroostook_16, Asayake_21, Atiba_21, Avrafan_16, AzulaCat_16, BEEST_21, BGIlluviae_21, BPs_16, BQuat_16, BaghaKamala_21, Barkley26_16, BarrelRoll_21, Beezoo_21, Bella96_21, Bern_23, Biglebops_17, Blizzard_21, Boiiii_21, BruceB_16, CLED96_16, CREW_21, CallaLilly_22, Camri_16, Capricorn_21, CaseJules_21, CassieYates_16, Cedasite_16, Chance64_16, CheetoDust_21, Cherrybomb426_16, Clipper_23, Coleslaw_16, Crespo_16, CrimD_21, DMoney_16, DNAlll_0016, Dalmuri_21, Darionha_16, DarthP_20, Deby_21, Devera_21, Dole_21, DrHayes_21, Durfee_21, ECartman_16, Ekdilam_18, Ellie_18, Emerson_21, Enkosi_17, Fefferhead_20, Frosty24_16, Ganymede_22, Geraldini_21, Gideon_16, GoldenAsh_16, Gomashi_16, Grizzly_16, Halo_16, Hammy_20, HedwigODU_21, Homura_21, Hope_16, Hotshotbaby7_16, Hurricane_20, Hyperbowlee_21, Illumine_21, Inky_21, JAWS_21, Jane_16, Jarvi_21, Jayhawk_21, Jeckyll_21, Jolene_16, Jonghyun_16, JorRay_16, Joy99_21, Kareem_16, Kasen3_16, Keshu_20, LaterM_21, Lea83_21, Liefie_16, LilPharaoh_17, LindNT_21, Llorens_21, LouisV14_16, Lunahalos_21, MacKat_22, MacnCheese_21, Maliketh_16, Marmie_16, Mdavu_17, MeaningOfLife_21, Megsy_21, Mowgli_16, Murucutumbu_21, Mynx_21, Nikao_17, November_20, Nutello_17, OctaviousRex_16, Olga_16, Padfoot_21, Padpat_21, Paito_16, Peeb_16, Peel_21, Periodt_16, Pharb_20, Phish_16, Phreak_16, Piatt_21, PinkYoshi_16, Pixie_20, Plagueis_16, Pokerus_20, Prithvi_21, QuincyRose_20, Rabbs_16, Ramen_21, Rapunzel97_21, Remy19_16, Renaissance_16, Rosmarinus_21, SamuelLPlaqsom_21, Schiebel_16, SgtBeansprout_17, ShaboiShabazz_16, ShedlockHolmes_20, ShiaSurprise_21, Sizemore_16, Slimphazie_21, Sneeze_16, Spock_21, Stinson_21, Sulley_21, Sweets_16, TBond007_20, Tachez_21, Taheera_16, TaiwanKao_22, Teejan_17, Terror_16, TinaBug_16, TiniBug_21, Tiri_21, TomBrady_16, Topper_21, Torres_17, TreyKay_21, TribbleTrouble_19, TruffulaTree_21, Twitch_21, Urkel_21, Veliki_21, Wendigo_16, YoureAdopted_20, Zabiza_21, Zavala_21, ZoMa_16, Zombie_16,

Genes that have the "Most Annotated" start but do not call it:

- Belladonna_21,

Genes that do not have the "Most Annotated" start:

- 8UZL_19, Agent47_19, AlleyCat_19, Antsirabe_16, Avocado_16, Bobquesha_22, Boilgate_18, BoostSeason_17, Bryler_20, Cain_20, Cambiare_17, Chancellor_22, Chavito_21, Cheetobro_22, Chris_20, Collard_19, Curiosium_22, Dadosky_19, Dartin_21, DismalFunk_17, DismalStressor_17, Doughnut_17, Edugator_18, Efra2_21, Eponine_22, FF47_19, Feyre_19, Findley_17, Fionnbharth_22, FlagStaff_16, Gengar_19, Guanica15_21, Guillsminger_19, Heftyboy_19, InvictusManeo_19, JF1_22, Jolie2_16, Juliette_22, KiSi_20, Kratio_18, Kraw_22, Krueger_20, Larva_19, LastHope_21, LeMond_20, Lebo14_22, Lemuria_16, Leston_19, MOOREtheMARYer_16, Maco6_17, Malthus_22, Marcoliusprime_17, MarkPhew_21, Marshawn_22, McMater_21, Mercurio_17, Milly_17, Miryou_19, MissDaisy_22, Mitti_22, Muddy_19, Mufasa_17, Neighly_19, Nibb_20, Niklas_21, NoShow_16, OkiRoe_19, OmniCritical_22, Omnicron_19, Oscar_20, Pace1224_16, Paola_19, Patt_22, Peanam_21, PhelpsODU_20, Phrank_20, Pinnie_17, Psycho_19, Rando14_19, Reptar3000_22, Richo_21, Ruthiejr_21, SamScheppers_20, Scarlett_20, Shadow1_19, Shaobing_21, SirPhilip_20, Slarp_22, SoSeph_19, Stargaze_16, Strobilo_17, Sunflower1121_19, Syra333_20, TClif_20, TM4_17, Taquito_20, Thyatira_19, Tierra_20, TingHuaYa_21, Unicorn_20, Validus_21, ViviJ_18, Waterfoul_19, Wintermute_22, Ximenita_21, Y10_22, Y2_22, Yuna_21, Yunkel11_21, ZoeJ_17,

Summary by start number:

Start 5:

- Found in 1 of 287 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 257
- Called 100.0% of time when present
- Phage (with cluster) where this start called: NoShow_16 (AB),

Start 12:

- Found in 3 of 287 (1.0%) of genes in pham
- Manual Annotations of this start: 1 of 257
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Psycho_19 (K5),

Start 14:

- Found in 35 of 287 (12.2%) of genes in pham
- Manual Annotations of this start: 31 of 257
- Called 97.1% of time when present
- Phage (with cluster) where this start called: Agent47_19 (K5), AlleyCat_19 (K5), BoostSeason_17 (K2), Collard_19 (K5), Dadosky_19 (K5), DismalFunk_17 (K2), DismalStressor_17 (K2), Doughnut_17 (K2), Edugator_18 (K5), Feyre_19 (K5), Findley_17 (K2), Gengar_19 (K5), Guillsminger_19 (K5), Heftyboy_19 (K5), InvictusManeo_19 (K5), Kratio_18 (K5), Larva_19 (K5), Leston_19 (K5), Marcoliusprime_17 (K2), Milly_17 (K2), Miryou_19 (K5), Mufasa_17 (K2), Neighly_19 (K3), OkiRoe_19 (K5), Omnicron_19 (K5), Paola_19 (K5), Rando14_19 (K5), SoSeph_19 (K5), Strobilo_17 (K2), TM4_17 (K2), Thyatira_19 (K5), ViviJ_18 (K5), Waterfoul_19 (K5), ZoeJ_17 (K2),

Start 15:

- Found in 177 of 287 (61.7%) of genes in pham
- Manual Annotations of this start: 162 of 257
- Called 99.4% of time when present
- Phage (with cluster) where this start called: ActinUp_21 (K1), Adephagia_21 (K1), Adonis_21 (K1), Ageofdapage_21 (K1), AlishaPH_21 (K1), Amelie_17 (K1), Amgine_19 (K6), Aminay_19 (K7), Amohnition_20 (K6), Anaya_22 (K1), Angel_16 (G1), Angelica_21 (K1), Annihilator_16 (G1), Apocalypse_21 (K1), Applecrisp_20 (K6), Aroostook_16 (G1), Asayake_21 (K1), Atiba_21 (K1), Avrafan_16 (G1), AzulaCat_16 (G1), BEEST_21 (K1), BGlluviae_21 (K1), BPs_16 (G1), BQuat_16 (G1), BaghaKamala_21 (K1), Barkley26_16 (G1), BarrelRoll_21 (K1), Beezoo_21 (K1), Bella96_21 (K1), Bern_23 (K1), Binglebops_17 (K1), Blizzard_21 (K1), Boiiii_21 (K1), BruceB_16 (G1), CLED96_16 (G1), CREW_21 (K1), CallaLilly_22 (K1), Camri_16 (G1), Capricorn_21 (K1), CaseJules_21 (K1), CassieYates_16 (G1), Cedasite_16 (G1), Chance64_16 (G1), CheetoDust_21 (K1), Cherrybomb426_16 (G1), Clipper_23 (K1), Coleslaw_16 (G1), Crespo_16 (G1), CrimD_21 (K1), DMoney_16 (G1), DNAIII_0016 (G1), Dalmuri_21 (K1), Darionha_16 (G1), DARTH_P_20 (K6), Deby_21 (K1), Devera_21 (K1), Dole_21 (K1), DrHayes_21 (K1), Durfee_21 (K1), ECartman_16 (G1), Ekdilam_18 (K6), Ellie_18 (K6), Emerson_21 (K1), Enkosi_17 (K1), Fefferhead_20 (K6), Frosty24_16 (G1), Ganymede_22 (K1), Geraldini_21 (K1), Gideon_16 (G1), GoldenAsh_16 (G1), Gomashi_16 (G1), Grizzly_16 (G1), Halo_16 (G1), Hammy_20 (K6), HedwigODU_21 (K1), Homura_21 (K1), Hope_16 (G1), Hotshotbaby7_16 (G1), Hurricane_20 (K3), Hyperbowlee_21 (K1), Illumine_21 (K1), Inky_21 (K1), JAWS_21 (K1), Jane_16 (G1), Jarvi_21 (K1), Jayhawk_21 (K1), Jeckyll_21 (K1), Jolene_16 (G1), Jonghyun_16 (G1), JorRay_16 (G1), Joy99_21 (K1), Kareem_16 (G1), Kasen3_16 (G1), Keshu_20 (K3), LaterM_21 (K1), Lea83_21 (K3), Liefie_16 (G1), LilPharaoh_17 (K1), LindNT_21 (K1), Llorens_21 (K1), LouisV14_16 (G1), Lunahalos_21 (K1), MacKat_22 (K1), MacnCheese_21 (K3), Maliketh_16 (G1), Marmie_16 (G1), Mdavu_17 (K1), MeaningOfLife_21 (K1), Megsy_21 (K1), Mowgli_16 (G1), Murucutumbu_21 (K1), Mynx_21 (K1), Nikao_17 (K1), November_20 (K6), Nutello_17 (K1), OctaviousRex_16 (G1), Olga_16 (G1), Padfoot_21 (K1), Padpat_21 (K1), Paito_16 (G1), Peeb_16 (G1), Peel_21 (K1), Periodt_16 (G1), Pharb_20 (K3), Phish_16 (G1), Phreak_16 (G1), Piatt_21 (K1), PinkYoshi_16 (G1), Pixie_20 (K3), Plagueis_16 (G1), Pokerus_20 (K1), Prithvi_21 (K1), QuincyRose_20 (K1), Rabbs_16 (G1), Ramen_21 (K1), Rapunzel97_21 (K1), Remy19_16 (G1), Renaissance_16 (G1), Rosmarinus_21 (K1), SamuelLPlaqson_21 (K1), Schiebel_16 (G1), SgtBeansprout_17 (K1), ShaboiShabazz_16 (G1), ShedlockHolmes_20 (K3), ShiaSurprise_21 (K1), Sizemore_16 (G1), Slimphazie_21 (K1), Sneeze_16 (G1), Spock_21 (K1), Stinson_21 (K1), Sulley_21 (K1), Sweets_16 (G1), TBond007_20 (K3), Tachez_21 (K1), Taheera_16 (G1), TaiwanKao_22 (K1), Teejan_17 (K1), Terror_16 (G1), TinaBug_16 (G1), TiniBug_21 (K1), Tiri_21 (K1), TomBrady_16 (G1), Topper_21 (K1), Torres_17 (K1), TreyKay_21 (K1), TribbleTrouble_19 (K3), TruffulaTree_21 (K1), Twitch_21 (K1), Urkel_21 (K1), Veliki_21 (K1), Wendigo_16 (G1), YoureAdopted_20 (K1), Zabiza_21 (K1), Zavala_21 (K1), ZoMa_16 (G1), Zombie_16 (G1),

Start 16:

- Found in 70 of 287 (24.4%) of genes in pham
- Manual Annotations of this start: 58 of 257
- Called 98.6% of time when present
- Phage (with cluster) where this start called: Antsirabe_16 (G5), Avocado_16 (G2), Bobquesha_22 (K4), Bryler_20 (K6), Cain_20 (K6), Cambiare_17 (G2), Chancellor_22 (K4), Chavito_21 (K1), Cheetobro_22 (K4), Chris_20 (K1), Curiosium_22 (K1), Dartin_21 (K1), Efra2_21 (K1), Eponine_22 (K4), Fionnbharth_22

(K4), FlagStaff_16 (G2), Guanica15_21 (K1), JF1_22 (K4), Jolie2_16 (G4), Juliette_22 (K4), KiSi_20 (K1), Kraw_22 (K4), Krueger_20 (K6), LastHope_21 (K1), LeMond_20 (K1), Lebo14_22 (K4), Lemuria_16 (G4), MOOREtheMARYer_16 (G3), Malthus_22 (K4), MarkPheW_21 (K1), Marshawn_22 (K6), McMater_21 (K1), Mercurio_17 (G4), MissDaisy_22 (K4), Mitti_22 (K4), Nibb_20 (K1), Niklas_21 (K1), OmniCritical_22 (K4), Oscar_20 (K1), Pace1224_16 (G2), Patt_22 (K4), Peanam_21 (K1), PhelpsODU_20 (K6), Phrank_20 (K6), Pinnie_17 (G3), Reptar3000_22 (K4), Richo_21 (K1), Ruthiejr_21 (K4), SamScheppers_20 (K4), Scarlett_20 (K1), Shadow1_19 (K6), Shaobing_21 (K1), SirPhilip_20 (K6), Slarp_22 (K4), Stargaze_16 (G5), Sunflower1121_19 (K6), Syra333_20 (K6), TClif_20 (K6), Taquito_20 (K4), Tierra_20 (K6), TingHuaYa_21 (K1), Unicorn_20 (K6), Validus_21 (K1), Wintermute_22 (K4), Ximenita_21 (K6), Y10_22 (K4), Y2_22 (K4), Yuna_21 (K6), Yunkel11_21 (K1),

Start 23:

- Found in 123 of 287 (42.9%) of genes in pham
- Manual Annotations of this start: 1 of 257
- Called 0.8% of time when present
- Phage (with cluster) where this start called: Belladonna_21 (K1),

Start 24:

- Found in 32 of 287 (11.1%) of genes in pham
- Manual Annotations of this start: 1 of 257
- Called 3.1% of time when present
- Phage (with cluster) where this start called: Boilgate_18 (K8),

Start 28:

- Found in 5 of 287 (1.7%) of genes in pham
- Manual Annotations of this start: 2 of 257
- Called 80.0% of time when present
- Phage (with cluster) where this start called: 8UZL_19 (AB), FF47_19 (AB), Maco6_17 (AB), Muddy_19 (AB),

Summary by clusters:

There are 14 clusters represented in this pham: G5, G4, G3, G2, G1, K3, K2, K1, AB, K7, K6, K5, K4, K8,

Info for manual annotations of cluster AB:

- Start number 5 was manually annotated 1 time for cluster AB.
- Start number 28 was manually annotated 2 times for cluster AB.

Info for manual annotations of cluster G1:

- Start number 15 was manually annotated 60 times for cluster G1.

Info for manual annotations of cluster G2:

- Start number 16 was manually annotated 3 times for cluster G2.

Info for manual annotations of cluster G3:

- Start number 16 was manually annotated 2 times for cluster G3.

Info for manual annotations of cluster G4:

- Start number 16 was manually annotated 2 times for cluster G4.

Info for manual annotations of cluster G5:

- Start number 16 was manually annotated 1 time for cluster G5.

Info for manual annotations of cluster K1:

- Start number 15 was manually annotated 86 times for cluster K1.
- Start number 16 was manually annotated 16 times for cluster K1.
- Start number 23 was manually annotated 1 time for cluster K1.

Info for manual annotations of cluster K2:

- Start number 14 was manually annotated 10 times for cluster K2.

Info for manual annotations of cluster K3:

- Start number 15 was manually annotated 8 times for cluster K3.

Info for manual annotations of cluster K4:

- Start number 16 was manually annotated 19 times for cluster K4.

Info for manual annotations of cluster K5:

- Start number 12 was manually annotated 1 time for cluster K5.
- Start number 14 was manually annotated 21 times for cluster K5.

Info for manual annotations of cluster K6:

- Start number 15 was manually annotated 7 times for cluster K6.
- Start number 16 was manually annotated 15 times for cluster K6.

Info for manual annotations of cluster K7:

- Start number 15 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster K8:

- Start number 24 was manually annotated 1 time for cluster K8.

Gene Information:

Gene: 8UZL_19 Start: 11439, Stop: 14888, Start Num: 28

Candidate Starts for 8UZL_19:

(Start: 28 @11439 has 2 MA's), (30, 11454), (36, 11502), (38, 11505), (45, 11550), (81, 11673), (142, 12000), (146, 12012), (149, 12033), (162, 12117), (169, 12171), (171, 12180), (180, 12234), (181, 12243), (187, 12267), (188, 12276), (193, 12318), (201, 12363), (202, 12375), (205, 12396), (210, 12420), (222, 12474), (236, 12528), (240, 12549), (243, 12561), (247, 12585), (249, 12594), (268, 12672), (335, 12798), (343, 12840), (366, 13008), (367, 13014), (376, 13059), (402, 13182), (420, 13260), (430, 13293), (434, 13320), (437, 13332), (457, 13440), (458, 13449), (486, 13542), (495, 13572), (505, 13608), (515, 13638), (521, 13656), (528, 13683), (529, 13686), (547, 13740), (548, 13743), (566, 13833), (577, 13881), (579, 13896), (586, 13914), (591, 13929), (599, 13989), (605, 14022), (609, 14031), (612, 14040), (623, 14076), (628, 14091), (661, 14286), (677, 14481), (687, 14577), (690, 14595), (697, 14637), (698, 14643), (706, 14670), (724, 14772), (726, 14781), (734, 14820),

Gene: ActinUp_21 Start: 12079, Stop: 15918, Start Num: 15

Candidate Starts for ActinUp_21:

(Start: 15 @12079 has 162 MA's), (Start: 23 @12148 has 1 MA's), (31, 12235), (59, 12412), (66, 12439), (83, 12511), (84, 12523), (86, 12532), (98, 12604), (109, 12679), (128, 12763), (130, 12772), (133, 12793), (141, 12832), (157, 12910), (168, 12988), (183, 13078), (196, 13153), (210, 13246), (212, 13255), (214, 13267), (216, 13276), (271, 13537), (275, 13552), (282, 13585), (302, 13672), (309, 13696), (323, 13780), (338, 13864), (341, 13876), (345, 13897), (400, 14053), (439, 14134), (450, 14182), (453, 14200), (456, 14221), (463, 14257), (475, 14308), (487, 14365), (503, 14443), (506, 14452), (527, 14530), (539, 14587), (555, 14641), (602, 14881), (627, 14956), (654, 15067), (667, 15286), (669, 15298), (686, 15487), (687, 15496), (699, 15568), (708, 15598), (712, 15619), (730, 15739), (741, 15811), (745, 15829), (746, 15835),

Gene: Adephagia_21 Start: 12079, Stop: 15915, Start Num: 15

Candidate Starts for Adephagia_21:

(Start: 15 @12079 has 162 MA's), (Start: 23 @12148 has 1 MA's), (31, 12235), (59, 12412), (66, 12439), (83, 12511), (84, 12523), (86, 12532), (98, 12604), (109, 12679), (128, 12763), (130, 12772), (133, 12793), (141, 12832), (157, 12910), (168, 12988), (183, 13078), (196, 13153), (210, 13246), (212, 13255), (214, 13267), (216, 13276), (271, 13537), (275, 13552), (282, 13585), (302, 13672), (309, 13696), (323, 13780), (338, 13864), (341, 13876), (345, 13897), (400, 14053), (439, 14134), (450, 14182), (453, 14200), (456, 14221), (463, 14257), (475, 14308), (487, 14365), (503, 14443), (506, 14452), (527, 14530), (539, 14587), (555, 14641), (602, 14881), (627, 14956), (654, 15067), (667, 15286), (669, 15298), (686, 15484), (687, 15493), (699, 15565), (708, 15595), (712, 15616), (730, 15736), (741, 15808), (745, 15826), (746, 15832),

Gene: Adonis_21 Start: 12088, Stop: 15921, Start Num: 15

Candidate Starts for Adonis_21:

(3, 11869), (10, 12049), (Start: 15 @12088 has 162 MA's), (Start: 23 @12157 has 1 MA's), (31, 12244), (59, 12421), (66, 12448), (84, 12532), (86, 12541), (98, 12613), (109, 12688), (128, 12772), (130, 12781), (133, 12802), (141, 12841), (157, 12919), (168, 12997), (183, 13087), (196, 13162), (210, 13255), (212, 13264), (214, 13276), (216, 13285), (255, 13468), (265, 13522), (275, 13561), (282, 13594), (302, 13681), (309, 13705), (323, 13789), (338, 13873), (341, 13885), (345, 13906), (400, 14062), (439, 14143), (450, 14191), (453, 14209), (456, 14230), (463, 14266), (475, 14317), (487, 14374), (503, 14452), (506, 14461), (527, 14539), (539, 14596), (555, 14650), (602, 14890), (627, 14965), (654, 15076), (667, 15295), (669, 15307), (686, 15490), (687, 15499), (708, 15601), (712, 15622), (730, 15742), (741, 15814), (745, 15832), (746, 15838),

Gene: Agent47_19 Start: 12236, Stop: 16342, Start Num: 14

Candidate Starts for Agent47_19:

(Start: 14 @12236 has 31 MA's), (Start: 24 @12329 has 1 MA's), (32, 12407), (33, 12431), (43, 12491), (61, 12575), (64, 12587), (86, 12689), (96, 12749), (98, 12761), (102, 12782), (109, 12836), (121, 12884), (130, 12929), (133, 12950), (157, 13067), (168, 13145), (173, 13169), (183, 13235), (196, 13310), (210, 13403), (216, 13433), (252, 13607), (255, 13616), (261, 13646), (265, 13670), (270, 13691), (284, 13751), (302, 13829), (305, 13838), (320, 13916), (331, 13982), (339, 14024), (341, 14033), (348, 14117), (354, 14138), (356, 14171), (369, 14237), (373, 14258), (383, 14312), (384, 14321), (388, 14339), (392, 14357), (393, 14366), (400, 14396), (406, 14432), (418, 14486), (426, 14522), (428, 14528), (429, 14546), (448, 14651), (460, 14717), (503, 14912), (512, 14942), (522, 14975), (534, 15026), (537, 15047), (541, 15062), (542, 15068), (558, 15152), (572, 15200), (582, 15239), (594, 15299), (601, 15332), (606, 15353), (614, 15377), (622, 15407), (645, 15473), (656, 15545), (678, 15860), (679, 15869), (680, 15872), (682, 15914), (686, 15941), (691, 15971), (699, 16022), (703, 16040), (719, 16106), (724, 16154), (730, 16178), (732, 16190), (747, 16271), (749, 16295), (754, 16334),

Gene: Ageofdapage_21 Start: 12015, Stop: 15848, Start Num: 15

Candidate Starts for Ageofdapage_21:

(Start: 15 @12015 has 162 MA's), (Start: 23 @12084 has 1 MA's), (31, 12171), (59, 12351), (66, 12378), (84, 12462), (86, 12471), (96, 12531), (98, 12543), (109, 12618), (118, 12660), (128, 12702), (130, 12711), (133, 12732), (141, 12771), (157, 12849), (168, 12927), (196, 13092), (210, 13185), (214, 13206), (216, 13215), (265, 13452), (271, 13476), (275, 13491), (282, 13524), (302, 13611), (323, 13719), (338, 13803), (341, 13815), (345, 13836), (353, 13917), (400, 13992), (439, 14073), (441, 14082), (450, 14121), (453, 14139), (456, 14160), (463, 14196), (475, 14247), (487, 14304), (503, 14382), (506, 14391), (527, 14469), (531, 14484), (539, 14526), (555, 14580), (602, 14820), (627, 14895), (654, 15006), (667, 15225), (678, 15339), (686, 15420), (687, 15429), (699, 15501), (708, 15531), (712, 15552), (730, 15669), (741, 15741), (746, 15765),

Gene: AlishaPH_21 Start: 12075, Stop: 15908, Start Num: 15

Candidate Starts for AlishaPH_21:

(Start: 15 @12075 has 162 MA's), (Start: 23 @12144 has 1 MA's), (31, 12231), (41, 12306), (59, 12408), (66, 12435), (83, 12507), (84, 12519), (86, 12528), (98, 12600), (109, 12675), (128, 12759), (130, 12768), (133, 12789), (141, 12828), (157, 12906), (168, 12984), (183, 13074), (196, 13149), (210, 13242), (212, 13251), (214, 13263), (216, 13272), (265, 13509), (275, 13548), (282, 13581), (302, 13668), (309, 13692), (323, 13776), (338, 13860), (341, 13872), (345, 13893), (400, 14049), (439, 14130), (450, 14178), (453, 14196), (456, 14217), (463, 14253), (475, 14304), (487, 14361), (503, 14439), (506, 14448), (527, 14526), (531, 14541), (539, 14583), (555, 14637), (602, 14877), (627, 14952), (654, 15063), (667, 15282), (669, 15294), (686, 15477), (687, 15486), (699, 15558), (708, 15588), (712, 15609), (730, 15729), (741, 15801), (745, 15819), (746, 15825),

Gene: AlleyCat_19 Start: 12112, Stop: 16224, Start Num: 14

Candidate Starts for AlleyCat_19:

(Start: 14 @12112 has 31 MA's), (Start: 24 @12205 has 1 MA's), (32, 12283), (33, 12307), (43, 12367), (61, 12451), (86, 12565), (96, 12625), (98, 12637), (102, 12658), (109, 12712), (121, 12760), (130, 12805), (133, 12826), (157, 12943), (168, 13021), (173, 13045), (179, 13087), (183, 13111), (196, 13186), (210, 13279), (216, 13309), (252, 13483), (261, 13522), (265, 13546), (270, 13567), (284, 13627), (302, 13705), (305, 13714), (320, 13792), (331, 13858), (339, 13900), (341, 13909), (348, 13993), (354, 14014), (356, 14047), (359, 14068), (369, 14113), (373, 14134), (383, 14188), (384, 14197), (388, 14215), (393, 14242), (400, 14272), (406, 14308), (426, 14398), (428, 14404), (429, 14422), (448, 14527), (460, 14593), (503, 14788), (512, 14818), (522, 14851), (534, 14902), (537, 14923), (541, 14938), (542, 14944), (558, 15028), (572, 15076), (582, 15115), (594, 15175), (601, 15208), (606, 15229), (614, 15253), (622, 15283), (645, 15349), (656, 15421), (678, 15736), (679, 15745), (680, 15748), (681, 15775), (682, 15790), (684, 15805), (686, 15817), (691, 15847), (699, 15901), (703, 15919), (719, 15988), (724, 16036), (730, 16060), (732, 16072), (734, 16081), (747, 16153), (749, 16177), (754, 16216),

Gene: Amelie_17 Start: 11327, Stop: 15460, Start Num: 15

Candidate Starts for Amelie_17:

(10, 11288), (Start: 15 @11327 has 162 MA's), (Start: 23 @11396 has 1 MA's), (31, 11483), (41, 11561), (61, 11669), (66, 11690), (73, 11723), (98, 11855), (100, 11870), (102, 11876), (109, 11930), (115, 11960), (130, 12023), (133, 12044), (141, 12083), (157, 12161), (168, 12239), (173, 12263), (210, 12497), (228, 12578), (238, 12638), (250, 12695), (260, 12731), (265, 12764), (271, 12788), (287, 12854), (290, 12863), (302, 12923), (323, 13031), (331, 13076), (354, 13232), (371, 13343), (373, 13352), (375, 13364), (384, 13415), (388, 13433), (393, 13460), (400, 13490), (419, 13583), (428, 13622), (456, 13790), (468, 13844), (475, 13877), (485, 13922), (503, 14003), (504, 14006), (527, 14090), (529, 14096), (531, 14105), (539, 14147), (552, 14183), (555, 14201), (558, 14240), (573, 14300), (602, 14441), (622, 14501), (627, 14516), (669, 14858), (686, 15047), (687, 15056), (697, 15119), (746, 15395),

Gene: Amgine_19 Start: 11863, Stop: 16011, Start Num: 15

Candidate Starts for Amgine_19:

(Start: 15 @11863 has 162 MA's), (Start: 23 @11932 has 1 MA's), (41, 12094), (59, 12196), (61, 12202), (66, 12223), (96, 12376), (98, 12388), (109, 12463), (130, 12556), (133, 12577), (141, 12616), (157, 12694), (168, 12772), (173, 12796), (181, 12850), (183, 12862), (196, 12937), (210, 13030), (228, 13111), (239, 13174), (250, 13228), (257, 13249), (259, 13261), (265, 13297), (270, 13318), (277, 13345), (282, 13369), (288, 13390), (293, 13411), (302, 13456), (322, 13582), (331, 13630), (343, 13690), (344, 13696), (354, 13786), (371, 13897), (381, 13948), (382, 13954), (392, 14005), (400, 14044), (403, 14065), (428, 14176), (437, 14236), (442, 14269), (445, 14287), (450, 14305), (453, 14323), (455, 14335), (463, 14380), (475, 14431), (482, 14479), (503, 14557), (527, 14644), (529, 14650), (543, 14716), (546, 14719), (558, 14794), (575, 14860), (602, 14995), (622, 15055), (627, 15070), (630, 15076), (679, 15526), (686, 15598), (687, 15607), (702, 15694), (730, 15847), (746, 15946), (749, 15973), (750, 15985),

Gene: Aminay_19 Start: 11993, Stop: 16294, Start Num: 15

Candidate Starts for Aminay_19:

(Start: 15 @11993 has 162 MA's), (17, 12002), (22, 12041), (Start: 24 @12083 has 1 MA's), (31, 12149), (34, 12194), (57, 12308), (67, 12356), (76, 12395), (77, 12398), (84, 12434), (96, 12503), (98, 12515), (100, 12530), (102, 12536), (130, 12683), (133, 12704), (141, 12743), (143, 12746), (157, 12821), (164, 12866), (168, 12899), (173, 12923), (183, 12989), (184, 12992), (188, 13010), (190, 13019), (194, 13052), (198, 13076), (201, 13097), (223, 13214), (251, 13355), (252, 13358), (255, 13367), (265, 13421), (266, 13427), (274, 13457), (281, 13490), (288, 13514), (295, 13541), (302, 13580), (306, 13595), (308, 13601), (314, 13628), (320, 13688), (322, 13706), (329, 13736), (332, 13757), (341, 13805), (342, 13808), (343, 13814), (345, 13826), (352, 13904), (373, 14030), (385, 14099), (389, 14117), (395, 14150), (396, 14153), (401, 14180), (415, 14234), (428, 14288), (433, 14327), (437, 14348), (440, 14372), (450, 14420), (460, 14480), (461, 14489), (467, 14546), (471, 14579), (473, 14588), (479, 14630), (488, 14696), (503, 14777), (506, 14786), (558, 14993), (602, 15194), (627, 15269), (637, 15299), (660, 15485), (679, 15749), (682, 15794), (686, 15821), (703, 15947), (709, 15965), (712, 15986), (718, 16043), (719, 16046), (729, 16118), (747, 16220), (749, 16244), (754, 16283),

Gene: Amohnition_20 Start: 12196, Stop: 16386, Start Num: 15

Candidate Starts for Amohnition_20:

(9, 12151), (Start: 15 @12196 has 162 MA's), (Start: 23 @12265 has 1 MA's), (31, 12352), (41, 12427), (57, 12514), (58, 12517), (73, 12589), (84, 12640), (86, 12649), (96, 12709), (98, 12721), (102, 12742), (109, 12796), (115, 12826), (130, 12889), (133, 12910), (141, 12949), (157, 13027), (168, 13105), (173, 13129), (183, 13195), (195, 13261), (201, 13303), (206, 13342), (208, 13354), (214, 13384), (216, 13393), (239, 13507), (242, 13522), (255, 13576), (261, 13606), (265, 13630), (270, 13651), (281, 13699), (293, 13744), (294, 13747), (302, 13789), (308, 13810), (317, 13858), (322, 13915), (325, 13930), (332, 13966), (334, 13978), (343, 14023), (344, 14029), (354, 14119), (392, 14338), (400, 14377), (403, 14398), (423, 14485), (428, 14509), (431, 14536), (432, 14539), (437, 14569), (445, 14620), (453, 14656), (475, 14764), (503, 14899), (504, 14902), (524, 14968), (526, 14974), (534, 15013), (550, 15085), (551, 15091), (555, 15112), (571, 15196), (576, 15226), (580, 15247), (583, 15259), (598, 15340), (603, 15373), (607, 15382), (610, 15388), (622, 15430), (638, 15481), (639, 15487), (667, 15778), (678, 15892), (679, 15901), (680, 15904), (686, 15973), (712, 16108), (720, 16177), (730, 16225), (746, 16321), (750, 16360),

Gene: Anaya_22 Start: 12098, Stop: 15934, Start Num: 15

Candidate Starts for Anaya_22:

(Start: 15 @12098 has 162 MA's), (Start: 23 @12167 has 1 MA's), (31, 12254), (59, 12431), (66, 12458), (83, 12530), (84, 12542), (86, 12551), (98, 12623), (109, 12698), (115, 12728), (128, 12782), (130, 12791), (133, 12812), (141, 12851), (157, 12929), (163, 12971), (168, 13007), (173, 13031), (183, 13097), (196, 13172), (210, 13265), (212, 13274), (214, 13286), (216, 13295), (265, 13532), (271, 13556), (275, 13571), (282, 13604), (302, 13691), (309, 13715), (323, 13799), (338, 13883), (341, 13895), (345, 13916), (400, 14072), (439, 14153), (453, 14219), (456, 14240), (463, 14276),

(475, 14327), (487, 14384), (503, 14462), (506, 14471), (527, 14549), (539, 14606), (555, 14660), (602, 14900), (627, 14975), (630, 14981), (654, 15086), (667, 15305), (686, 15503), (687, 15512), (708, 15614), (712, 15635), (721, 15710), (730, 15755), (741, 15827), (745, 15845), (746, 15851),

Gene: Angel_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Angel_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Angelica_21 Start: 12050, Stop: 15883, Start Num: 15

Candidate Starts for Angelica_21:

(Start: 15 @12050 has 162 MA's), (Start: 23 @12119 has 1 MA's), (31, 12206), (59, 12383), (66, 12410), (84, 12494), (86, 12503), (98, 12575), (109, 12650), (128, 12734), (130, 12743), (133, 12764), (141, 12803), (157, 12881), (168, 12959), (183, 13049), (196, 13124), (210, 13217), (214, 13238), (216, 13247), (265, 13484), (275, 13523), (282, 13556), (302, 13643), (309, 13667), (323, 13751), (338, 13835), (341, 13847), (345, 13868), (400, 14024), (439, 14105), (450, 14153), (453, 14171), (456, 14192), (463, 14228), (475, 14279), (487, 14336), (503, 14414), (506, 14423), (527, 14501), (531, 14516), (539, 14558), (555, 14612), (602, 14852), (627, 14927), (654, 15038), (667, 15257), (669, 15269), (686, 15452), (687, 15461), (708, 15563), (712, 15584), (730, 15704), (741, 15776), (745, 15794), (746, 15800),

Gene: Annihilator_16 Start: 11455, Stop: 15468, Start Num: 15

Candidate Starts for Annihilator_16:

(Start: 15 @11455 has 162 MA's), (34, 11656), (57, 11770), (66, 11812), (72, 11842), (98, 11977), (99, 11989), (102, 11998), (138, 12187), (141, 12205), (143, 12208), (148, 12229), (150, 12241), (161, 12313), (168, 12361), (192, 12493), (195, 12517), (206, 12598), (233, 12721), (247, 12805), (258, 12841), (265, 12886), (266, 12892), (293, 13000), (298, 13024), (302, 13045), (344, 13264), (362, 13414), (378, 13501), (399, 13609), (428, 13744), (445, 13855), (450, 13873), (455, 13903), (501, 14125), (509, 14149), (513, 14164), (518, 14185), (527, 14212), (534, 14239), (549, 14299), (566, 14389), (572, 14422), (588, 14485), (596, 14542), (602, 14575), (605, 14584), (680, 15088), (681, 15115), (684, 15145), (686, 15157), (687, 15166), (699, 15235), (719, 15316), (727, 15376), (731, 15394), (733, 15403),

Gene: Antsirabe_16 Start: 11833, Stop: 15810, Start Num: 16

Candidate Starts for Antsirabe_16:

(Start: 16 @11833 has 58 MA's), (25, 11926), (40, 12046), (50, 12109), (55, 12127), (69, 12190), (79, 12226), (90, 12298), (92, 12304), (97, 12331), (100, 12349), (107, 12394), (115, 12430), (119, 12445), (145, 12568), (151, 12610), (154, 12625), (160, 12661), (168, 12724), (172, 12745), (185, 12817), (188, 12835), (211, 12976), (219, 13018), (227, 13048), (228, 13051), (230, 13060), (232, 13069), (237, 13111), (254, 13183), (256, 13189), (259, 13204), (262, 13222), (263, 13225), (270, 13258), (277, 13285), (289, 13330), (302, 13393), (309, 13417), (312, 13429), (313, 13432), (333, 13561), (341, 13603), (342, 13606), (354, 13708), (363, 13768), (371, 13819), (386, 13903), (400, 13966), (411, 14023), (423, 14074), (426, 14092), (428, 14098), (435, 14149), (442, 14191), (460, 14287), (490, 14410), (494, 14428), (508, 14494), (510, 14509), (529, 14575), (540, 14629), (544, 14644), (559, 14725), (561, 14734), (584, 14827), (592, 14881), (593, 14884), (600, 14917), (624, 14992), (680, 15454), (681, 15481), (686, 15523), (699, 15610), (700, 15613), (705, 15631), (707, 15634),

(725, 15718), (728, 15736),

Gene: Apocalypse_21 Start: 12053, Stop: 15886, Start Num: 15

Candidate Starts for Apocalypse_21:

(Start: 15 @12053 has 162 MA's), (Start: 23 @12122 has 1 MA's), (31, 12209), (59, 12386), (66, 12413), (84, 12497), (86, 12506), (98, 12578), (109, 12653), (128, 12737), (130, 12746), (133, 12767), (141, 12806), (157, 12884), (168, 12962), (173, 12986), (183, 13052), (196, 13127), (210, 13220), (212, 13229), (214, 13241), (216, 13250), (265, 13487), (275, 13526), (282, 13559), (302, 13646), (309, 13670), (323, 13754), (338, 13838), (341, 13850), (345, 13871), (400, 14027), (439, 14108), (444, 14132), (450, 14156), (453, 14174), (456, 14195), (463, 14231), (475, 14282), (487, 14339), (503, 14417), (506, 14426), (527, 14504), (531, 14519), (539, 14561), (555, 14615), (602, 14855), (627, 14930), (654, 15041), (667, 15260), (669, 15272), (686, 15455), (687, 15464), (699, 15536), (708, 15566), (712, 15587), (730, 15707), (741, 15779), (745, 15797), (746, 15803),

Gene: Applecrisp_20 Start: 12274, Stop: 16422, Start Num: 15

Candidate Starts for Applecrisp_20:

(Start: 15 @12274 has 162 MA's), (Start: 23 @12343 has 1 MA's), (41, 12505), (59, 12607), (61, 12613), (66, 12634), (96, 12787), (98, 12799), (109, 12874), (115, 12904), (130, 12967), (133, 12988), (141, 13027), (157, 13105), (168, 13183), (173, 13207), (183, 13273), (196, 13348), (210, 13441), (218, 13474), (228, 13522), (239, 13585), (250, 13639), (251, 13642), (257, 13660), (259, 13672), (270, 13729), (277, 13756), (282, 13780), (288, 13801), (293, 13822), (302, 13867), (331, 14041), (354, 14197), (373, 14317), (381, 14359), (382, 14365), (394, 14437), (400, 14455), (403, 14476), (428, 14587), (437, 14647), (442, 14680), (445, 14698), (450, 14716), (453, 14734), (455, 14746), (463, 14791), (475, 14842), (482, 14890), (503, 14968), (527, 15055), (529, 15061), (531, 15070), (543, 15127), (546, 15130), (558, 15205), (575, 15271), (602, 15406), (622, 15466), (627, 15481), (630, 15487), (679, 15937), (686, 16009), (687, 16018), (702, 16105), (730, 16258), (746, 16357), (749, 16384), (750, 16396),

Gene: Aroostook_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Aroostook_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Asayake_21 Start: 12116, Stop: 15949, Start Num: 15

Candidate Starts for Asayake_21:

(Start: 15 @12116 has 162 MA's), (Start: 23 @12185 has 1 MA's), (31, 12272), (41, 12347), (59, 12449), (66, 12476), (83, 12548), (84, 12560), (86, 12569), (98, 12641), (109, 12716), (128, 12800), (130, 12809), (133, 12830), (141, 12869), (150, 12905), (157, 12947), (168, 13025), (183, 13115), (196, 13190), (210, 13283), (212, 13292), (214, 13304), (216, 13313), (265, 13550), (275, 13589), (282, 13622), (302, 13709), (309, 13733), (323, 13817), (338, 13901), (341, 13913), (345, 13934), (400, 14090), (439, 14171), (450, 14219), (453, 14237), (456, 14258), (463, 14294), (475, 14345), (487, 14402), (503, 14480), (506, 14489), (527, 14567), (531, 14582), (539, 14624), (555, 14678), (602, 14918), (627, 14993), (654, 15104), (667, 15323), (669, 15335), (686, 15518), (687, 15527), (699, 15599), (708, 15629), (712, 15650), (730, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: Atiba_21 Start: 12042, Stop: 15878, Start Num: 15

Candidate Starts for Atiba_21:

(Start: 15 @12042 has 162 MA's), (Start: 23 @12111 has 1 MA's), (31, 12198), (59, 12375), (66, 12402), (83, 12474), (84, 12486), (86, 12495), (98, 12567), (109, 12642), (128, 12726), (130, 12735), (133, 12756), (141, 12795), (157, 12873), (168, 12951), (183, 13041), (196, 13116), (210, 13209), (212, 13218), (214, 13230), (216, 13239), (271, 13500), (275, 13515), (282, 13548), (302, 13635), (309, 13659), (323, 13743), (338, 13827), (341, 13839), (345, 13860), (400, 14016), (439, 14097), (450, 14145), (453, 14163), (456, 14184), (463, 14220), (475, 14271), (487, 14328), (503, 14406), (506, 14415), (527, 14493), (539, 14550), (555, 14604), (602, 14844), (627, 14919), (654, 15030), (667, 15249), (669, 15261), (686, 15447), (687, 15456), (699, 15528), (708, 15558), (712, 15579), (730, 15699), (741, 15771), (745, 15789), (746, 15795),

Gene: Avocado_16 Start: 11691, Stop: 15731, Start Num: 16

Candidate Starts for Avocado_16:

(Start: 16 @11691 has 58 MA's), (25, 11784), (29, 11814), (43, 11961), (61, 12045), (71, 12093), (98, 12231), (102, 12252), (109, 12306), (130, 12399), (133, 12420), (138, 12441), (141, 12459), (148, 12483), (150, 12495), (161, 12567), (164, 12582), (168, 12615), (192, 12747), (195, 12771), (198, 12792), (202, 12825), (206, 12852), (214, 12894), (223, 12942), (250, 13080), (251, 13083), (261, 13125), (276, 13194), (277, 13197), (294, 13266), (302, 13308), (318, 13386), (339, 13503), (341, 13512), (344, 13527), (351, 13608), (354, 13617), (362, 13677), (383, 13791), (393, 13845), (397, 13869), (399, 13872), (400, 13875), (405, 13905), (412, 13935), (432, 14037), (435, 14058), (454, 14163), (455, 14166), (491, 14319), (494, 14337), (509, 14403), (513, 14418), (520, 14442), (532, 14484), (534, 14493), (549, 14553), (566, 14643), (588, 14739), (596, 14796), (602, 14829), (634, 14904), (662, 15099), (678, 15309), (684, 15378), (686, 15390), (687, 15399), (691, 15420), (719, 15579), (731, 15657),

Gene: Avrafan_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Avrafan_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: AzulaCat_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for AzulaCat_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: BEEST_21 Start: 12116, Stop: 15949, Start Num: 15

Candidate Starts for BEEST_21:

(Start: 15 @12116 has 162 MA's), (Start: 23 @12185 has 1 MA's), (31, 12272), (41, 12347), (59, 12449), (66, 12476), (83, 12548), (84, 12560), (86, 12569), (98, 12641), (109, 12716), (128, 12800),

(130, 12809), (133, 12830), (141, 12869), (150, 12905), (157, 12947), (168, 13025), (183, 13115), (196, 13190), (210, 13283), (212, 13292), (214, 13304), (216, 13313), (265, 13550), (275, 13589), (282, 13622), (302, 13709), (309, 13733), (323, 13817), (338, 13901), (341, 13913), (345, 13934), (400, 14090), (439, 14171), (450, 14219), (453, 14237), (456, 14258), (463, 14294), (475, 14345), (487, 14402), (503, 14480), (506, 14489), (527, 14567), (531, 14582), (539, 14624), (555, 14678), (602, 14918), (627, 14993), (654, 15104), (667, 15323), (669, 15335), (686, 15518), (687, 15527), (699, 15599), (708, 15629), (712, 15650), (730, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: BGlluviae_21 Start: 12116, Stop: 15949, Start Num: 15

Candidate Starts for BGlluviae_21:

(Start: 15 @12116 has 162 MA's), (Start: 23 @12185 has 1 MA's), (31, 12272), (41, 12347), (59, 12449), (66, 12476), (83, 12548), (84, 12560), (86, 12569), (98, 12641), (109, 12716), (128, 12800), (130, 12809), (133, 12830), (141, 12869), (150, 12905), (157, 12947), (168, 13025), (183, 13115), (196, 13190), (210, 13283), (212, 13292), (214, 13304), (216, 13313), (265, 13550), (275, 13589), (282, 13622), (302, 13709), (309, 13733), (323, 13817), (338, 13901), (341, 13913), (345, 13934), (400, 14090), (439, 14171), (450, 14219), (453, 14237), (456, 14258), (463, 14294), (475, 14345), (487, 14402), (503, 14480), (506, 14489), (527, 14567), (531, 14582), (539, 14624), (555, 14678), (602, 14918), (627, 14993), (654, 15104), (667, 15323), (669, 15335), (686, 15518), (687, 15527), (699, 15599), (708, 15629), (712, 15650), (730, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: BPs_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for BPs_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: BQuat_16 Start: 11455, Stop: 15468, Start Num: 15

Candidate Starts for BQuat_16:

(Start: 15 @11455 has 162 MA's), (34, 11656), (57, 11770), (66, 11812), (72, 11842), (98, 11977), (99, 11989), (102, 11998), (138, 12187), (141, 12205), (143, 12208), (148, 12229), (150, 12241), (161, 12313), (168, 12361), (192, 12493), (195, 12517), (206, 12598), (233, 12721), (247, 12805), (258, 12841), (265, 12886), (266, 12892), (293, 13000), (298, 13024), (302, 13045), (344, 13264), (362, 13414), (378, 13501), (399, 13609), (428, 13744), (445, 13855), (450, 13873), (455, 13903), (501, 14125), (509, 14149), (513, 14164), (518, 14185), (527, 14212), (534, 14239), (549, 14299), (566, 14389), (572, 14422), (588, 14485), (596, 14542), (602, 14575), (605, 14584), (680, 15088), (681, 15115), (684, 15145), (686, 15157), (687, 15166), (699, 15235), (719, 15316), (727, 15376), (731, 15394), (733, 15403),

Gene: BaghaKamala_21 Start: 12045, Stop: 15878, Start Num: 15

Candidate Starts for BaghaKamala_21:

(Start: 15 @12045 has 162 MA's), (Start: 23 @12114 has 1 MA's), (31, 12201), (41, 12276), (59, 12378), (66, 12405), (83, 12477), (84, 12489), (86, 12498), (98, 12570), (109, 12645), (128, 12729), (130, 12738), (133, 12759), (141, 12798), (150, 12834), (157, 12876), (168, 12954), (183, 13044), (196, 13119), (210, 13212), (212, 13221), (214, 13233), (216, 13242), (265, 13479), (275, 13518), (282, 13551), (302, 13638), (309, 13662), (323, 13746), (338, 13830), (341, 13842), (345, 13863), (400, 14019), (439, 14100), (450, 14148), (453, 14166), (456, 14187), (463, 14223), (475, 14274), (487, 14331), (503, 14409), (506, 14418), (527, 14496), (531, 14511), (539, 14553), (555, 14607),

(602, 14847), (627, 14922), (654, 15033), (667, 15252), (669, 15264), (686, 15447), (687, 15456), (699, 15528), (708, 15558), (712, 15579), (730, 15699), (741, 15771), (745, 15789), (746, 15795),

Gene: Barkley26_16 Start: 11464, Stop: 15480, Start Num: 15

Candidate Starts for Barkley26_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15100), (681, 15127), (684, 15157), (686, 15169), (687, 15178), (699, 15247), (719, 15328), (727, 15388), (731, 15406), (733, 15415),

Gene: BarrelRoll_21 Start: 12068, Stop: 15901, Start Num: 15

Candidate Starts for BarrelRoll_21:

(Start: 15 @12068 has 162 MA's), (Start: 23 @12137 has 1 MA's), (31, 12224), (41, 12299), (59, 12401), (66, 12428), (83, 12500), (84, 12512), (86, 12521), (98, 12593), (109, 12668), (128, 12752), (130, 12761), (133, 12782), (141, 12821), (150, 12857), (157, 12899), (168, 12977), (183, 13067), (196, 13142), (210, 13235), (212, 13244), (214, 13256), (216, 13265), (265, 13502), (275, 13541), (282, 13574), (302, 13661), (309, 13685), (323, 13769), (338, 13853), (341, 13865), (345, 13886), (400, 14042), (439, 14123), (450, 14171), (453, 14189), (456, 14210), (463, 14246), (475, 14297), (487, 14354), (503, 14432), (506, 14441), (527, 14519), (531, 14534), (539, 14576), (555, 14630), (602, 14870), (627, 14945), (654, 15056), (667, 15275), (669, 15287), (686, 15470), (687, 15479), (699, 15551), (708, 15581), (712, 15602), (730, 15722), (741, 15794), (745, 15812), (746, 15818),

Gene: Beezoo_21 Start: 12092, Stop: 15925, Start Num: 15

Candidate Starts for Beezoo_21:

(Start: 15 @12092 has 162 MA's), (Start: 23 @12161 has 1 MA's), (Start: 24 @12182 has 1 MA's), (31, 12248), (59, 12425), (66, 12452), (83, 12524), (84, 12536), (86, 12545), (98, 12617), (109, 12692), (128, 12776), (130, 12785), (133, 12806), (141, 12845), (157, 12923), (168, 13001), (183, 13091), (196, 13166), (210, 13259), (212, 13268), (214, 13280), (216, 13289), (265, 13526), (275, 13565), (282, 13598), (302, 13685), (309, 13709), (323, 13793), (338, 13877), (341, 13889), (342, 13892), (345, 13910), (400, 14066), (439, 14147), (450, 14195), (453, 14213), (456, 14234), (463, 14270), (475, 14321), (487, 14378), (503, 14456), (506, 14465), (527, 14543), (531, 14558), (539, 14600), (555, 14654), (602, 14894), (627, 14969), (654, 15080), (667, 15299), (669, 15311), (686, 15494), (687, 15503), (708, 15605), (712, 15626), (730, 15746), (741, 15818), (745, 15836), (746, 15842),

Gene: Bella96_21 Start: 12006, Stop: 15845, Start Num: 15

Candidate Starts for Bella96_21:

(Start: 15 @12006 has 162 MA's), (Start: 23 @12075 has 1 MA's), (31, 12162), (59, 12342), (66, 12369), (84, 12453), (86, 12462), (96, 12522), (98, 12534), (109, 12609), (118, 12651), (128, 12693), (130, 12702), (133, 12723), (141, 12762), (143, 12765), (157, 12840), (168, 12918), (196, 13083), (210, 13176), (214, 13197), (216, 13206), (265, 13443), (271, 13467), (275, 13482), (282, 13515), (302, 13602), (320, 13689), (323, 13710), (338, 13794), (341, 13806), (345, 13827), (400, 13983), (439, 14064), (453, 14130), (456, 14151), (463, 14187), (475, 14238), (479, 14256), (487, 14295), (503, 14373), (506, 14382), (527, 14460), (531, 14475), (539, 14517), (555, 14571), (602, 14811), (627, 14886), (654, 14997), (656, 15018), (657, 15039), (665, 15159), (678, 15333), (686, 15414), (687, 15423), (699, 15495), (708, 15525), (712, 15546), (730, 15666), (741, 15738), (745, 15756), (746, 15762),

Gene: Belladonna_21 Start: 12185, Stop: 15949, Start Num: 23

Candidate Starts for Belladonna_21:

(Start: 15 @12116 has 162 MA's), (Start: 23 @12185 has 1 MA's), (31, 12272), (41, 12347), (59, 12449), (66, 12476), (83, 12548), (84, 12560), (86, 12569), (98, 12641), (109, 12716), (128, 12800), (130, 12809), (133, 12830), (141, 12869), (150, 12905), (157, 12947), (168, 13025), (183, 13115), (196, 13190), (210, 13283), (212, 13292), (214, 13304), (216, 13313), (265, 13550), (275, 13589), (282, 13622), (302, 13709), (309, 13733), (323, 13817), (338, 13901), (341, 13913), (345, 13934), (400, 14090), (439, 14171), (450, 14219), (453, 14237), (456, 14258), (463, 14294), (475, 14345), (487, 14402), (503, 14480), (506, 14489), (527, 14567), (531, 14582), (539, 14624), (555, 14678), (602, 14918), (627, 14993), (654, 15104), (667, 15323), (669, 15335), (686, 15518), (687, 15527), (699, 15599), (708, 15629), (712, 15650), (730, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: Bern_23 Start: 12034, Stop: 15873, Start Num: 15

Candidate Starts for Bern_23:

(Start: 15 @12034 has 162 MA's), (Start: 23 @12103 has 1 MA's), (31, 12190), (59, 12370), (66, 12397), (84, 12481), (96, 12550), (98, 12562), (109, 12637), (122, 12688), (130, 12730), (133, 12751), (141, 12790), (157, 12868), (168, 12946), (196, 13111), (210, 13204), (214, 13225), (216, 13234), (265, 13471), (271, 13495), (275, 13510), (282, 13543), (302, 13630), (320, 13717), (323, 13738), (338, 13822), (341, 13834), (344, 13849), (345, 13855), (439, 14092), (450, 14140), (453, 14158), (456, 14179), (463, 14215), (468, 14233), (475, 14266), (503, 14401), (506, 14410), (527, 14488), (531, 14503), (539, 14545), (555, 14599), (602, 14839), (627, 14914), (654, 15025), (656, 15046), (657, 15067), (665, 15187), (678, 15361), (686, 15442), (687, 15451), (699, 15523), (708, 15553), (712, 15574), (730, 15694), (741, 15766), (745, 15784), (746, 15790),

Gene: Biglebops_17 Start: 11327, Stop: 15460, Start Num: 15

Candidate Starts for Biglebops_17:

(10, 11288), (Start: 15 @11327 has 162 MA's), (Start: 23 @11396 has 1 MA's), (31, 11483), (41, 11561), (61, 11669), (66, 11690), (73, 11723), (98, 11855), (100, 11870), (102, 11876), (109, 11930), (115, 11960), (130, 12023), (133, 12044), (141, 12083), (157, 12161), (168, 12239), (173, 12263), (210, 12497), (228, 12578), (238, 12638), (250, 12695), (260, 12731), (265, 12764), (271, 12788), (287, 12854), (290, 12863), (302, 12923), (323, 13031), (331, 13076), (354, 13232), (371, 13343), (373, 13352), (375, 13364), (384, 13415), (388, 13433), (393, 13460), (400, 13490), (419, 13583), (428, 13622), (456, 13790), (468, 13844), (475, 13877), (485, 13922), (503, 14003), (504, 14006), (527, 14090), (529, 14096), (531, 14105), (539, 14147), (552, 14183), (555, 14201), (558, 14240), (573, 14300), (602, 14441), (622, 14501), (627, 14516), (669, 14858), (686, 15047), (687, 15056), (697, 15119), (746, 15395),

Gene: Blizzard_21 Start: 12116, Stop: 15949, Start Num: 15

Candidate Starts for Blizzard_21:

(Start: 15 @12116 has 162 MA's), (Start: 23 @12185 has 1 MA's), (31, 12272), (41, 12347), (59, 12449), (66, 12476), (83, 12548), (84, 12560), (86, 12569), (98, 12641), (109, 12716), (128, 12800), (130, 12809), (133, 12830), (141, 12869), (150, 12905), (157, 12947), (168, 13025), (183, 13115), (196, 13190), (210, 13283), (212, 13292), (214, 13304), (216, 13313), (265, 13550), (275, 13589), (282, 13622), (302, 13709), (309, 13733), (323, 13817), (338, 13901), (341, 13913), (345, 13934), (400, 14090), (439, 14171), (450, 14219), (453, 14237), (456, 14258), (463, 14294), (475, 14345), (487, 14402), (503, 14480), (506, 14489), (527, 14567), (531, 14582), (539, 14624), (555, 14678), (602, 14918), (627, 14993), (654, 15104), (667, 15323), (669, 15335), (686, 15518), (687, 15527), (699, 15599), (708, 15629), (712, 15650), (730, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: Bobquesha_22 Start: 13067, Stop: 17233, Start Num: 16

Candidate Starts for Bobquesha_22:

(9, 13031), (Start: 16 @13067 has 58 MA's), (34, 13265), (83, 13493), (84, 13505), (86, 13514), (89, 13544), (102, 13607), (130, 13754), (133, 13775), (141, 13814), (143, 13817), (157, 13892), (168, 13970), (182, 14057), (183, 14060), (190, 14090), (194, 14123), (198, 14147), (211, 14231), (217,

14261), (223, 14288), (245, 14396), (248, 14417), (251, 14429), (255, 14441), (265, 14495), (302, 14654), (308, 14675), (323, 14783), (342, 14903), (378, 15152), (400, 15263), (410, 15314), (412, 15323), (422, 15368), (426, 15389), (446, 15488), (450, 15503), (451, 15509), (464, 15578), (468, 15599), (469, 15608), (470, 15620), (474, 15629), (494, 15701), (503, 15752), (504, 15755), (512, 15782), (539, 15881), (545, 15899), (558, 15974), (600, 16163), (602, 16175), (627, 16250), (657, 16430), (665, 16550), (673, 16658), (686, 16805), (703, 16925), (706, 16934), (708, 16937), (722, 17036), (729, 17063), (746, 17159), (753, 17222),

Gene: Boiiii_21 Start: 12118, Stop: 15951, Start Num: 15

Candidate Starts for Boiiii_21:

(Start: 15 @12118 has 162 MA's), (Start: 23 @12187 has 1 MA's), (31, 12274), (41, 12349), (59, 12451), (66, 12478), (83, 12550), (84, 12562), (86, 12571), (98, 12643), (109, 12718), (128, 12802), (130, 12811), (133, 12832), (141, 12871), (150, 12907), (157, 12949), (168, 13027), (183, 13117), (196, 13192), (210, 13285), (212, 13294), (214, 13306), (216, 13315), (265, 13552), (275, 13591), (282, 13624), (302, 13711), (309, 13735), (323, 13819), (338, 13903), (341, 13915), (345, 13936), (400, 14092), (439, 14173), (450, 14221), (453, 14239), (456, 14260), (463, 14296), (475, 14347), (487, 14404), (503, 14482), (506, 14491), (527, 14569), (531, 14584), (539, 14626), (555, 14680), (602, 14920), (627, 14995), (654, 15106), (667, 15325), (669, 15337), (686, 15520), (687, 15529), (699, 15601), (708, 15631), (712, 15652), (730, 15772), (741, 15844), (745, 15862), (746, 15868),

Gene: Boilgate_18 Start: 12212, Stop: 16429, Start Num: 24

Candidate Starts for Boilgate_18:

(8, 12077), (11, 12101), (Start: 16 @12122 has 58 MA's), (Start: 24 @12212 has 1 MA's), (34, 12323), (68, 12494), (73, 12512), (79, 12536), (83, 12551), (84, 12563), (96, 12632), (98, 12644), (102, 12665), (115, 12749), (128, 12803), (130, 12812), (133, 12833), (140, 12866), (141, 12872), (143, 12875), (147, 12890), (153, 12926), (157, 12950), (158, 12953), (168, 13028), (170, 13040), (182, 13115), (183, 13118), (184, 13121), (195, 13184), (212, 13295), (225, 13352), (235, 13406), (244, 13448), (255, 13496), (257, 13502), (260, 13517), (265, 13550), (273, 13583), (282, 13622), (283, 13625), (295, 13670), (302, 13709), (305, 13718), (308, 13730), (314, 13757), (325, 13850), (328, 13862), (334, 13919), (346, 14015), (364, 14090), (371, 14138), (372, 14144), (379, 14156), (394, 14192), (409, 14234), (451, 14432), (465, 14507), (494, 14624), (503, 14675), (504, 14678), (522, 14738), (523, 14741), (551, 14837), (567, 14915), (568, 14918), (599, 15074), (605, 15107), (609, 15116), (613, 15128), (620, 15152), (641, 15227), (642, 15236), (644, 15239), (647, 15263), (648, 15272), (649, 15275), (650, 15296), (657, 15368), (660, 15410), (662, 15440), (663, 15482), (668, 15554), (671, 15575), (676, 15662), (678, 15677), (686, 15758), (706, 15890), (743, 16112), (744, 16118), (756, 16232), (757, 16262), (758, 16280), (759, 16322), (760, 16355), (761, 16418),

Gene: BoostSeason_17 Start: 10144, Stop: 13818, Start Num: 14

Candidate Starts for BoostSeason_17:

(Start: 14 @10144 has 31 MA's), (Start: 23 @10216 has 1 MA's), (65, 10450), (83, 10501), (98, 10594), (109, 10669), (130, 10762), (133, 10783), (138, 10804), (139, 10810), (157, 10900), (163, 10942), (168, 10978), (176, 11011), (177, 11023), (180, 11047), (183, 11068), (189, 11092), (190, 11098), (195, 11134), (196, 11143), (201, 11176), (202, 11188), (206, 11215), (247, 11398), (250, 11410), (252, 11416), (261, 11455), (265, 11479), (303, 11512), (308, 11530), (311, 11539), (322, 11572), (350, 11761), (351, 11767), (355, 11803), (361, 11830), (366, 11848), (370, 11866), (393, 11974), (401, 12007), (411, 12040), (427, 12094), (433, 12127), (437, 12148), (442, 12172), (447, 12202), (452, 12223), (511, 12445), (536, 12538), (556, 12616), (590, 12739), (635, 12892), (678, 13309), (679, 13318), (681, 13348), (689, 13408), (710, 13516), (730, 13648), (746, 13741),

Gene: BruceB_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for BruceB_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161,

12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Bryler_20 Start: 11095, Stop: 15096, Start Num: 16

Candidate Starts for Bryler_20:

(Start: 16 @11095 has 58 MA's), (26, 11188), (37, 11293), (42, 11320), (47, 11347), (50, 11365), (55, 11383), (59, 11407), (61, 11413), (68, 11440), (69, 11446), (79, 11482), (82, 11491), (85, 11515), (97, 11587), (100, 11605), (101, 11608), (127, 11737), (151, 11854), (165, 11950), (172, 11989), (178, 12019), (188, 12079), (219, 12262), (220, 12268), (221, 12271), (234, 12325), (237, 12355), (250, 12415), (254, 12427), (256, 12433), (259, 12448), (263, 12469), (266, 12487), (300, 12625), (302, 12637), (308, 12658), (316, 12697), (340, 12751), (341, 12757), (360, 12919), (373, 12982), (388, 13063), (391, 13078), (400, 13120), (410, 13171), (414, 13192), (421, 13222), (423, 13228), (428, 13252), (435, 13303), (445, 13363), (456, 13420), (463, 13456), (468, 13474), (475, 13507), (503, 13648), (504, 13651), (527, 13735), (534, 13762), (555, 13846), (602, 14086), (627, 14161), (668, 14494), (678, 14596), (679, 14605), (686, 14677), (699, 14761), (708, 14791), (712, 14812), (730, 14929), (741, 15004), (748, 15043), (749, 15055),

Gene: CLED96_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for CLED96_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: CREW_21 Start: 12116, Stop: 15949, Start Num: 15

Candidate Starts for CREW_21:

(Start: 15 @12116 has 162 MA's), (Start: 23 @12185 has 1 MA's), (31, 12272), (41, 12347), (59, 12449), (66, 12476), (83, 12548), (84, 12560), (86, 12569), (98, 12641), (109, 12716), (128, 12800), (130, 12809), (133, 12830), (141, 12869), (150, 12905), (157, 12947), (168, 13025), (183, 13115), (196, 13190), (210, 13283), (212, 13292), (214, 13304), (216, 13313), (265, 13550), (275, 13589), (282, 13622), (302, 13709), (309, 13733), (323, 13817), (338, 13901), (341, 13913), (345, 13934), (400, 14090), (439, 14171), (450, 14219), (453, 14237), (456, 14258), (463, 14294), (475, 14345), (487, 14402), (503, 14480), (506, 14489), (527, 14567), (531, 14582), (539, 14624), (555, 14678), (602, 14918), (627, 14993), (654, 15104), (667, 15323), (669, 15335), (686, 15518), (687, 15527), (699, 15599), (708, 15629), (712, 15650), (730, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: Cain_20 Start: 11083, Stop: 15084, Start Num: 16

Candidate Starts for Cain_20:

(Start: 16 @11083 has 58 MA's), (26, 11176), (37, 11281), (42, 11308), (47, 11335), (50, 11353), (55, 11371), (59, 11395), (61, 11401), (68, 11428), (69, 11434), (79, 11470), (82, 11479), (85, 11503), (97, 11575), (100, 11593), (101, 11596), (127, 11725), (151, 11842), (165, 11938), (172, 11977), (178, 12007), (188, 12067), (219, 12250), (220, 12256), (221, 12259), (234, 12313), (237, 12343), (250, 12403), (254, 12415), (256, 12421), (259, 12436), (263, 12457), (266, 12475), (300, 12613), (302,

12625), (308, 12646), (316, 12685), (340, 12739), (341, 12745), (360, 12907), (373, 12970), (388, 13051), (391, 13066), (400, 13108), (410, 13159), (414, 13180), (421, 13210), (423, 13216), (428, 13240), (435, 13291), (445, 13351), (456, 13408), (463, 13444), (468, 13462), (475, 13495), (503, 13636), (504, 13639), (527, 13723), (534, 13750), (555, 13834), (602, 14074), (627, 14149), (668, 14482), (678, 14584), (679, 14593), (686, 14665), (699, 14749), (708, 14779), (712, 14800), (730, 14917), (741, 14992), (748, 15031), (749, 15043),

Gene: CallaLilly_22 Start: 12039, Stop: 15872, Start Num: 15

Candidate Starts for CallaLilly_22:

(Start: 15 @12039 has 162 MA's), (Start: 23 @12108 has 1 MA's), (Start: 24 @12129 has 1 MA's), (31, 12195), (59, 12372), (66, 12399), (83, 12471), (84, 12483), (86, 12492), (98, 12564), (109, 12639), (128, 12723), (130, 12732), (133, 12753), (141, 12792), (150, 12828), (157, 12870), (168, 12948), (183, 13038), (196, 13113), (210, 13206), (212, 13215), (214, 13227), (216, 13236), (265, 13473), (275, 13512), (282, 13545), (302, 13632), (309, 13656), (323, 13740), (338, 13824), (341, 13836), (345, 13857), (400, 14013), (439, 14094), (450, 14142), (453, 14160), (456, 14181), (463, 14217), (475, 14268), (487, 14325), (503, 14403), (506, 14412), (527, 14490), (531, 14505), (539, 14547), (555, 14601), (602, 14841), (627, 14916), (654, 15027), (667, 15246), (669, 15258), (686, 15441), (687, 15450), (699, 15522), (708, 15552), (712, 15573), (730, 15693), (741, 15765), (745, 15783), (746, 15789),

Gene: Cambiare_17 Start: 12153, Stop: 16196, Start Num: 16

Candidate Starts for Cambiare_17:

(Start: 16 @12153 has 58 MA's), (25, 12246), (29, 12276), (43, 12423), (61, 12507), (71, 12555), (98, 12693), (102, 12714), (109, 12768), (130, 12861), (133, 12882), (138, 12903), (141, 12921), (148, 12945), (150, 12957), (161, 13029), (164, 13044), (168, 13077), (192, 13209), (195, 13233), (198, 13254), (202, 13287), (206, 13314), (214, 13356), (223, 13404), (250, 13542), (251, 13545), (261, 13587), (276, 13656), (277, 13659), (294, 13728), (302, 13770), (318, 13848), (339, 13965), (341, 13974), (344, 13989), (351, 14070), (354, 14079), (362, 14139), (383, 14253), (393, 14307), (399, 14334), (410, 14388), (412, 14397), (421, 14439), (426, 14463), (428, 14469), (432, 14499), (435, 14520), (438, 14538), (446, 14583), (491, 14790), (493, 14805), (502, 14853), (509, 14874), (513, 14889), (520, 14913), (531, 14952), (532, 14955), (534, 14964), (538, 14991), (543, 15006), (557, 15057), (558, 15084), (585, 15189), (602, 15285), (627, 15360), (657, 15504), (670, 15705), (680, 15789), (681, 15816), (684, 15846), (686, 15858), (719, 16044), (731, 16122),

Gene: Camri_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Camri_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Capricorn_21 Start: 12116, Stop: 15949, Start Num: 15

Candidate Starts for Capricorn_21:

(Start: 15 @12116 has 162 MA's), (Start: 23 @12185 has 1 MA's), (31, 12272), (41, 12347), (59, 12449), (66, 12476), (83, 12548), (84, 12560), (86, 12569), (98, 12641), (109, 12716), (128, 12800), (130, 12809), (133, 12830), (141, 12869), (150, 12905), (157, 12947), (168, 13025), (183, 13115), (196, 13190), (210, 13283), (212, 13292), (214, 13304), (216, 13313), (265, 13550), (275, 13589), (282, 13622), (302, 13709), (309, 13733), (323, 13817), (338, 13901), (341, 13913), (345, 13934),

(400, 14090), (439, 14171), (450, 14219), (453, 14237), (456, 14258), (463, 14294), (475, 14345), (487, 14402), (503, 14480), (506, 14489), (527, 14567), (531, 14582), (539, 14624), (555, 14678), (602, 14918), (627, 14993), (654, 15104), (667, 15323), (669, 15335), (686, 15518), (687, 15527), (699, 15599), (708, 15629), (712, 15650), (730, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: CaseJules_21 Start: 12116, Stop: 15949, Start Num: 15

Candidate Starts for CaseJules_21:

(Start: 15 @12116 has 162 MA's), (Start: 23 @12185 has 1 MA's), (31, 12272), (41, 12347), (59, 12449), (66, 12476), (83, 12548), (84, 12560), (86, 12569), (98, 12641), (109, 12716), (128, 12800), (130, 12809), (133, 12830), (141, 12869), (150, 12905), (157, 12947), (168, 13025), (183, 13115), (196, 13190), (210, 13283), (212, 13292), (214, 13304), (216, 13313), (265, 13550), (275, 13589), (282, 13622), (302, 13709), (309, 13733), (323, 13817), (338, 13901), (341, 13913), (345, 13934), (400, 14090), (439, 14171), (450, 14219), (453, 14237), (456, 14258), (463, 14294), (475, 14345), (487, 14402), (503, 14480), (506, 14489), (527, 14567), (531, 14582), (539, 14624), (555, 14678), (602, 14918), (627, 14993), (654, 15104), (667, 15323), (669, 15335), (686, 15518), (687, 15527), (699, 15599), (708, 15629), (712, 15650), (730, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: CassieYates_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for CassieYates_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Cedasite_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Cedasite_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Chance64_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Chance64_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Chancellor_22 Start: 13324, Stop: 17499, Start Num: 16

Candidate Starts for Chancellor_22:

(9, 13288), (Start: 16 @13324 has 58 MA's), (34, 13522), (84, 13762), (86, 13771), (102, 13864), (130, 14011), (133, 14032), (141, 14071), (143, 14074), (157, 14149), (168, 14227), (182, 14314), (183, 14317), (190, 14347), (194, 14380), (198, 14404), (211, 14488), (217, 14518), (223, 14545), (245, 14653), (248, 14674), (251, 14686), (255, 14698), (265, 14752), (302, 14911), (308, 14932), (323, 15040), (342, 15160), (400, 15520), (410, 15571), (412, 15580), (422, 15625), (426, 15646), (469, 15865), (470, 15877), (474, 15886), (494, 15958), (503, 16009), (504, 16012), (512, 16039), (539, 16138), (545, 16156), (558, 16231), (600, 16420), (602, 16432), (627, 16507), (657, 16693), (665, 16813), (673, 16921), (686, 17071), (703, 17191), (706, 17200), (708, 17203), (714, 17224), (722, 17302), (729, 17329), (746, 17425), (753, 17488),

Gene: Chavito_21 Start: 11138, Stop: 15292, Start Num: 16

Candidate Starts for Chavito_21:

(9, 11090), (Start: 16 @11138 has 58 MA's), (26, 11231), (47, 11390), (53, 11417), (74, 11507), (75, 11510), (90, 11597), (108, 11705), (109, 11708), (124, 11774), (145, 11876), (151, 11918), (154, 11933), (155, 11942), (160, 11969), (164, 11999), (168, 12032), (177, 12074), (188, 12143), (219, 12329), (220, 12335), (230, 12371), (232, 12380), (234, 12392), (235, 12404), (237, 12422), (250, 12482), (254, 12494), (256, 12500), (259, 12515), (262, 12533), (263, 12536), (266, 12554), (270, 12569), (279, 12608), (295, 12665), (296, 12674), (302, 12704), (308, 12725), (315, 12755), (325, 12824), (330, 12845), (333, 12872), (338, 12902), (341, 12914), (353, 13016), (365, 13094), (373, 13139), (377, 13163), (387, 13217), (388, 13220), (391, 13235), (392, 13238), (400, 13277), (404, 13304), (410, 13328), (411, 13334), (437, 13469), (438, 13478), (444, 13514), (445, 13520), (450, 13538), (454, 13565), (456, 13577), (468, 13631), (475, 13664), (488, 13724), (503, 13805), (504, 13808), (527, 13892), (531, 13907), (558, 14042), (575, 14108), (602, 14243), (660, 14516), (664, 14591), (686, 14852), (687, 14861), (694, 14924), (718, 15047), (730, 15119), (734, 15140), (741, 15191), (745, 15209), (746, 15215), (750, 15254),

Gene: CheetoDust_21 Start: 12093, Stop: 15926, Start Num: 15

Candidate Starts for CheetoDust_21:

(Start: 15 @12093 has 162 MA's), (Start: 23 @12162 has 1 MA's), (31, 12249), (59, 12426), (66, 12453), (83, 12525), (84, 12537), (86, 12546), (98, 12618), (109, 12693), (128, 12777), (130, 12786), (133, 12807), (141, 12846), (157, 12924), (168, 13002), (173, 13026), (183, 13092), (196, 13167), (210, 13260), (212, 13269), (214, 13281), (216, 13290), (265, 13527), (275, 13566), (282, 13599), (302, 13686), (309, 13710), (323, 13794), (338, 13878), (341, 13890), (345, 13911), (400, 14067), (439, 14148), (444, 14172), (450, 14196), (453, 14214), (456, 14235), (463, 14271), (475, 14322), (487, 14379), (503, 14457), (506, 14466), (527, 14544), (531, 14559), (539, 14601), (555, 14655), (602, 14895), (627, 14970), (654, 15081), (667, 15300), (669, 15312), (686, 15495), (687, 15504), (699, 15576), (708, 15606), (712, 15627), (730, 15747), (741, 15819), (745, 15837), (746, 15843),

Gene: Cheetobro_22 Start: 13324, Stop: 17496, Start Num: 16

Candidate Starts for Cheetobro_22:

(9, 13288), (Start: 16 @13324 has 58 MA's), (34, 13522), (84, 13762), (86, 13771), (102, 13864), (130, 14011), (133, 14032), (141, 14071), (143, 14074), (157, 14149), (168, 14227), (182, 14314), (183, 14317), (190, 14347), (194, 14380), (198, 14404), (211, 14488), (217, 14518), (223, 14545), (245, 14653), (248, 14674), (251, 14686), (255, 14698), (265, 14752), (302, 14911), (308, 14932), (323, 15040), (342, 15160), (400, 15520), (410, 15571), (412, 15580), (422, 15625), (426, 15646), (469, 15865), (470, 15877), (474, 15886), (494, 15958), (503, 16009), (504, 16012), (512, 16039), (539, 16138), (545, 16156), (558, 16231), (600, 16420), (602, 16432), (627, 16507), (657, 16693), (665, 16813), (673, 16921), (686, 17068), (703, 17188), (706, 17197), (708, 17200), (722, 17299), (729, 17326), (746, 17422), (753, 17485),

Gene: Cherrybomb426_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Cherrybomb426_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Chris_20 Start: 11071, Stop: 15138, Start Num: 16

Candidate Starts for Chris_20:

(Start: 16 @11071 has 58 MA's), (26, 11164), (42, 11296), (47, 11323), (48, 11332), (49, 11338), (73, 11434), (97, 11563), (100, 11581), (101, 11584), (105, 11611), (109, 11641), (127, 11722), (132, 11752), (138, 11776), (151, 11839), (154, 11854), (167, 11950), (168, 11953), (177, 11995), (188, 12064), (219, 12247), (221, 12256), (232, 12298), (234, 12310), (250, 12400), (254, 12412), (256, 12418), (259, 12433), (262, 12451), (263, 12454), (269, 12484), (270, 12487), (300, 12610), (302, 12622), (304, 12628), (308, 12643), (310, 12649), (339, 12733), (346, 12802), (373, 12967), (382, 13015), (384, 13030), (400, 13105), (410, 13156), (414, 13177), (423, 13213), (428, 13237), (432, 13267), (453, 13384), (455, 13396), (456, 13405), (468, 13459), (475, 13492), (487, 13549), (503, 13627), (504, 13630), (527, 13714), (534, 13741), (545, 13789), (555, 13825), (558, 13864), (587, 13969), (602, 14065), (617, 14107), (627, 14140), (667, 14482), (686, 14680), (702, 14794), (730, 14968), (741, 15052), (746, 15073),

Gene: Clipper_23 Start: 12093, Stop: 15926, Start Num: 15

Candidate Starts for Clipper_23:

(Start: 15 @12093 has 162 MA's), (Start: 23 @12162 has 1 MA's), (31, 12249), (59, 12426), (66, 12453), (84, 12537), (86, 12546), (98, 12618), (109, 12693), (128, 12777), (130, 12786), (133, 12807), (141, 12846), (157, 12924), (168, 13002), (183, 13092), (196, 13167), (210, 13260), (212, 13269), (214, 13281), (216, 13290), (265, 13527), (275, 13566), (282, 13599), (302, 13686), (309, 13710), (323, 13794), (338, 13878), (341, 13890), (345, 13911), (400, 14067), (439, 14148), (444, 14172), (450, 14196), (453, 14214), (456, 14235), (463, 14271), (475, 14322), (487, 14379), (503, 14457), (506, 14466), (527, 14544), (531, 14559), (539, 14601), (555, 14655), (602, 14895), (627, 14970), (654, 15081), (667, 15300), (669, 15312), (686, 15495), (687, 15504), (699, 15576), (708, 15606), (712, 15627), (730, 15747), (741, 15819), (745, 15837), (746, 15843),

Gene: Coleslaw_16 Start: 11455, Stop: 15468, Start Num: 15

Candidate Starts for Coleslaw_16:

(Start: 15 @11455 has 162 MA's), (34, 11656), (57, 11770), (66, 11812), (72, 11842), (98, 11977), (99, 11989), (102, 11998), (138, 12187), (141, 12205), (143, 12208), (148, 12229), (150, 12241), (161, 12313), (168, 12361), (192, 12493), (195, 12517), (206, 12598), (233, 12721), (247, 12805), (258, 12841), (265, 12886), (266, 12892), (293, 13000), (298, 13024), (302, 13045), (344, 13264), (362, 13414), (378, 13501), (399, 13609), (428, 13744), (445, 13855), (450, 13873), (455, 13903), (501, 14125), (509, 14149), (513, 14164), (518, 14185), (527, 14212), (534, 14239), (549, 14299), (566, 14389), (572, 14422), (588, 14485), (596, 14542), (602, 14575), (605, 14584), (680, 15088), (681, 15115), (684, 15145), (686, 15157), (687, 15166), (699, 15235), (719, 15316), (727, 15376), (731, 15394), (733, 15403),

Gene: Collard_19 Start: 12197, Stop: 16303, Start Num: 14

Candidate Starts for Collard_19:

(Start: 14 @12197 has 31 MA's), (Start: 24 @12290 has 1 MA's), (32, 12368), (33, 12392), (43, 12452), (61, 12536), (64, 12548), (86, 12650), (96, 12710), (98, 12722), (102, 12743), (109, 12797), (121,

12845), (130, 12890), (133, 12911), (157, 13028), (168, 13106), (173, 13130), (183, 13196), (196, 13271), (210, 13364), (216, 13394), (252, 13568), (255, 13577), (261, 13607), (265, 13631), (270, 13652), (284, 13712), (302, 13790), (305, 13799), (320, 13877), (331, 13943), (339, 13985), (341, 13994), (348, 14078), (354, 14099), (356, 14132), (369, 14198), (373, 14219), (383, 14273), (384, 14282), (388, 14300), (392, 14318), (393, 14327), (400, 14357), (406, 14393), (418, 14447), (426, 14483), (428, 14489), (429, 14507), (448, 14612), (460, 14678), (503, 14873), (512, 14903), (522, 14936), (534, 14987), (537, 15008), (541, 15023), (542, 15029), (558, 15113), (572, 15161), (582, 15200), (594, 15260), (601, 15293), (606, 15314), (614, 15338), (622, 15368), (645, 15434), (656, 15506), (678, 15821), (679, 15830), (680, 15833), (682, 15875), (686, 15902), (691, 15932), (699, 15983), (703, 16001), (719, 16067), (724, 16115), (730, 16139), (732, 16151), (747, 16232), (749, 16256), (754, 16295),

Gene: Crespo_16 Start: 11465, Stop: 15478, Start Num: 15

Candidate Starts for Crespo_16:

(Start: 15 @11465 has 162 MA's), (34, 11666), (57, 11780), (66, 11822), (72, 11852), (98, 11987), (99, 11999), (102, 12008), (138, 12197), (141, 12215), (143, 12218), (148, 12239), (150, 12251), (161, 12323), (168, 12371), (192, 12503), (195, 12527), (206, 12608), (233, 12731), (247, 12815), (258, 12851), (265, 12896), (266, 12902), (293, 13010), (298, 13034), (302, 13055), (344, 13274), (362, 13424), (378, 13511), (399, 13619), (428, 13754), (445, 13865), (450, 13883), (455, 13913), (501, 14135), (509, 14159), (513, 14174), (518, 14195), (527, 14222), (534, 14249), (549, 14309), (566, 14399), (572, 14432), (588, 14495), (596, 14552), (602, 14585), (605, 14594), (680, 15098), (681, 15125), (684, 15155), (686, 15167), (687, 15176), (699, 15245), (719, 15326), (727, 15386), (731, 15404), (733, 15413),

Gene: CrimD_21 Start: 12051, Stop: 15887, Start Num: 15

Candidate Starts for CrimD_21:

(Start: 15 @12051 has 162 MA's), (Start: 23 @12120 has 1 MA's), (31, 12207), (59, 12387), (66, 12414), (84, 12498), (86, 12507), (96, 12567), (98, 12579), (109, 12654), (118, 12696), (128, 12738), (130, 12747), (133, 12768), (141, 12807), (157, 12885), (168, 12963), (196, 13128), (210, 13221), (212, 13230), (214, 13242), (216, 13251), (265, 13488), (271, 13512), (275, 13527), (282, 13560), (302, 13647), (309, 13671), (323, 13755), (338, 13839), (341, 13851), (345, 13872), (353, 13953), (394, 14010), (400, 14028), (439, 14109), (450, 14157), (453, 14175), (455, 14187), (456, 14196), (463, 14232), (475, 14283), (487, 14340), (503, 14418), (527, 14505), (531, 14520), (539, 14562), (555, 14616), (602, 14856), (627, 14931), (654, 15042), (667, 15261), (669, 15273), (678, 15375), (686, 15456), (687, 15465), (699, 15537), (708, 15567), (712, 15588), (730, 15708), (741, 15780), (745, 15798), (746, 15804),

Gene: Curiosium_22 Start: 11510, Stop: 15637, Start Num: 16

Candidate Starts for Curiosium_22:

(Start: 16 @11510 has 58 MA's), (20, 11537), (26, 11603), (42, 11735), (46, 11759), (53, 11789), (57, 11810), (59, 11822), (74, 11879), (75, 11882), (90, 11969), (97, 12002), (100, 12020), (101, 12023), (107, 12065), (116, 12110), (145, 12239), (151, 12281), (154, 12296), (155, 12305), (160, 12332), (168, 12395), (176, 12425), (188, 12506), (196, 12557), (210, 12644), (219, 12689), (230, 12731), (231, 12734), (232, 12740), (237, 12782), (250, 12842), (254, 12854), (256, 12860), (259, 12875), (262, 12893), (263, 12896), (266, 12914), (270, 12929), (285, 12989), (292, 13010), (295, 13025), (302, 13064), (307, 13082), (308, 13085), (338, 13262), (341, 13274), (343, 13283), (346, 13334), (353, 13376), (373, 13499), (377, 13523), (392, 13598), (404, 13664), (423, 13745), (432, 13799), (435, 13820), (438, 13838), (445, 13880), (450, 13898), (454, 13925), (456, 13937), (463, 13973), (468, 13991), (477, 14036), (503, 14165), (504, 14168), (527, 14252), (531, 14267), (538, 14306), (539, 14309), (555, 14363), (558, 14402), (575, 14468), (602, 14603), (641, 14729), (671, 15044), (678, 15125), (679, 15134), (686, 15206), (730, 15458), (741, 15530), (746, 15554), (749, 15581),

Gene: DMoney_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for DMoney_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: DNAlll_0016 Start: 11473, Stop: 15486, Start Num: 15

Candidate Starts for DNAlll_0016:

(Start: 15 @11473 has 162 MA's), (34, 11674), (57, 11788), (66, 11830), (72, 11860), (98, 11995), (99, 12007), (102, 12016), (138, 12205), (141, 12223), (143, 12226), (148, 12247), (150, 12259), (161, 12331), (168, 12379), (192, 12511), (195, 12535), (206, 12616), (233, 12739), (247, 12823), (258, 12859), (265, 12904), (266, 12910), (293, 13018), (298, 13042), (302, 13063), (344, 13282), (362, 13432), (378, 13519), (399, 13627), (428, 13762), (445, 13873), (450, 13891), (455, 13921), (501, 14143), (509, 14167), (513, 14182), (518, 14203), (527, 14230), (534, 14257), (549, 14317), (566, 14407), (572, 14440), (588, 14503), (596, 14560), (602, 14593), (605, 14602), (680, 15106), (681, 15133), (684, 15163), (686, 15175), (687, 15184), (699, 15253), (719, 15334), (727, 15394), (731, 15412), (733, 15421),

Gene: Dadosky_19 Start: 12113, Stop: 16225, Start Num: 14

Candidate Starts for Dadosky_19:

(Start: 14 @12113 has 31 MA's), (Start: 24 @12206 has 1 MA's), (32, 12284), (33, 12308), (43, 12368), (61, 12452), (86, 12566), (96, 12626), (98, 12638), (102, 12659), (109, 12713), (121, 12761), (130, 12806), (133, 12827), (157, 12944), (168, 13022), (173, 13046), (179, 13088), (183, 13112), (196, 13187), (210, 13280), (216, 13310), (252, 13484), (261, 13523), (265, 13547), (270, 13568), (284, 13628), (302, 13706), (320, 13793), (331, 13859), (339, 13901), (341, 13910), (348, 13994), (354, 14015), (356, 14048), (369, 14114), (373, 14135), (383, 14189), (384, 14198), (388, 14216), (393, 14243), (400, 14273), (406, 14309), (426, 14399), (428, 14405), (429, 14423), (448, 14528), (460, 14594), (503, 14789), (512, 14819), (522, 14852), (534, 14903), (537, 14924), (541, 14939), (542, 14945), (558, 15029), (572, 15077), (582, 15116), (594, 15176), (601, 15209), (606, 15230), (614, 15254), (622, 15284), (645, 15350), (656, 15422), (678, 15737), (679, 15746), (680, 15749), (681, 15776), (682, 15791), (684, 15806), (686, 15818), (691, 15848), (699, 15902), (703, 15920), (719, 15989), (724, 16037), (730, 16061), (732, 16073), (734, 16082), (747, 16154), (749, 16178), (754, 16217),

Gene: Dalmuri_21 Start: 12116, Stop: 15949, Start Num: 15

Candidate Starts for Dalmuri_21:

(Start: 15 @12116 has 162 MA's), (Start: 23 @12185 has 1 MA's), (31, 12272), (41, 12347), (59, 12449), (66, 12476), (83, 12548), (84, 12560), (86, 12569), (98, 12641), (109, 12716), (128, 12800), (130, 12809), (133, 12830), (141, 12869), (150, 12905), (157, 12947), (168, 13025), (183, 13115), (196, 13190), (210, 13283), (212, 13292), (214, 13304), (216, 13313), (265, 13550), (275, 13589), (282, 13622), (302, 13709), (309, 13733), (323, 13817), (338, 13901), (341, 13913), (345, 13934), (400, 14090), (439, 14171), (450, 14219), (453, 14237), (456, 14258), (463, 14294), (475, 14345), (487, 14402), (503, 14480), (506, 14489), (527, 14567), (531, 14582), (539, 14624), (555, 14678), (602, 14918), (627, 14993), (654, 15104), (667, 15323), (669, 15335), (686, 15518), (687, 15527), (699, 15599), (708, 15629), (712, 15650), (730, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: Darionha_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Darionha_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: DARTH_P_20 Start: 12196, Stop: 16335, Start Num: 15

Candidate Starts for DARTH_P_20:

(9, 12151), (Start: 15 @12196 has 162 MA's), (Start: 23 @12265 has 1 MA's), (31, 12352), (41, 12427), (59, 12529), (61, 12535), (66, 12556), (73, 12589), (76, 12601), (84, 12640), (86, 12649), (96, 12709), (98, 12721), (102, 12742), (109, 12796), (115, 12826), (130, 12889), (133, 12910), (141, 12949), (157, 13027), (168, 13105), (173, 13129), (201, 13303), (206, 13342), (207, 13351), (208, 13354), (214, 13384), (239, 13507), (242, 13522), (250, 13561), (261, 13606), (265, 13630), (291, 13732), (293, 13744), (295, 13750), (302, 13789), (322, 13915), (325, 13930), (332, 13966), (334, 13978), (343, 14023), (354, 14119), (392, 14338), (400, 14377), (403, 14398), (423, 14485), (428, 14509), (431, 14536), (432, 14539), (437, 14569), (445, 14620), (453, 14656), (475, 14764), (503, 14899), (504, 14902), (524, 14968), (526, 14974), (534, 15013), (550, 15085), (551, 15091), (555, 15112), (571, 15196), (576, 15226), (580, 15247), (583, 15259), (598, 15340), (603, 15373), (607, 15382), (610, 15388), (622, 15430), (630, 15448), (638, 15481), (639, 15487), (655, 15532), (667, 15742), (678, 15841), (679, 15850), (680, 15853), (686, 15922), (712, 16057), (720, 16126), (730, 16174), (746, 16270), (750, 16309),

Gene: DARTIN_21 Start: 11128, Stop: 15282, Start Num: 16

Candidate Starts for DARTIN_21:

(9, 11086), (Start: 16 @11128 has 58 MA's), (26, 11221), (47, 11380), (53, 11407), (74, 11497), (75, 11500), (90, 11587), (108, 11695), (124, 11764), (128, 11782), (145, 11866), (151, 11908), (154, 11923), (155, 11932), (160, 11959), (168, 12022), (177, 12064), (188, 12133), (198, 12196), (199, 12205), (219, 12319), (220, 12325), (230, 12361), (232, 12370), (234, 12382), (235, 12394), (237, 12412), (250, 12472), (254, 12484), (256, 12490), (259, 12505), (262, 12523), (263, 12526), (266, 12544), (270, 12559), (279, 12598), (295, 12655), (296, 12664), (302, 12694), (308, 12715), (315, 12745), (319, 12778), (333, 12862), (338, 12892), (341, 12904), (353, 13006), (365, 13084), (373, 13129), (377, 13153), (387, 13207), (388, 13210), (391, 13225), (400, 13267), (404, 13294), (406, 13303), (410, 13318), (411, 13324), (412, 13327), (438, 13468), (444, 13504), (445, 13510), (450, 13528), (454, 13555), (456, 13567), (468, 13621), (475, 13654), (488, 13714), (503, 13795), (504, 13798), (527, 13882), (531, 13897), (558, 14032), (575, 14098), (602, 14233), (665, 14584), (686, 14839), (687, 14848), (694, 14914), (730, 15109), (734, 15130), (741, 15181), (745, 15199), (746, 15205), (750, 15244),

Gene: DEBY_21 Start: 12050, Stop: 15883, Start Num: 15

Candidate Starts for DEBY_21:

(Start: 15 @12050 has 162 MA's), (Start: 23 @12119 has 1 MA's), (31, 12206), (59, 12383), (66, 12410), (84, 12494), (86, 12503), (98, 12575), (109, 12650), (128, 12734), (130, 12743), (133, 12764), (141, 12803), (157, 12881), (168, 12959), (183, 13049), (196, 13124), (210, 13217), (214, 13238), (216, 13247), (265, 13484), (275, 13523), (282, 13556), (302, 13643), (309, 13667), (323, 13751), (338, 13835), (341, 13847), (345, 13868), (400, 14024), (439, 14105), (450, 14153), (453, 14171), (456, 14192), (463, 14228), (475, 14279), (487, 14336), (503, 14414), (506, 14423), (527, 14501), (531, 14516), (539, 14558), (555, 14612), (602, 14852), (627, 14927), (654, 15038), (667, 15257), (669, 15269), (686, 15452), (687, 15461), (708, 15563), (712, 15584), (730, 15704), (741, 15776), (745, 15794), (746, 15800),

Gene: Devera_21 Start: 12075, Stop: 15929, Start Num: 15

Candidate Starts for Devera_21:

(Start: 15 @12075 has 162 MA's), (Start: 23 @12144 has 1 MA's), (31, 12231), (59, 12411), (66, 12438), (84, 12522), (86, 12531), (96, 12591), (98, 12603), (109, 12678), (118, 12720), (128, 12762), (130, 12771), (133, 12792), (141, 12831), (157, 12909), (163, 12951), (168, 12987), (196, 13152), (210, 13245), (214, 13266), (216, 13275), (271, 13557), (275, 13572), (282, 13605), (302, 13692), (323, 13800), (338, 13884), (341, 13896), (345, 13917), (400, 14073), (439, 14154), (450, 14202), (453, 14220), (456, 14241), (463, 14277), (475, 14328), (487, 14385), (503, 14463), (506, 14472), (527, 14550), (531, 14565), (539, 14607), (555, 14661), (578, 14778), (602, 14901), (627, 14976), (657, 15129), (667, 15306), (678, 15420), (686, 15501), (687, 15510), (699, 15582), (708, 15612), (712, 15633), (730, 15750), (741, 15822), (746, 15846),

Gene: DismalFunk_17 Start: 10116, Stop: 13784, Start Num: 14

Candidate Starts for DismalFunk_17:

(Start: 14 @10116 has 31 MA's), (Start: 23 @10188 has 1 MA's), (65, 10422), (83, 10473), (98, 10566), (102, 10587), (109, 10641), (130, 10734), (133, 10755), (138, 10776), (139, 10782), (157, 10872), (163, 10914), (168, 10950), (176, 10983), (177, 10995), (180, 11019), (183, 11040), (189, 11064), (190, 11070), (195, 11106), (196, 11115), (201, 11148), (202, 11160), (206, 11187), (247, 11370), (250, 11382), (252, 11388), (258, 11406), (261, 11427), (265, 11451), (280, 11475), (303, 11484), (307, 11499), (311, 11511), (322, 11544), (331, 11592), (350, 11733), (351, 11739), (355, 11775), (361, 11802), (366, 11820), (393, 11946), (411, 12012), (427, 12066), (433, 12099), (437, 12120), (442, 12144), (447, 12174), (452, 12195), (511, 12417), (536, 12510), (556, 12588), (590, 12711), (615, 12816), (635, 12864), (674, 13251), (678, 13281), (679, 13290), (681, 13320), (710, 13485), (730, 13614), (746, 13707),

Gene: DismalStressor_17 Start: 10116, Stop: 13784, Start Num: 14

Candidate Starts for DismalStressor_17:

(Start: 14 @10116 has 31 MA's), (Start: 23 @10188 has 1 MA's), (65, 10422), (83, 10473), (98, 10566), (102, 10587), (109, 10641), (130, 10734), (133, 10755), (138, 10776), (139, 10782), (157, 10872), (163, 10914), (168, 10950), (176, 10983), (177, 10995), (180, 11019), (183, 11040), (189, 11064), (190, 11070), (195, 11106), (196, 11115), (201, 11148), (202, 11160), (206, 11187), (247, 11370), (250, 11382), (252, 11388), (258, 11406), (261, 11427), (265, 11451), (280, 11475), (303, 11484), (307, 11499), (311, 11511), (322, 11544), (331, 11592), (350, 11733), (351, 11739), (355, 11775), (361, 11802), (366, 11820), (393, 11946), (411, 12012), (427, 12066), (433, 12099), (437, 12120), (442, 12144), (447, 12174), (452, 12195), (511, 12417), (536, 12510), (556, 12588), (590, 12711), (615, 12816), (635, 12864), (674, 13251), (678, 13281), (679, 13290), (681, 13320), (710, 13485), (730, 13614), (746, 13707),

Gene: Dole_21 Start: 12077, Stop: 15931, Start Num: 15

Candidate Starts for Dole_21:

(Start: 15 @12077 has 162 MA's), (Start: 23 @12146 has 1 MA's), (31, 12233), (59, 12413), (66, 12440), (84, 12524), (86, 12533), (96, 12593), (98, 12605), (109, 12680), (118, 12722), (128, 12764), (130, 12773), (133, 12794), (141, 12833), (157, 12911), (163, 12953), (168, 12989), (196, 13154), (210, 13247), (214, 13268), (216, 13277), (271, 13559), (275, 13574), (282, 13607), (302, 13694), (323, 13802), (338, 13886), (341, 13898), (345, 13919), (400, 14075), (439, 14156), (450, 14204), (453, 14222), (456, 14243), (463, 14279), (475, 14330), (487, 14387), (503, 14465), (506, 14474), (527, 14552), (531, 14567), (539, 14609), (555, 14663), (578, 14780), (602, 14903), (627, 14978), (657, 15131), (667, 15308), (678, 15422), (686, 15503), (687, 15512), (699, 15584), (708, 15614), (712, 15635), (730, 15752), (741, 15824), (746, 15848),

Gene: Doughnut_17 Start: 10138, Stop: 13812, Start Num: 14

Candidate Starts for Doughnut_17:

(Start: 14 @10138 has 31 MA's), (Start: 23 @10210 has 1 MA's), (65, 10444), (83, 10495), (98, 10588), (109, 10663), (130, 10756), (133, 10777), (138, 10798), (139, 10804), (157, 10894), (163, 10936), (168, 10972), (176, 11005), (177, 11017), (180, 11041), (183, 11062), (189, 11086), (190, 11092), (195, 11128), (196, 11137), (201, 11170), (202, 11182), (206, 11209), (247, 11392), (250, 11404), (252, 11410), (261, 11449), (265, 11473), (303, 11506), (308, 11524), (311, 11533), (322, 11566), (350, 11755), (351, 11761), (355, 11797), (361, 11824), (366, 11842), (370, 11860), (393, 11968), (401, 12001), (411, 12034), (427, 12088), (433, 12121), (437, 12142), (442, 12166), (447, 12196), (452, 12217), (511, 12439), (536, 12532), (556, 12610), (590, 12733), (635, 12886), (674, 13273), (678, 13303), (679, 13312), (681, 13342), (689, 13402), (710, 13510), (730, 13642), (746, 13735),

Gene: DrHayes_21 Start: 12024, Stop: 15863, Start Num: 15

Candidate Starts for DrHayes_21:

(Start: 15 @12024 has 162 MA's), (Start: 23 @12093 has 1 MA's), (31, 12180), (59, 12360), (66, 12387), (84, 12471), (86, 12480), (96, 12540), (98, 12552), (109, 12627), (122, 12678), (130, 12720), (133, 12741), (141, 12780), (157, 12858), (168, 12936), (173, 12960), (196, 13101), (210, 13194), (214, 13215), (216, 13224), (265, 13461), (271, 13485), (275, 13500), (282, 13533), (302, 13620), (320, 13707), (323, 13728), (338, 13812), (341, 13824), (345, 13845), (400, 14001), (439, 14082), (453, 14148), (456, 14169), (463, 14205), (475, 14256), (479, 14274), (487, 14313), (503, 14391), (527, 14478), (531, 14493), (539, 14535), (555, 14589), (602, 14829), (627, 14904), (654, 15015), (656, 15036), (657, 15057), (665, 15177), (678, 15351), (686, 15432), (687, 15441), (699, 15513), (708, 15543), (712, 15564), (730, 15684), (741, 15756), (745, 15774), (746, 15780),

Gene: Durfee_21 Start: 12116, Stop: 15949, Start Num: 15

Candidate Starts for Durfee_21:

(Start: 15 @12116 has 162 MA's), (Start: 23 @12185 has 1 MA's), (31, 12272), (41, 12347), (59, 12449), (66, 12476), (83, 12548), (84, 12560), (86, 12569), (98, 12641), (109, 12716), (128, 12800), (130, 12809), (133, 12830), (141, 12869), (150, 12905), (157, 12947), (168, 13025), (183, 13115), (196, 13190), (210, 13283), (212, 13292), (214, 13304), (216, 13313), (265, 13550), (275, 13589), (282, 13622), (302, 13709), (309, 13733), (323, 13817), (338, 13901), (341, 13913), (345, 13934), (400, 14090), (439, 14171), (450, 14219), (453, 14237), (456, 14258), (463, 14294), (475, 14345), (487, 14402), (503, 14480), (506, 14489), (527, 14567), (531, 14582), (539, 14624), (555, 14678), (602, 14918), (627, 14993), (654, 15104), (667, 15323), (669, 15335), (686, 15518), (687, 15527), (699, 15599), (708, 15629), (712, 15650), (730, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: ECartman_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for ECartman_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Edugator_18 Start: 12113, Stop: 16225, Start Num: 14

Candidate Starts for Edugator_18:

(Start: 12 @12092 has 1 MA's), (Start: 14 @12113 has 31 MA's), (Start: 24 @12206 has 1 MA's), (32, 12284), (33, 12308), (43, 12368), (61, 12452), (86, 12566), (96, 12626), (98, 12638), (102, 12659), (109, 12713), (121, 12761), (130, 12806), (133, 12827), (157, 12944), (168, 13022), (173, 13046), (179, 13088), (183, 13112), (196, 13187), (210, 13280), (216, 13310), (252, 13484), (261, 13523), (265, 13547), (270, 13568), (284, 13628), (302, 13706), (320, 13793), (331, 13859), (339, 13901),

(341, 13910), (348, 13994), (354, 14015), (356, 14048), (369, 14114), (373, 14135), (383, 14189), (384, 14198), (388, 14216), (393, 14243), (400, 14273), (406, 14309), (426, 14399), (428, 14405), (429, 14423), (448, 14528), (460, 14594), (503, 14789), (512, 14819), (522, 14852), (534, 14903), (537, 14924), (541, 14939), (542, 14945), (558, 15029), (572, 15077), (582, 15116), (594, 15176), (601, 15209), (606, 15230), (614, 15254), (622, 15284), (645, 15350), (656, 15422), (678, 15737), (679, 15746), (680, 15749), (681, 15776), (682, 15791), (684, 15806), (686, 15818), (691, 15848), (699, 15902), (703, 15920), (719, 15989), (724, 16037), (730, 16061), (732, 16073), (734, 16082), (747, 16154), (749, 16178), (754, 16217),

Gene: Efra2_21 Start: 11000, Stop: 15127, Start Num: 16

Candidate Starts for Efra2_21:

(9, 10952), (Start: 16 @11000 has 58 MA's), (26, 11093), (42, 11225), (46, 11249), (53, 11279), (57, 11300), (59, 11312), (75, 11372), (90, 11459), (97, 11492), (100, 11510), (101, 11513), (113, 11585), (145, 11729), (151, 11771), (154, 11786), (160, 11822), (169, 11894), (188, 11996), (219, 12179), (226, 12206), (231, 12224), (232, 12230), (237, 12272), (254, 12344), (256, 12350), (259, 12365), (263, 12386), (266, 12404), (270, 12419), (281, 12467), (292, 12500), (295, 12515), (302, 12554), (308, 12575), (315, 12605), (343, 12773), (346, 12824), (373, 12989), (377, 13013), (388, 13070), (397, 13121), (404, 13154), (406, 13163), (423, 13235), (435, 13310), (438, 13328), (445, 13370), (450, 13388), (454, 13415), (456, 13427), (480, 13556), (488, 13574), (503, 13655), (504, 13658), (527, 13742), (538, 13796), (539, 13799), (558, 13892), (575, 13958), (602, 14093), (641, 14219), (678, 14615), (679, 14624), (686, 14696), (699, 14780), (708, 14810), (711, 14831), (730, 14948), (741, 15020), (746, 15044), (750, 15083),

Gene: Ekdilam_18 Start: 11907, Stop: 16097, Start Num: 15

Candidate Starts for Ekdilam_18:

(9, 11862), (Start: 15 @11907 has 162 MA's), (Start: 23 @11976 has 1 MA's), (31, 12063), (41, 12138), (59, 12240), (66, 12267), (73, 12300), (76, 12312), (84, 12351), (96, 12420), (98, 12432), (102, 12453), (109, 12507), (113, 12531), (115, 12537), (130, 12600), (133, 12621), (141, 12660), (148, 12684), (157, 12738), (168, 12816), (173, 12840), (186, 12915), (201, 13014), (206, 13053), (208, 13065), (214, 13095), (239, 13218), (242, 13233), (250, 13272), (255, 13287), (265, 13341), (293, 13455), (294, 13458), (302, 13500), (308, 13521), (322, 13626), (325, 13641), (329, 13656), (332, 13677), (334, 13689), (343, 13734), (354, 13830), (373, 13950), (400, 14088), (403, 14109), (423, 14196), (428, 14220), (431, 14247), (432, 14250), (437, 14280), (445, 14331), (453, 14367), (475, 14475), (503, 14610), (504, 14613), (524, 14679), (526, 14685), (534, 14724), (550, 14796), (551, 14802), (555, 14823), (571, 14907), (576, 14937), (580, 14958), (583, 14970), (598, 15051), (603, 15084), (607, 15093), (610, 15099), (622, 15141), (630, 15159), (638, 15192), (639, 15198), (667, 15486), (678, 15600), (679, 15609), (680, 15612), (686, 15681), (712, 15813), (730, 15933), (742, 16011), (746, 16032), (750, 16071),

Gene: Ellie_18 Start: 11944, Stop: 16092, Start Num: 15

Candidate Starts for Ellie_18:

(Start: 15 @11944 has 162 MA's), (Start: 23 @12013 has 1 MA's), (41, 12175), (59, 12277), (61, 12283), (66, 12304), (96, 12457), (98, 12469), (109, 12544), (115, 12574), (130, 12637), (133, 12658), (141, 12697), (157, 12775), (168, 12853), (173, 12877), (183, 12943), (196, 13018), (210, 13111), (228, 13192), (239, 13255), (250, 13309), (251, 13312), (257, 13330), (259, 13342), (270, 13399), (277, 13426), (282, 13450), (288, 13471), (293, 13492), (302, 13537), (331, 13711), (354, 13867), (373, 13987), (381, 14029), (382, 14035), (394, 14107), (400, 14125), (403, 14146), (428, 14257), (437, 14317), (442, 14350), (445, 14368), (450, 14386), (453, 14404), (455, 14416), (463, 14461), (475, 14512), (482, 14560), (503, 14638), (527, 14725), (529, 14731), (531, 14740), (543, 14797), (546, 14800), (558, 14875), (575, 14941), (602, 15076), (622, 15136), (627, 15151), (630, 15157), (679, 15607), (686, 15679), (687, 15688), (702, 15775), (730, 15928), (746, 16027), (749, 16054), (750, 16066),

Gene: Emerson_21 Start: 12076, Stop: 15909, Start Num: 15

Candidate Starts for Emerson_21:

(Start: 15 @12076 has 162 MA's), (Start: 23 @12145 has 1 MA's), (31, 12232), (41, 12307), (59, 12409), (66, 12436), (83, 12508), (84, 12520), (86, 12529), (98, 12601), (109, 12676), (128, 12760), (130, 12769), (133, 12790), (141, 12829), (157, 12907), (168, 12985), (183, 13075), (196, 13150), (210, 13243), (212, 13252), (214, 13264), (216, 13273), (265, 13510), (275, 13549), (282, 13582), (302, 13669), (309, 13693), (323, 13777), (338, 13861), (341, 13873), (345, 13894), (400, 14050), (439, 14131), (450, 14179), (453, 14197), (456, 14218), (463, 14254), (475, 14305), (487, 14362), (503, 14440), (506, 14449), (527, 14527), (531, 14542), (539, 14584), (555, 14638), (602, 14878), (627, 14953), (654, 15064), (667, 15283), (669, 15295), (686, 15478), (687, 15487), (699, 15559), (708, 15589), (712, 15610), (730, 15730), (741, 15802), (745, 15820), (746, 15826),

Gene: Enkosi_17 Start: 11327, Stop: 15460, Start Num: 15

Candidate Starts for Enkosi_17:

(10, 11288), (Start: 15 @11327 has 162 MA's), (Start: 23 @11396 has 1 MA's), (31, 11483), (41, 11561), (61, 11669), (66, 11690), (73, 11723), (98, 11855), (100, 11870), (102, 11876), (109, 11930), (115, 11960), (130, 12023), (133, 12044), (141, 12083), (157, 12161), (168, 12239), (173, 12263), (210, 12497), (228, 12578), (238, 12638), (250, 12695), (260, 12731), (265, 12764), (271, 12788), (287, 12854), (290, 12863), (302, 12923), (323, 13031), (331, 13076), (354, 13232), (371, 13343), (373, 13352), (375, 13364), (384, 13415), (388, 13433), (393, 13460), (400, 13490), (419, 13583), (428, 13622), (456, 13790), (468, 13844), (475, 13877), (485, 13922), (503, 14003), (504, 14006), (527, 14090), (529, 14096), (531, 14105), (539, 14147), (552, 14183), (555, 14201), (558, 14240), (573, 14300), (602, 14441), (622, 14501), (627, 14516), (669, 14858), (686, 15047), (687, 15056), (697, 15119), (746, 15395),

Gene: Eponine_22 Start: 13193, Stop: 17389, Start Num: 16

Candidate Starts for Eponine_22:

(Start: 16 @13193 has 58 MA's), (34, 13391), (79, 13604), (84, 13631), (86, 13640), (98, 13712), (102, 13733), (128, 13871), (130, 13880), (133, 13901), (141, 13940), (155, 14009), (157, 14018), (168, 14096), (170, 14108), (183, 14186), (190, 14216), (194, 14249), (195, 14252), (198, 14273), (223, 14414), (225, 14423), (251, 14555), (255, 14567), (265, 14621), (275, 14660), (282, 14693), (302, 14780), (308, 14801), (332, 14978), (342, 15029), (360, 15188), (400, 15389), (410, 15440), (412, 15449), (422, 15494), (426, 15515), (430, 15521), (449, 15626), (451, 15635), (469, 15734), (470, 15746), (474, 15755), (494, 15827), (499, 15860), (503, 15878), (504, 15881), (512, 15908), (539, 16007), (545, 16025), (558, 16100), (600, 16289), (602, 16301), (627, 16376), (644, 16445), (657, 16577), (663, 16691), (686, 16958), (689, 16976), (706, 17087), (708, 17090), (722, 17189), (729, 17216), (730, 17219), (746, 17315), (753, 17378),

Gene: FF47_19 Start: 11405, Stop: 14815, Start Num: 28

Candidate Starts for FF47_19:

(Start: 28 @11405 has 2 MA's), (30, 11420), (36, 11468), (38, 11471), (45, 11516), (81, 11639), (142, 11966), (146, 11978), (149, 11999), (162, 12083), (169, 12137), (171, 12146), (180, 12200), (187, 12233), (188, 12242), (193, 12284), (201, 12329), (202, 12341), (205, 12362), (210, 12386), (222, 12440), (236, 12494), (240, 12515), (243, 12527), (247, 12551), (249, 12560), (268, 12638), (318, 12695), (335, 12764), (366, 12974), (374, 13013), (376, 13025), (391, 13088), (400, 13130), (402, 13148), (425, 13235), (430, 13259), (434, 13286), (437, 13298), (457, 13406), (458, 13415), (486, 13508), (495, 13538), (497, 13559), (505, 13574), (546, 13685), (553, 13706), (566, 13781), (591, 13877), (599, 13934), (605, 13967), (611, 13982), (661, 14213), (677, 14408), (687, 14504), (690, 14522), (697, 14564), (698, 14570), (706, 14597), (724, 14699), (726, 14708), (734, 14747),

Gene: Fefferhead_20 Start: 12111, Stop: 16259, Start Num: 15

Candidate Starts for Fefferhead_20:

(Start: 15 @12111 has 162 MA's), (Start: 23 @12180 has 1 MA's), (41, 12342), (59, 12444), (61, 12450), (66, 12471), (96, 12624), (98, 12636), (109, 12711), (130, 12804), (133, 12825), (141, 12864), (157, 12942), (168, 13020), (173, 13044), (181, 13098), (183, 13110), (196, 13185), (210, 13278), (228, 13359), (239, 13422), (250, 13476), (257, 13497), (259, 13509), (265, 13545), (270, 13566), (275, 13584), (282, 13617), (288, 13638), (290, 13644), (293, 13659), (295, 13665), (302, 13704), (331, 13878), (354, 14034), (381, 14196), (382, 14202), (392, 14253), (400, 14292), (403, 14313), (428, 14424), (437, 14484), (442, 14517), (445, 14535), (450, 14553), (453, 14571), (455, 14583), (463, 14628), (475, 14679), (482, 14727), (503, 14805), (506, 14814), (527, 14892), (529, 14898), (531, 14907), (543, 14964), (546, 14967), (558, 15042), (575, 15108), (602, 15243), (622, 15303), (627, 15318), (630, 15324), (679, 15774), (686, 15846), (687, 15855), (702, 15942), (730, 16095), (746, 16194), (749, 16221), (750, 16233),

Gene: Feyre_19 Start: 12055, Stop: 16164, Start Num: 14

Candidate Starts for Feyre_19:

(Start: 14 @12055 has 31 MA's), (43, 12313), (61, 12397), (76, 12463), (83, 12490), (86, 12511), (96, 12571), (98, 12583), (102, 12604), (109, 12658), (115, 12688), (130, 12751), (133, 12772), (157, 12889), (163, 12931), (164, 12934), (168, 12967), (176, 13000), (210, 13225), (213, 13237), (214, 13246), (235, 13324), (247, 13387), (251, 13402), (252, 13405), (255, 13414), (257, 13420), (259, 13432), (260, 13435), (265, 13468), (269, 13486), (271, 13492), (295, 13588), (302, 13627), (331, 13780), (339, 13822), (344, 13846), (354, 13936), (356, 13969), (383, 14110), (384, 14119), (388, 14137), (393, 14164), (409, 14242), (428, 14326), (448, 14449), (460, 14515), (481, 14617), (503, 14710), (506, 14719), (512, 14740), (522, 14773), (534, 14824), (537, 14845), (541, 14860), (542, 14866), (558, 14950), (570, 14980), (572, 14998), (582, 15037), (594, 15097), (601, 15130), (606, 15151), (614, 15175), (622, 15208), (645, 15292), (656, 15364), (678, 15673), (682, 15727), (684, 15742), (686, 15754), (691, 15784), (724, 15970), (730, 15994), (732, 16006), (747, 16093), (749, 16117),

Gene: Findley_17 Start: 10116, Stop: 13787, Start Num: 14

Candidate Starts for Findley_17:

(Start: 14 @10116 has 31 MA's), (Start: 23 @10188 has 1 MA's), (65, 10422), (83, 10473), (98, 10566), (102, 10587), (109, 10641), (130, 10734), (133, 10755), (138, 10776), (139, 10782), (157, 10872), (163, 10914), (168, 10950), (176, 10983), (177, 10995), (180, 11019), (183, 11040), (189, 11064), (190, 11070), (195, 11106), (196, 11115), (201, 11148), (202, 11160), (206, 11187), (247, 11370), (250, 11382), (252, 11388), (258, 11406), (261, 11427), (265, 11451), (280, 11475), (303, 11484), (307, 11499), (311, 11511), (322, 11544), (331, 11592), (350, 11733), (351, 11739), (355, 11775), (361, 11802), (366, 11820), (373, 11850), (393, 11946), (401, 11979), (412, 12015), (427, 12066), (433, 12099), (437, 12120), (442, 12144), (447, 12174), (452, 12195), (492, 12339), (511, 12417), (536, 12510), (556, 12588), (590, 12711), (615, 12816), (635, 12864), (678, 13284), (679, 13293), (681, 13323), (710, 13488), (730, 13617), (746, 13710),

Gene: Fionnbharth_22 Start: 13314, Stop: 17489, Start Num: 16

Candidate Starts for Fionnbharth_22:

(9, 13278), (Start: 16 @13314 has 58 MA's), (34, 13512), (84, 13752), (86, 13761), (102, 13854), (121, 13956), (130, 14001), (141, 14061), (157, 14139), (168, 14217), (182, 14304), (183, 14307), (190, 14337), (194, 14370), (198, 14394), (211, 14478), (217, 14508), (223, 14535), (245, 14643), (248, 14664), (251, 14676), (255, 14688), (265, 14742), (302, 14901), (308, 14922), (323, 15030), (342, 15150), (394, 15492), (400, 15510), (410, 15561), (412, 15570), (422, 15615), (426, 15636), (451, 15756), (469, 15855), (470, 15867), (474, 15876), (494, 15948), (503, 15999), (504, 16002), (512, 16029), (539, 16128), (545, 16146), (558, 16221), (600, 16410), (602, 16422), (627, 16497), (637, 16527), (657, 16683), (665, 16803), (673, 16911), (686, 17061), (706, 17190), (708, 17193), (722, 17292), (729, 17319), (746, 17415), (753, 17478),

Gene: FlagStaff_16 Start: 11630, Stop: 15664, Start Num: 16

Candidate Starts for FlagStaff_16:

(Start: 16 @11630 has 58 MA's), (25, 11723), (29, 11753), (43, 11900), (61, 11984), (71, 12032), (96, 12158), (98, 12170), (102, 12191), (130, 12338), (133, 12359), (138, 12380), (141, 12398), (148, 12422), (150, 12434), (161, 12506), (164, 12521), (168, 12554), (192, 12686), (195, 12710), (198, 12731), (201, 12752), (202, 12764), (206, 12791), (208, 12803), (214, 12833), (223, 12881), (251, 13022), (252, 13025), (261, 13064), (265, 13088), (276, 13133), (277, 13136), (302, 13247), (341, 13451), (351, 13547), (354, 13556), (362, 13616), (383, 13730), (386, 13751), (399, 13811), (405, 13844), (412, 13874), (428, 13946), (432, 13976), (435, 13997), (454, 14102), (455, 14105), (466, 14159), (491, 14258), (494, 14276), (509, 14342), (513, 14357), (520, 14381), (532, 14423), (534, 14432), (549, 14492), (566, 14582), (588, 14678), (596, 14735), (602, 14768), (625, 14828), (634, 14843), (662, 15038), (678, 15245), (684, 15314), (686, 15326), (691, 15356), (693, 15416), (719, 15512), (727, 15572), (731, 15590),

Gene: Frosty24_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Frosty24_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Ganymede_22 Start: 12096, Stop: 15929, Start Num: 15

Candidate Starts for Ganymede_22:

(Start: 15 @12096 has 162 MA's), (Start: 23 @12165 has 1 MA's), (31, 12252), (59, 12429), (66, 12456), (84, 12540), (86, 12549), (98, 12621), (109, 12696), (128, 12780), (130, 12789), (133, 12810), (141, 12849), (157, 12927), (168, 13005), (183, 13095), (196, 13170), (210, 13263), (214, 13284), (216, 13293), (265, 13530), (275, 13569), (282, 13602), (302, 13689), (309, 13713), (323, 13797), (338, 13881), (341, 13893), (345, 13914), (400, 14070), (439, 14151), (450, 14199), (453, 14217), (456, 14238), (463, 14274), (475, 14325), (487, 14382), (503, 14460), (506, 14469), (527, 14547), (539, 14604), (555, 14658), (602, 14898), (627, 14973), (654, 15084), (667, 15303), (669, 15315), (686, 15498), (687, 15507), (699, 15579), (708, 15609), (712, 15630), (730, 15750), (741, 15822), (745, 15840), (746, 15846),

Gene: Gengar_19 Start: 12162, Stop: 16271, Start Num: 14

Candidate Starts for Gengar_19:

(Start: 14 @12162 has 31 MA's), (43, 12420), (61, 12504), (76, 12570), (86, 12618), (96, 12678), (98, 12690), (102, 12711), (109, 12765), (115, 12795), (130, 12858), (133, 12879), (147, 12936), (157, 12996), (168, 13074), (173, 13098), (179, 13140), (186, 13173), (210, 13332), (214, 13353), (235, 13431), (247, 13494), (251, 13509), (252, 13512), (255, 13521), (257, 13527), (259, 13539), (265, 13575), (269, 13593), (295, 13695), (302, 13734), (331, 13887), (339, 13929), (344, 13953), (354, 14043), (356, 14076), (369, 14142), (383, 14217), (384, 14226), (388, 14244), (393, 14271), (409, 14349), (428, 14433), (448, 14556), (460, 14622), (481, 14724), (503, 14817), (512, 14847), (519, 14874), (522, 14880), (534, 14931), (537, 14952), (541, 14967), (542, 14973), (558, 15057), (570, 15087), (572, 15105), (582, 15144), (594, 15204), (601, 15237), (606, 15258), (614, 15282), (622, 15315), (645, 15399), (656, 15471), (678, 15780), (682, 15834), (684, 15849), (686, 15861), (691, 15891), (724, 16077), (730, 16101), (732, 16113), (747, 16200), (749, 16224),

Gene: Geraldini_21 Start: 12092, Stop: 15925, Start Num: 15

Candidate Starts for Geraldini_21:

(Start: 15 @12092 has 162 MA's), (Start: 23 @12161 has 1 MA's), (Start: 24 @12182 has 1 MA's), (31, 12248), (59, 12425), (66, 12452), (83, 12524), (84, 12536), (86, 12545), (98, 12617), (109, 12692), (128, 12776), (130, 12785), (133, 12806), (141, 12845), (157, 12923), (168, 13001), (183, 13091), (196, 13166), (210, 13259), (212, 13268), (214, 13280), (216, 13289), (265, 13526), (275, 13565), (282, 13598), (302, 13685), (309, 13709), (323, 13793), (338, 13877), (341, 13889), (345, 13910), (400, 14066), (439, 14147), (450, 14195), (453, 14213), (456, 14234), (463, 14270), (475, 14321), (487, 14378), (503, 14456), (506, 14465), (527, 14543), (531, 14558), (539, 14600), (555, 14654), (602, 14894), (627, 14969), (654, 15080), (667, 15299), (669, 15311), (686, 15494), (687, 15503), (699, 15575), (708, 15605), (712, 15626), (730, 15746), (741, 15818), (745, 15836), (746, 15842),

Gene: Gideon_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Gideon_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: GoldenAsh_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for GoldenAsh_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Gomashi_16 Start: 11465, Stop: 15478, Start Num: 15

Candidate Starts for Gomashi_16:

(Start: 15 @11465 has 162 MA's), (34, 11666), (57, 11780), (66, 11822), (72, 11852), (98, 11987), (99, 11999), (102, 12008), (138, 12197), (141, 12215), (143, 12218), (148, 12239), (150, 12251), (161, 12323), (168, 12371), (192, 12503), (195, 12527), (206, 12608), (233, 12731), (247, 12815), (258, 12851), (265, 12896), (266, 12902), (293, 13010), (298, 13034), (302, 13055), (344, 13274), (362, 13424), (378, 13511), (399, 13619), (428, 13754), (445, 13865), (450, 13883), (455, 13913), (501, 14135), (509, 14159), (513, 14174), (518, 14195), (527, 14222), (534, 14249), (549, 14309), (566, 14399), (572, 14432), (588, 14495), (596, 14552), (602, 14585), (605, 14594), (680, 15098), (681, 15125), (684, 15155), (686, 15167), (687, 15176), (699, 15245), (719, 15326), (727, 15386), (731, 15404), (733, 15413),

Gene: Grizzly_16 Start: 11464, Stop: 15480, Start Num: 15

Candidate Starts for Grizzly_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (64, 11812), (66, 11821), (72, 11851), (98, 11986), (102, 12007), (130, 12154), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (255, 12841), (258, 12850), (266, 12901), (272, 12925), (278, 12952), (302, 13054), (342, 13261), (344, 13273), (360, 13420), (362, 13423), (399, 13618), (445, 13864), (450, 13882), (455,

13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (520, 14197), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (574, 14446), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15100), (681, 15127), (684, 15157), (686, 15169), (687, 15178), (699, 15247), (719, 15328), (727, 15388), (731, 15406), (733, 15415),

Gene: Guanica15_21 Start: 11016, Stop: 15143, Start Num: 16

Candidate Starts for Guanica15_21:

(9, 10968), (Start: 16 @11016 has 58 MA's), (26, 11109), (42, 11241), (46, 11265), (53, 11295), (57, 11316), (59, 11328), (75, 11388), (90, 11475), (97, 11508), (100, 11526), (101, 11529), (113, 11601), (145, 11745), (151, 11787), (154, 11802), (160, 11838), (169, 11910), (188, 12012), (219, 12195), (226, 12222), (231, 12240), (232, 12246), (237, 12288), (254, 12360), (256, 12366), (259, 12381), (263, 12402), (266, 12420), (270, 12435), (281, 12483), (292, 12516), (295, 12531), (302, 12570), (308, 12591), (315, 12621), (343, 12789), (346, 12840), (373, 13005), (377, 13029), (388, 13086), (397, 13137), (404, 13170), (406, 13179), (423, 13251), (435, 13326), (438, 13344), (445, 13386), (450, 13404), (454, 13431), (456, 13443), (480, 13572), (488, 13590), (503, 13671), (504, 13674), (527, 13758), (538, 13812), (539, 13815), (558, 13908), (575, 13974), (602, 14109), (641, 14235), (678, 14631), (679, 14640), (686, 14712), (699, 14796), (730, 14964), (741, 15036), (746, 15060), (750, 15099),

Gene: Guillsminger_19 Start: 12137, Stop: 16246, Start Num: 14

Candidate Starts for Guillsminger_19:

(Start: 14 @12137 has 31 MA's), (43, 12395), (61, 12479), (76, 12545), (86, 12593), (96, 12653), (98, 12665), (102, 12686), (109, 12740), (115, 12770), (130, 12833), (133, 12854), (147, 12911), (157, 12971), (168, 13049), (173, 13073), (179, 13115), (186, 13148), (210, 13307), (214, 13328), (235, 13406), (247, 13469), (251, 13484), (252, 13487), (255, 13496), (257, 13502), (259, 13514), (265, 13550), (269, 13568), (295, 13670), (302, 13709), (331, 13862), (339, 13904), (344, 13928), (354, 14018), (356, 14051), (369, 14117), (383, 14192), (384, 14201), (388, 14219), (393, 14246), (409, 14324), (428, 14408), (448, 14531), (460, 14597), (481, 14699), (503, 14792), (512, 14822), (519, 14849), (522, 14855), (534, 14906), (537, 14927), (541, 14942), (542, 14948), (558, 15032), (570, 15062), (572, 15080), (582, 15119), (594, 15179), (601, 15212), (606, 15233), (614, 15257), (622, 15290), (645, 15374), (656, 15446), (678, 15755), (682, 15809), (684, 15824), (686, 15836), (691, 15866), (724, 16052), (730, 16076), (732, 16088), (747, 16175), (749, 16199),

Gene: Halo_16 Start: 11459, Stop: 15472, Start Num: 15

Candidate Starts for Halo_16:

(Start: 15 @11459 has 162 MA's), (34, 11660), (57, 11774), (66, 11816), (72, 11846), (98, 11981), (99, 11993), (102, 12002), (138, 12191), (141, 12209), (143, 12212), (148, 12233), (150, 12245), (161, 12317), (168, 12365), (192, 12497), (195, 12521), (206, 12602), (233, 12725), (247, 12809), (258, 12845), (265, 12890), (266, 12896), (293, 13004), (298, 13028), (302, 13049), (344, 13268), (362, 13418), (378, 13505), (399, 13613), (428, 13748), (445, 13859), (450, 13877), (455, 13907), (501, 14129), (509, 14153), (513, 14168), (518, 14189), (527, 14216), (534, 14243), (549, 14303), (566, 14393), (572, 14426), (588, 14489), (596, 14546), (602, 14579), (605, 14588), (680, 15092), (681, 15119), (684, 15149), (686, 15161), (687, 15170), (699, 15239), (719, 15320), (727, 15380), (731, 15398), (733, 15407),

Gene: Hammy_20 Start: 12190, Stop: 16329, Start Num: 15

Candidate Starts for Hammy_20:

(9, 12145), (Start: 15 @12190 has 162 MA's), (Start: 23 @12259 has 1 MA's), (31, 12346), (41, 12421), (59, 12523), (61, 12529), (66, 12550), (73, 12583), (76, 12595), (84, 12634), (86, 12643), (96, 12703), (98, 12715), (102, 12736), (109, 12790), (115, 12820), (130, 12883), (133, 12904), (141, 12943), (157, 13021), (168, 13099), (173, 13123), (201, 13297), (206, 13336), (207, 13345), (208, 13348), (214, 13378), (239, 13501), (242, 13516), (250, 13555), (261, 13600), (265, 13624), (291, 13726), (293, 13738), (295, 13744), (302, 13783), (322, 13909), (325, 13924), (332, 13960), (334, 13972), (343,

14017), (354, 14113), (392, 14332), (400, 14371), (403, 14392), (423, 14479), (428, 14503), (431, 14530), (432, 14533), (437, 14563), (445, 14614), (453, 14650), (475, 14758), (503, 14893), (504, 14896), (524, 14962), (526, 14968), (534, 15007), (550, 15079), (551, 15085), (555, 15106), (571, 15190), (576, 15220), (580, 15241), (583, 15253), (598, 15334), (603, 15367), (607, 15376), (610, 15382), (622, 15424), (630, 15442), (638, 15475), (639, 15481), (655, 15526), (667, 15736), (678, 15835), (679, 15844), (680, 15847), (686, 15916), (712, 16051), (720, 16120), (730, 16168), (746, 16264), (750, 16303),

Gene: HedwigODU_21 Start: 12079, Stop: 15918, Start Num: 15

Candidate Starts for HedwigODU_21:

(Start: 15 @12079 has 162 MA's), (Start: 23 @12148 has 1 MA's), (31, 12235), (59, 12412), (66, 12439), (83, 12511), (84, 12523), (86, 12532), (98, 12604), (109, 12679), (128, 12763), (130, 12772), (133, 12793), (141, 12832), (157, 12910), (168, 12988), (183, 13078), (196, 13153), (210, 13246), (212, 13255), (214, 13267), (216, 13276), (271, 13537), (275, 13552), (282, 13585), (302, 13672), (309, 13696), (323, 13780), (338, 13864), (341, 13876), (345, 13897), (400, 14053), (439, 14134), (450, 14182), (453, 14200), (456, 14221), (463, 14257), (475, 14308), (487, 14365), (503, 14443), (506, 14452), (527, 14530), (539, 14587), (555, 14641), (602, 14881), (627, 14956), (654, 15067), (667, 15286), (669, 15298), (686, 15487), (687, 15496), (699, 15568), (708, 15598), (712, 15619), (730, 15739), (741, 15811), (745, 15829), (746, 15835),

Gene: Heftyboy_19 Start: 12264, Stop: 16394, Start Num: 14

Candidate Starts for Heftyboy_19:

(Start: 14 @12264 has 31 MA's), (Start: 24 @12357 has 1 MA's), (32, 12435), (33, 12459), (43, 12519), (61, 12603), (64, 12615), (86, 12717), (96, 12777), (98, 12789), (102, 12810), (109, 12864), (121, 12912), (130, 12957), (133, 12978), (157, 13095), (168, 13173), (173, 13197), (183, 13263), (196, 13338), (210, 13431), (216, 13461), (252, 13635), (255, 13644), (261, 13674), (265, 13698), (270, 13719), (284, 13779), (302, 13857), (305, 13866), (320, 13944), (331, 14010), (339, 14052), (341, 14061), (348, 14145), (354, 14166), (356, 14199), (383, 14340), (384, 14349), (388, 14367), (393, 14394), (409, 14472), (428, 14556), (448, 14679), (460, 14745), (503, 14940), (512, 14970), (519, 14997), (522, 15003), (528, 15030), (537, 15075), (541, 15090), (542, 15096), (558, 15180), (572, 15228), (582, 15267), (594, 15327), (601, 15360), (606, 15381), (614, 15405), (622, 15438), (645, 15522), (656, 15594), (678, 15903), (682, 15957), (684, 15972), (686, 15984), (691, 16014), (724, 16200), (730, 16224), (732, 16236), (747, 16323), (749, 16347),

Gene: Homura_21 Start: 12116, Stop: 15949, Start Num: 15

Candidate Starts for Homura_21:

(Start: 15 @12116 has 162 MA's), (Start: 23 @12185 has 1 MA's), (31, 12272), (41, 12347), (59, 12449), (66, 12476), (83, 12548), (84, 12560), (86, 12569), (98, 12641), (109, 12716), (128, 12800), (130, 12809), (133, 12830), (141, 12869), (150, 12905), (157, 12947), (168, 13025), (183, 13115), (196, 13190), (210, 13283), (212, 13292), (214, 13304), (216, 13313), (265, 13550), (275, 13589), (282, 13622), (302, 13709), (309, 13733), (323, 13817), (338, 13901), (341, 13913), (345, 13934), (400, 14090), (439, 14171), (450, 14219), (453, 14237), (456, 14258), (463, 14294), (475, 14345), (487, 14402), (503, 14480), (506, 14489), (527, 14567), (531, 14582), (539, 14624), (555, 14678), (602, 14918), (627, 14993), (652, 15089), (654, 15104), (667, 15323), (669, 15335), (686, 15518), (687, 15527), (699, 15599), (708, 15629), (712, 15650), (730, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: Hope_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Hope_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362,

13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Hotshotbaby7_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Hotshotbaby7_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Hurricane_20 Start: 12208, Stop: 16356, Start Num: 15

Candidate Starts for Hurricane_20:

(Start: 15 @12208 has 162 MA's), (Start: 23 @12277 has 1 MA's), (Start: 24 @12298 has 1 MA's), (26, 12304), (31, 12364), (52, 12502), (61, 12547), (66, 12568), (69, 12589), (83, 12640), (96, 12721), (98, 12733), (102, 12754), (109, 12808), (118, 12850), (130, 12901), (133, 12922), (136, 12940), (143, 12964), (153, 13015), (157, 13039), (164, 13084), (168, 13117), (173, 13141), (201, 13315), (210, 13375), (214, 13396), (216, 13405), (250, 13573), (257, 13594), (261, 13618), (265, 13642), (270, 13663), (275, 13681), (279, 13702), (282, 13714), (293, 13756), (294, 13759), (302, 13801), (306, 13816), (318, 13879), (334, 13990), (340, 14020), (347, 14098), (368, 14218), (373, 14251), (390, 14341), (393, 14359), (400, 14389), (404, 14416), (445, 14632), (453, 14668), (468, 14743), (475, 14776), (476, 14788), (488, 14836), (503, 14917), (504, 14920), (539, 15037), (558, 15130), (578, 15208), (599, 15307), (602, 15331), (627, 15406), (678, 15865), (679, 15874), (680, 15877), (686, 15946), (687, 15955), (712, 16087), (721, 16147), (723, 16165), (732, 16201), (734, 16210), (745, 16276), (746, 16282), (748, 16297), (749, 16309),

Gene: Hyperbowlee_21 Start: 12116, Stop: 15949, Start Num: 15

Candidate Starts for Hyperbowlee_21:

(Start: 15 @12116 has 162 MA's), (Start: 23 @12185 has 1 MA's), (31, 12272), (41, 12347), (59, 12449), (66, 12476), (83, 12548), (84, 12560), (86, 12569), (98, 12641), (109, 12716), (128, 12800), (130, 12809), (133, 12830), (141, 12869), (150, 12905), (157, 12947), (168, 13025), (183, 13115), (196, 13190), (210, 13283), (212, 13292), (214, 13304), (216, 13313), (265, 13550), (275, 13589), (282, 13622), (302, 13709), (309, 13733), (323, 13817), (338, 13901), (341, 13913), (345, 13934), (400, 14090), (439, 14171), (450, 14219), (453, 14237), (456, 14258), (463, 14294), (475, 14345), (487, 14402), (503, 14480), (506, 14489), (527, 14567), (531, 14582), (539, 14624), (555, 14678), (602, 14918), (627, 14993), (654, 15104), (667, 15323), (669, 15335), (686, 15518), (687, 15527), (699, 15599), (708, 15629), (712, 15650), (730, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: Illumine_21 Start: 12077, Stop: 15931, Start Num: 15

Candidate Starts for Illumine_21:

(Start: 15 @12077 has 162 MA's), (Start: 23 @12146 has 1 MA's), (31, 12233), (59, 12413), (66, 12440), (84, 12524), (86, 12533), (96, 12593), (98, 12605), (109, 12680), (118, 12722), (128, 12764), (130, 12773), (133, 12794), (141, 12833), (157, 12911), (163, 12953), (168, 12989), (196, 13154), (210, 13247), (214, 13268), (216, 13277), (271, 13559), (275, 13574), (282, 13607), (302, 13694), (323, 13802), (338, 13886), (341, 13898), (345, 13919), (400, 14075), (439, 14156), (450, 14204), (453, 14222), (456, 14243), (463, 14279), (475, 14330), (487, 14387), (503, 14465), (506, 14474),

(527, 14552), (531, 14567), (539, 14609), (555, 14663), (578, 14780), (602, 14903), (627, 14978), (657, 15131), (667, 15308), (678, 15422), (686, 15503), (687, 15512), (699, 15584), (708, 15614), (712, 15635), (730, 15752), (741, 15824), (746, 15848),

Gene: Inky_21 Start: 12116, Stop: 15949, Start Num: 15

Candidate Starts for Inky_21:

(Start: 15 @12116 has 162 MA's), (Start: 23 @12185 has 1 MA's), (31, 12272), (41, 12347), (59, 12449), (66, 12476), (83, 12548), (84, 12560), (86, 12569), (98, 12641), (109, 12716), (128, 12800), (130, 12809), (133, 12830), (141, 12869), (150, 12905), (157, 12947), (168, 13025), (183, 13115), (196, 13190), (210, 13283), (212, 13292), (214, 13304), (216, 13313), (265, 13550), (275, 13589), (282, 13622), (302, 13709), (309, 13733), (323, 13817), (338, 13901), (341, 13913), (345, 13934), (400, 14090), (439, 14171), (450, 14219), (453, 14237), (456, 14258), (463, 14294), (475, 14345), (487, 14402), (503, 14480), (506, 14489), (527, 14567), (531, 14582), (539, 14624), (555, 14678), (602, 14918), (627, 14993), (654, 15104), (667, 15323), (669, 15335), (686, 15518), (687, 15527), (699, 15599), (708, 15629), (712, 15650), (730, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: InvictusManeo_19 Start: 12240, Stop: 16346, Start Num: 14

Candidate Starts for InvictusManeo_19:

(Start: 14 @12240 has 31 MA's), (Start: 24 @12333 has 1 MA's), (32, 12411), (33, 12435), (43, 12495), (61, 12579), (64, 12591), (86, 12693), (96, 12753), (98, 12765), (102, 12786), (109, 12840), (121, 12888), (130, 12933), (133, 12954), (157, 13071), (168, 13149), (173, 13173), (183, 13239), (196, 13314), (210, 13407), (216, 13437), (252, 13611), (255, 13620), (261, 13650), (265, 13674), (270, 13695), (284, 13755), (302, 13833), (305, 13842), (320, 13920), (331, 13986), (339, 14028), (341, 14037), (348, 14121), (354, 14142), (356, 14175), (369, 14241), (373, 14262), (383, 14316), (384, 14325), (388, 14343), (392, 14361), (393, 14370), (400, 14400), (406, 14436), (418, 14490), (426, 14526), (428, 14532), (429, 14550), (448, 14655), (460, 14721), (503, 14916), (512, 14946), (522, 14979), (534, 15030), (537, 15051), (541, 15066), (542, 15072), (558, 15156), (572, 15204), (582, 15243), (594, 15303), (601, 15336), (606, 15357), (614, 15381), (622, 15411), (645, 15477), (656, 15549), (678, 15864), (679, 15873), (680, 15876), (682, 15918), (686, 15945), (691, 15975), (699, 16026), (703, 16044), (719, 16110), (724, 16158), (730, 16182), (732, 16194), (747, 16275), (749, 16299), (754, 16338),

Gene: JAWS_21 Start: 12070, Stop: 15903, Start Num: 15

Candidate Starts for JAWS_21:

(Start: 15 @12070 has 162 MA's), (Start: 23 @12139 has 1 MA's), (31, 12226), (41, 12301), (59, 12403), (66, 12430), (83, 12502), (84, 12514), (86, 12523), (98, 12595), (109, 12670), (128, 12754), (130, 12763), (133, 12784), (141, 12823), (150, 12859), (157, 12901), (168, 12979), (183, 13069), (196, 13144), (210, 13237), (212, 13246), (214, 13258), (216, 13267), (265, 13504), (275, 13543), (282, 13576), (302, 13663), (309, 13687), (323, 13771), (338, 13855), (341, 13867), (345, 13888), (400, 14044), (439, 14125), (450, 14173), (453, 14191), (456, 14212), (463, 14248), (475, 14299), (487, 14356), (503, 14434), (506, 14443), (527, 14521), (531, 14536), (539, 14578), (555, 14632), (602, 14872), (627, 14947), (654, 15058), (667, 15277), (669, 15289), (686, 15472), (687, 15481), (699, 15553), (708, 15583), (712, 15604), (730, 15724), (741, 15796), (745, 15814), (746, 15820),

Gene: JF1_22 Start: 13313, Stop: 17488, Start Num: 16

Candidate Starts for JF1_22:

(9, 13277), (Start: 16 @13313 has 58 MA's), (34, 13511), (84, 13751), (86, 13760), (102, 13853), (121, 13955), (130, 14000), (141, 14060), (157, 14138), (168, 14216), (182, 14303), (183, 14306), (190, 14336), (194, 14369), (198, 14393), (211, 14477), (217, 14507), (223, 14534), (245, 14642), (248, 14663), (251, 14675), (255, 14687), (265, 14741), (302, 14900), (308, 14921), (323, 15029), (342, 15149), (394, 15491), (400, 15509), (410, 15560), (412, 15569), (422, 15614), (426, 15635), (451, 15755), (469, 15854), (470, 15866), (474, 15875), (494, 15947), (503, 15998), (504, 16001), (512, 16028), (539, 16127), (545, 16145), (558, 16220), (600, 16409), (602, 16421), (627, 16496), (637,

16526), (657, 16682), (665, 16802), (673, 16910), (686, 17060), (703, 17180), (706, 17189), (708, 17192), (722, 17291), (729, 17318), (746, 17414), (753, 17477),

Gene: Jane_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Jane_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Jarvi_21 Start: 12116, Stop: 15949, Start Num: 15

Candidate Starts for Jarvi_21:

(Start: 15 @12116 has 162 MA's), (Start: 23 @12185 has 1 MA's), (31, 12272), (41, 12347), (59, 12449), (66, 12476), (83, 12548), (84, 12560), (86, 12569), (98, 12641), (109, 12716), (128, 12800), (130, 12809), (133, 12830), (141, 12869), (150, 12905), (157, 12947), (168, 13025), (183, 13115), (196, 13190), (210, 13283), (212, 13292), (214, 13304), (216, 13313), (265, 13550), (275, 13589), (282, 13622), (302, 13709), (309, 13733), (323, 13817), (338, 13901), (341, 13913), (345, 13934), (400, 14090), (439, 14171), (450, 14219), (453, 14237), (456, 14258), (463, 14294), (475, 14345), (487, 14402), (503, 14480), (506, 14489), (527, 14567), (531, 14582), (539, 14624), (555, 14678), (602, 14918), (627, 14993), (654, 15104), (667, 15323), (669, 15335), (686, 15518), (687, 15527), (699, 15599), (708, 15629), (712, 15650), (730, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: Jayhawk_21 Start: 12080, Stop: 15916, Start Num: 15

Candidate Starts for Jayhawk_21:

(Start: 15 @12080 has 162 MA's), (Start: 23 @12149 has 1 MA's), (31, 12236), (59, 12413), (66, 12440), (83, 12512), (84, 12524), (86, 12533), (98, 12605), (109, 12680), (128, 12764), (130, 12773), (133, 12794), (141, 12833), (157, 12911), (168, 12989), (183, 13079), (196, 13154), (210, 13247), (212, 13256), (214, 13268), (216, 13277), (271, 13538), (275, 13553), (282, 13586), (302, 13673), (309, 13697), (323, 13781), (338, 13865), (341, 13877), (345, 13898), (400, 14054), (439, 14135), (450, 14183), (453, 14201), (456, 14222), (463, 14258), (475, 14309), (487, 14366), (503, 14444), (506, 14453), (527, 14531), (539, 14588), (555, 14642), (602, 14882), (627, 14957), (654, 15068), (667, 15287), (669, 15299), (686, 15485), (687, 15494), (699, 15566), (708, 15596), (712, 15617), (730, 15737), (741, 15809), (745, 15827), (746, 15833),

Gene: Jeckyll_21 Start: 12116, Stop: 15949, Start Num: 15

Candidate Starts for Jeckyll_21:

(Start: 15 @12116 has 162 MA's), (Start: 23 @12185 has 1 MA's), (31, 12272), (41, 12347), (59, 12449), (66, 12476), (83, 12548), (84, 12560), (86, 12569), (98, 12641), (109, 12716), (128, 12800), (130, 12809), (133, 12830), (141, 12869), (150, 12905), (157, 12947), (168, 13025), (183, 13115), (196, 13190), (210, 13283), (212, 13292), (214, 13304), (216, 13313), (265, 13550), (275, 13589), (282, 13622), (302, 13709), (309, 13733), (323, 13817), (338, 13901), (341, 13913), (345, 13934), (400, 14090), (439, 14171), (450, 14219), (453, 14237), (456, 14258), (463, 14294), (475, 14345), (487, 14402), (503, 14480), (506, 14489), (527, 14567), (531, 14582), (539, 14624), (555, 14678), (602, 14918), (627, 14993), (654, 15104), (667, 15323), (669, 15335), (686, 15518), (687, 15527), (699, 15599), (708, 15629), (712, 15650), (730, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: Jolene_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Jolene_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Jolie2_16 Start: 10765, Stop: 14787, Start Num: 16

Candidate Starts for Jolie2_16:

(Start: 16 @10765 has 58 MA's), (Start: 23 @10834 has 1 MA's), (26, 10861), (39, 10975), (63, 11098), (69, 11122), (70, 11125), (79, 11158), (80, 11161), (87, 11203), (88, 11212), (110, 11344), (114, 11368), (119, 11386), (129, 11431), (134, 11455), (135, 11467), (145, 11509), (151, 11551), (159, 11596), (160, 11602), (168, 11665), (169, 11674), (172, 11686), (175, 11695), (179, 11728), (188, 11776), (219, 11953), (228, 11986), (229, 11989), (232, 12004), (256, 12124), (259, 12139), (262, 12157), (263, 12160), (270, 12193), (277, 12220), (289, 12265), (295, 12289), (298, 12307), (302, 12328), (321, 12424), (333, 12496), (363, 12703), (371, 12754), (388, 12844), (390, 12853), (393, 12871), (397, 12895), (400, 12901), (412, 12961), (422, 13006), (423, 13009), (424, 13015), (437, 13093), (442, 13126), (456, 13201), (501, 13414), (507, 13435), (508, 13438), (510, 13453), (521, 13486), (544, 13588), (561, 13678), (584, 13771), (592, 13825), (593, 13828), (600, 13861), (604, 13876), (618, 13915), (631, 13942), (657, 14080), (665, 14200), (671, 14287), (684, 14443), (686, 14455), (696, 14539), (706, 14578), (728, 14713),

Gene: Jonghyun_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Jonghyun_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: JorRay_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for JorRay_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Joy99_21 Start: 12045, Stop: 15878, Start Num: 15

Candidate Starts for Joy99_21:

(Start: 15 @12045 has 162 MA's), (Start: 23 @12114 has 1 MA's), (Start: 24 @12135 has 1 MA's), (31, 12201), (59, 12378), (66, 12405), (83, 12477), (84, 12489), (86, 12498), (98, 12570), (109, 12645),

(128, 12729), (130, 12738), (133, 12759), (141, 12798), (157, 12876), (168, 12954), (183, 13044), (196, 13119), (210, 13212), (212, 13221), (214, 13233), (216, 13242), (265, 13479), (275, 13518), (282, 13551), (302, 13638), (309, 13662), (323, 13746), (338, 13830), (341, 13842), (345, 13863), (400, 14019), (439, 14100), (450, 14148), (453, 14166), (456, 14187), (463, 14223), (475, 14274), (487, 14331), (503, 14409), (506, 14418), (527, 14496), (531, 14511), (539, 14553), (555, 14607), (602, 14847), (627, 14922), (654, 15033), (667, 15252), (669, 15264), (686, 15447), (687, 15456), (699, 15528), (708, 15558), (712, 15579), (730, 15699), (741, 15771), (745, 15789), (746, 15795),

Gene: Juliette_22 Start: 13193, Stop: 17389, Start Num: 16

Candidate Starts for Juliette_22:

(Start: 16 @13193 has 58 MA's), (34, 13391), (79, 13604), (84, 13631), (86, 13640), (98, 13712), (102, 13733), (128, 13871), (130, 13880), (133, 13901), (141, 13940), (155, 14009), (157, 14018), (168, 14096), (170, 14108), (183, 14186), (190, 14216), (194, 14249), (195, 14252), (198, 14273), (223, 14414), (225, 14423), (251, 14555), (255, 14567), (265, 14621), (275, 14660), (282, 14693), (302, 14780), (308, 14801), (332, 14978), (342, 15029), (360, 15188), (400, 15389), (410, 15440), (412, 15449), (422, 15494), (426, 15515), (430, 15521), (451, 15635), (469, 15734), (470, 15746), (474, 15755), (494, 15827), (499, 15860), (503, 15878), (504, 15881), (512, 15908), (539, 16007), (545, 16025), (558, 16100), (600, 16289), (602, 16301), (627, 16376), (644, 16445), (657, 16577), (663, 16691), (686, 16958), (689, 16976), (706, 17087), (708, 17090), (722, 17189), (729, 17216), (730, 17219), (746, 17315), (753, 17378),

Gene: Kareem_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Kareem_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Kasen3_16 Start: 11465, Stop: 15478, Start Num: 15

Candidate Starts for Kasen3_16:

(Start: 15 @11465 has 162 MA's), (34, 11666), (57, 11780), (66, 11822), (72, 11852), (98, 11987), (99, 11999), (102, 12008), (138, 12197), (141, 12215), (143, 12218), (148, 12239), (150, 12251), (161, 12323), (168, 12371), (192, 12503), (195, 12527), (206, 12608), (233, 12731), (247, 12815), (258, 12851), (265, 12896), (266, 12902), (293, 13010), (298, 13034), (302, 13055), (344, 13274), (362, 13424), (378, 13511), (399, 13619), (428, 13754), (445, 13865), (450, 13883), (455, 13913), (501, 14135), (509, 14159), (513, 14174), (518, 14195), (527, 14222), (534, 14249), (549, 14309), (566, 14399), (572, 14432), (588, 14495), (596, 14552), (602, 14585), (605, 14594), (680, 15098), (681, 15125), (684, 15155), (686, 15167), (687, 15176), (699, 15245), (719, 15326), (727, 15386), (731, 15404), (733, 15413),

Gene: Keshu_20 Start: 12188, Stop: 16348, Start Num: 15

Candidate Starts for Keshu_20:

(Start: 15 @12188 has 162 MA's), (Start: 23 @12257 has 1 MA's), (Start: 24 @12278 has 1 MA's), (26, 12284), (31, 12344), (52, 12482), (57, 12506), (61, 12527), (66, 12548), (69, 12569), (96, 12701), (98, 12713), (102, 12734), (109, 12788), (115, 12818), (122, 12839), (128, 12872), (130, 12881), (133, 12902), (141, 12941), (157, 13019), (163, 13061), (168, 13097), (173, 13121), (201, 13295), (206, 13334), (210, 13355), (214, 13376), (216, 13385), (257, 13574), (261, 13598), (265, 13622), (270, 13643), (275, 13661), (282, 13694), (284, 13703), (293, 13736), (294, 13739), (295, 13742), (302,

13781), (305, 13790), (318, 13859), (334, 13970), (340, 14000), (347, 14078), (368, 14198), (373, 14231), (390, 14321), (393, 14339), (400, 14369), (404, 14396), (428, 14501), (432, 14531), (453, 14648), (463, 14705), (468, 14723), (472, 14744), (475, 14756), (488, 14816), (503, 14897), (504, 14900), (529, 14990), (539, 15020), (558, 15113), (578, 15191), (602, 15314), (627, 15389), (678, 15854), (680, 15866), (686, 15935), (687, 15944), (691, 15965), (721, 16139), (723, 16157), (732, 16193), (734, 16202), (745, 16268), (746, 16274), (748, 16289), (749, 16301),

Gene: KiSi_20 Start: 11011, Stop: 15084, Start Num: 16

Candidate Starts for KiSi_20:

(Start: 16 @11011 has 58 MA's), (26, 11104), (47, 11263), (48, 11272), (50, 11281), (73, 11374), (87, 11443), (88, 11452), (89, 11464), (90, 11470), (97, 11503), (104, 11539), (112, 11596), (114, 11608), (127, 11662), (132, 11692), (151, 11779), (154, 11794), (160, 11830), (188, 12004), (219, 12187), (221, 12196), (232, 12238), (237, 12280), (250, 12340), (254, 12352), (256, 12358), (259, 12373), (262, 12391), (263, 12394), (270, 12427), (300, 12550), (302, 12562), (304, 12568), (308, 12583), (310, 12589), (339, 12673), (347, 12754), (373, 12907), (391, 13003), (393, 13015), (400, 13045), (410, 13096), (414, 13117), (421, 13147), (423, 13153), (428, 13177), (437, 13237), (445, 13288), (454, 13333), (468, 13399), (475, 13432), (487, 13489), (503, 13567), (504, 13570), (527, 13654), (534, 13681), (539, 13711), (555, 13765), (558, 13804), (602, 14005), (627, 14080), (665, 14365), (667, 14422), (686, 14623), (702, 14737), (730, 14914), (741, 14998), (746, 15019),

Gene: Kratio_18 Start: 11868, Stop: 15977, Start Num: 14

Candidate Starts for Kratio_18:

(Start: 14 @11868 has 31 MA's), (Start: 24 @11961 has 1 MA's), (32, 12039), (33, 12063), (43, 12123), (61, 12207), (76, 12273), (86, 12321), (96, 12381), (98, 12393), (102, 12414), (109, 12468), (121, 12516), (130, 12561), (133, 12582), (157, 12699), (168, 12777), (173, 12801), (183, 12867), (196, 12942), (210, 13035), (216, 13065), (252, 13239), (255, 13248), (261, 13278), (265, 13302), (270, 13323), (284, 13383), (302, 13461), (305, 13470), (320, 13548), (331, 13614), (339, 13656), (348, 13749), (354, 13770), (356, 13803), (369, 13869), (373, 13890), (383, 13944), (384, 13953), (388, 13971), (392, 13989), (393, 13998), (400, 14028), (406, 14064), (426, 14154), (428, 14160), (429, 14178), (448, 14283), (460, 14349), (503, 14544), (512, 14574), (522, 14607), (534, 14658), (537, 14679), (541, 14694), (542, 14700), (558, 14784), (572, 14832), (582, 14871), (594, 14931), (601, 14964), (606, 14985), (614, 15009), (645, 15105), (656, 15177), (678, 15492), (679, 15501), (680, 15504), (682, 15546), (684, 15561), (686, 15573), (691, 15603), (699, 15654), (703, 15672), (724, 15789), (730, 15813), (732, 15825), (747, 15906), (749, 15930), (754, 15969),

Gene: Kraw_22 Start: 13237, Stop: 17412, Start Num: 16

Candidate Starts for Kraw_22:

(9, 13201), (Start: 16 @13237 has 58 MA's), (34, 13435), (84, 13675), (86, 13684), (102, 13777), (121, 13879), (130, 13924), (141, 13984), (157, 14062), (168, 14140), (182, 14227), (183, 14230), (190, 14260), (194, 14293), (198, 14317), (211, 14401), (217, 14431), (223, 14458), (245, 14566), (248, 14587), (251, 14599), (255, 14611), (265, 14665), (302, 14824), (308, 14845), (323, 14953), (342, 15073), (394, 15415), (400, 15433), (410, 15484), (412, 15493), (422, 15538), (426, 15559), (451, 15679), (469, 15778), (470, 15790), (474, 15799), (494, 15871), (503, 15922), (504, 15925), (512, 15952), (539, 16051), (545, 16069), (558, 16144), (600, 16333), (602, 16345), (627, 16420), (637, 16450), (657, 16606), (665, 16726), (673, 16834), (686, 16984), (706, 17113), (708, 17116), (722, 17215), (729, 17242), (746, 17338), (753, 17401),

Gene: Krueger_20 Start: 11051, Stop: 15055, Start Num: 16

Candidate Starts for Krueger_20:

(Start: 16 @11051 has 58 MA's), (26, 11144), (37, 11249), (47, 11303), (50, 11321), (55, 11339), (61, 11369), (68, 11396), (69, 11402), (82, 11447), (97, 11543), (100, 11561), (101, 11564), (124, 11678), (127, 11693), (151, 11810), (154, 11825), (165, 11906), (177, 11966), (178, 11975), (188, 12035), (219, 12218), (220, 12224), (234, 12281), (250, 12371), (254, 12383), (256, 12389), (259, 12404),

(263, 12425), (266, 12443), (285, 12518), (294, 12551), (300, 12581), (302, 12593), (308, 12614), (316, 12653), (337, 12698), (341, 12713), (360, 12875), (373, 12938), (378, 12965), (392, 13037), (400, 13076), (410, 13127), (414, 13148), (421, 13178), (423, 13184), (428, 13208), (435, 13259), (444, 13313), (453, 13355), (456, 13376), (463, 13412), (475, 13463), (503, 13604), (504, 13607), (527, 13691), (534, 13718), (555, 13802), (602, 14042), (627, 14117), (678, 14555), (679, 14564), (686, 14636), (687, 14645), (699, 14720), (708, 14750), (712, 14771), (730, 14888), (741, 14963), (748, 15002), (749, 15014),

Gene: Larva_19 Start: 11980, Stop: 16092, Start Num: 14

Candidate Starts for Larva_19:

(Start: 14 @11980 has 31 MA's), (Start: 24 @12073 has 1 MA's), (32, 12151), (33, 12175), (43, 12235), (61, 12319), (86, 12433), (96, 12493), (98, 12505), (102, 12526), (109, 12580), (121, 12628), (130, 12673), (133, 12694), (157, 12811), (168, 12889), (173, 12913), (183, 12979), (196, 13054), (210, 13147), (216, 13177), (252, 13351), (261, 13390), (265, 13414), (270, 13435), (284, 13495), (302, 13573), (320, 13660), (331, 13726), (339, 13768), (341, 13777), (348, 13861), (354, 13882), (356, 13915), (369, 13981), (373, 14002), (383, 14056), (384, 14065), (388, 14083), (393, 14110), (400, 14140), (406, 14176), (426, 14266), (428, 14272), (429, 14290), (448, 14395), (460, 14461), (503, 14656), (512, 14686), (522, 14719), (534, 14770), (537, 14791), (541, 14806), (542, 14812), (558, 14896), (572, 14944), (582, 14983), (594, 15043), (601, 15076), (606, 15097), (614, 15121), (622, 15151), (645, 15217), (656, 15289), (678, 15604), (679, 15613), (680, 15616), (681, 15643), (682, 15658), (684, 15673), (686, 15685), (691, 15715), (699, 15769), (703, 15787), (719, 15856), (724, 15904), (730, 15928), (732, 15940), (734, 15949), (747, 16021), (749, 16045), (754, 16084),

Gene: LastHope_21 Start: 11090, Stop: 15217, Start Num: 16

Candidate Starts for LastHope_21:

(9, 11042), (Start: 16 @11090 has 58 MA's), (26, 11183), (42, 11315), (46, 11339), (53, 11369), (57, 11390), (59, 11402), (61, 11408), (68, 11435), (75, 11462), (90, 11549), (97, 11582), (100, 11600), (101, 11603), (107, 11645), (117, 11693), (145, 11819), (151, 11861), (154, 11876), (160, 11912), (169, 11984), (188, 12086), (210, 12224), (219, 12269), (230, 12311), (231, 12314), (232, 12320), (234, 12332), (237, 12362), (250, 12422), (256, 12440), (259, 12455), (262, 12473), (263, 12476), (270, 12509), (292, 12590), (295, 12605), (302, 12644), (308, 12665), (338, 12842), (341, 12854), (346, 12914), (353, 12956), (373, 13079), (377, 13103), (388, 13160), (391, 13175), (392, 13178), (404, 13244), (406, 13253), (412, 13277), (423, 13325), (435, 13400), (438, 13418), (450, 13478), (454, 13505), (456, 13517), (463, 13553), (468, 13571), (477, 13616), (480, 13646), (488, 13664), (503, 13745), (504, 13748), (527, 13832), (531, 13847), (538, 13886), (539, 13889), (558, 13982), (575, 14048), (602, 14183), (665, 14534), (678, 14705), (686, 14786), (691, 14816), (699, 14870), (730, 15038), (741, 15110), (745, 15128), (746, 15134),

Gene: LaterM_21 Start: 12043, Stop: 15876, Start Num: 15

Candidate Starts for LaterM_21:

(Start: 15 @12043 has 162 MA's), (Start: 23 @12112 has 1 MA's), (31, 12199), (59, 12379), (66, 12406), (84, 12490), (86, 12499), (96, 12559), (98, 12571), (109, 12646), (118, 12688), (128, 12730), (130, 12739), (133, 12760), (141, 12799), (157, 12877), (168, 12955), (196, 13120), (210, 13213), (214, 13234), (216, 13243), (265, 13480), (271, 13504), (275, 13519), (282, 13552), (302, 13639), (323, 13747), (338, 13831), (341, 13843), (345, 13864), (353, 13945), (400, 14020), (439, 14101), (441, 14110), (450, 14149), (453, 14167), (456, 14188), (463, 14224), (475, 14275), (487, 14332), (503, 14410), (506, 14419), (527, 14497), (531, 14512), (539, 14554), (555, 14608), (602, 14848), (627, 14923), (654, 15034), (667, 15253), (678, 15367), (686, 15448), (687, 15457), (699, 15529), (708, 15559), (712, 15580), (730, 15697), (741, 15769), (746, 15793),

Gene: LeMond_20 Start: 11082, Stop: 15155, Start Num: 16

Candidate Starts for LeMond_20:

(Start: 16 @11082 has 58 MA's), (26, 11175), (42, 11307), (73, 11445), (88, 11523), (89, 11535), (90, 11541), (97, 11574), (104, 11610), (112, 11667), (114, 11679), (127, 11733), (132, 11763), (151, 11850), (154, 11865), (160, 11901), (175, 11994), (188, 12075), (219, 12258), (221, 12267), (232, 12309), (237, 12351), (250, 12411), (254, 12423), (256, 12429), (259, 12444), (263, 12465), (270, 12498), (300, 12621), (302, 12633), (304, 12639), (308, 12654), (310, 12660), (339, 12744), (347, 12825), (373, 12978), (391, 13074), (400, 13116), (410, 13167), (414, 13188), (421, 13218), (423, 13224), (428, 13248), (437, 13308), (445, 13359), (454, 13404), (456, 13416), (468, 13470), (475, 13503), (487, 13560), (503, 13638), (504, 13641), (527, 13725), (539, 13782), (555, 13836), (558, 13875), (587, 13980), (602, 14076), (627, 14151), (654, 14274), (667, 14493), (686, 14694), (702, 14808), (730, 14985), (741, 15069), (746, 15090),

Gene: Lea83_21 Start: 12197, Stop: 16345, Start Num: 15

Candidate Starts for Lea83_21:

(Start: 15 @12197 has 162 MA's), (Start: 23 @12266 has 1 MA's), (Start: 24 @12287 has 1 MA's), (26, 12293), (31, 12353), (52, 12491), (61, 12536), (66, 12557), (76, 12602), (96, 12710), (98, 12722), (102, 12743), (109, 12797), (115, 12827), (122, 12848), (128, 12881), (130, 12890), (133, 12911), (141, 12950), (157, 13028), (163, 13070), (168, 13106), (173, 13130), (201, 13304), (210, 13364), (214, 13385), (216, 13394), (250, 13562), (257, 13583), (261, 13607), (265, 13631), (270, 13652), (275, 13670), (282, 13703), (293, 13745), (294, 13748), (295, 13751), (302, 13790), (305, 13799), (318, 13868), (334, 13979), (340, 14009), (368, 14207), (373, 14240), (390, 14330), (393, 14348), (400, 14378), (404, 14405), (445, 14621), (453, 14657), (463, 14714), (468, 14732), (475, 14765), (476, 14777), (488, 14825), (503, 14906), (504, 14909), (539, 15026), (558, 15119), (578, 15197), (599, 15296), (602, 15320), (627, 15395), (678, 15854), (680, 15866), (686, 15935), (687, 15944), (721, 16136), (723, 16154), (732, 16190), (734, 16199), (745, 16265), (746, 16271), (748, 16286), (749, 16298),

Gene: Lebo14_22 Start: 13327, Stop: 17505, Start Num: 16

Candidate Starts for Lebo14_22:

(9, 13291), (Start: 16 @13327 has 58 MA's), (34, 13525), (84, 13765), (86, 13774), (102, 13867), (130, 14014), (133, 14035), (141, 14074), (143, 14077), (157, 14152), (168, 14230), (182, 14317), (183, 14320), (190, 14350), (194, 14383), (198, 14407), (211, 14491), (217, 14521), (223, 14548), (245, 14656), (248, 14677), (251, 14689), (255, 14701), (265, 14755), (302, 14914), (308, 14935), (323, 15043), (342, 15163), (400, 15523), (410, 15574), (412, 15583), (422, 15628), (426, 15649), (469, 15868), (470, 15880), (474, 15889), (494, 15961), (503, 16012), (504, 16015), (512, 16042), (523, 16078), (539, 16141), (545, 16159), (558, 16234), (600, 16423), (602, 16435), (627, 16510), (657, 16696), (665, 16816), (673, 16924), (686, 17077), (703, 17197), (706, 17206), (708, 17209), (722, 17308), (729, 17335), (746, 17431), (753, 17494),

Gene: Lemuria_16 Start: 10811, Stop: 14821, Start Num: 16

Candidate Starts for Lemuria_16:

(Start: 16 @10811 has 58 MA's), (26, 10907), (35, 11012), (39, 11021), (63, 11144), (69, 11168), (70, 11171), (79, 11204), (80, 11207), (88, 11258), (93, 11285), (100, 11327), (107, 11372), (115, 11408), (116, 11417), (117, 11420), (119, 11423), (132, 11489), (145, 11546), (151, 11588), (160, 11639), (167, 11699), (169, 11711), (172, 11723), (175, 11732), (188, 11813), (209, 11942), (219, 11990), (227, 12020), (230, 12032), (232, 12041), (237, 12083), (250, 12143), (256, 12161), (259, 12176), (263, 12197), (270, 12230), (277, 12257), (279, 12269), (289, 12302), (295, 12326), (298, 12344), (302, 12365), (321, 12461), (333, 12533), (371, 12791), (377, 12824), (393, 12908), (399, 12935), (405, 12968), (412, 12998), (421, 13040), (423, 13046), (437, 13130), (446, 13184), (468, 13292), (501, 13451), (508, 13475), (510, 13490), (517, 13514), (544, 13625), (560, 13712), (561, 13715), (581, 13802), (584, 13811), (593, 13868), (600, 13901), (618, 13955), (631, 13982), (656, 14096), (671, 14324), (675, 14390), (680, 14426), (684, 14483), (686, 14495), (696, 14573), (706, 14612), (713, 14639), (728, 14747),

Gene: Leston_19 Start: 12267, Stop: 16376, Start Num: 14

Candidate Starts for Leston_19:

(Start: 14 @12267 has 31 MA's), (43, 12525), (61, 12609), (76, 12675), (86, 12723), (96, 12783), (98, 12795), (102, 12816), (109, 12870), (115, 12900), (130, 12963), (133, 12984), (147, 13041), (157, 13101), (168, 13179), (173, 13203), (179, 13245), (186, 13278), (210, 13437), (214, 13458), (235, 13536), (247, 13599), (251, 13614), (252, 13617), (255, 13626), (257, 13632), (259, 13644), (265, 13680), (269, 13698), (295, 13800), (302, 13839), (331, 13992), (339, 14034), (344, 14058), (354, 14148), (356, 14181), (369, 14247), (383, 14322), (384, 14331), (388, 14349), (393, 14376), (409, 14454), (428, 14538), (448, 14661), (460, 14727), (481, 14829), (503, 14922), (512, 14952), (519, 14979), (522, 14985), (534, 15036), (537, 15057), (541, 15072), (542, 15078), (558, 15162), (570, 15192), (572, 15210), (582, 15249), (594, 15309), (601, 15342), (606, 15363), (614, 15387), (622, 15420), (645, 15504), (656, 15576), (678, 15885), (682, 15939), (684, 15954), (686, 15966), (691, 15996), (724, 16182), (730, 16206), (732, 16218), (747, 16305), (749, 16329),

Gene: Liefie_16 Start: 11463, Stop: 15476, Start Num: 15

Candidate Starts for Liefie_16:

(Start: 15 @11463 has 162 MA's), (34, 11664), (56, 11766), (57, 11778), (66, 11820), (69, 11841), (72, 11850), (98, 11985), (99, 11997), (102, 12006), (138, 12195), (141, 12213), (143, 12216), (148, 12237), (150, 12249), (161, 12321), (168, 12369), (192, 12501), (195, 12525), (206, 12606), (233, 12729), (247, 12813), (258, 12849), (265, 12894), (266, 12900), (293, 13008), (298, 13032), (302, 13053), (344, 13272), (362, 13422), (378, 13509), (399, 13617), (428, 13752), (444, 13857), (445, 13863), (450, 13881), (455, 13911), (501, 14133), (509, 14157), (513, 14172), (518, 14193), (534, 14247), (549, 14307), (566, 14397), (572, 14430), (588, 14493), (596, 14550), (602, 14583), (605, 14592), (680, 15096), (681, 15123), (684, 15153), (686, 15165), (687, 15174), (699, 15243), (719, 15324), (727, 15384), (731, 15402), (733, 15411),

Gene: LilPharaoh_17 Start: 11327, Stop: 15460, Start Num: 15

Candidate Starts for LilPharaoh_17:

(10, 11288), (Start: 15 @11327 has 162 MA's), (Start: 23 @11396 has 1 MA's), (31, 11483), (41, 11561), (61, 11669), (66, 11690), (73, 11723), (98, 11855), (100, 11870), (102, 11876), (109, 11930), (115, 11960), (130, 12023), (133, 12044), (141, 12083), (157, 12161), (168, 12239), (173, 12263), (210, 12497), (228, 12578), (238, 12638), (250, 12695), (260, 12731), (265, 12764), (271, 12788), (287, 12854), (290, 12863), (302, 12923), (323, 13031), (331, 13076), (354, 13232), (371, 13343), (373, 13352), (375, 13364), (384, 13415), (388, 13433), (393, 13460), (400, 13490), (419, 13583), (428, 13622), (456, 13790), (468, 13844), (475, 13877), (485, 13922), (503, 14003), (504, 14006), (527, 14090), (529, 14096), (531, 14105), (539, 14147), (552, 14183), (555, 14201), (558, 14240), (573, 14300), (602, 14441), (622, 14501), (627, 14516), (669, 14858), (686, 15047), (687, 15056), (697, 15119), (746, 15395),

Gene: LindNT_21 Start: 12047, Stop: 15883, Start Num: 15

Candidate Starts for LindNT_21:

(Start: 15 @12047 has 162 MA's), (Start: 23 @12116 has 1 MA's), (31, 12203), (59, 12383), (66, 12410), (86, 12503), (96, 12563), (98, 12575), (109, 12650), (122, 12701), (130, 12743), (133, 12764), (141, 12803), (157, 12881), (168, 12959), (173, 12983), (196, 13124), (210, 13217), (212, 13226), (214, 13238), (216, 13247), (265, 13484), (271, 13508), (275, 13523), (282, 13556), (302, 13643), (309, 13667), (323, 13751), (338, 13835), (341, 13847), (345, 13868), (353, 13949), (400, 14024), (439, 14105), (450, 14153), (453, 14171), (455, 14183), (456, 14192), (463, 14228), (475, 14279), (487, 14336), (503, 14414), (506, 14423), (527, 14501), (531, 14516), (539, 14558), (555, 14612), (602, 14852), (627, 14927), (654, 15038), (667, 15257), (669, 15269), (678, 15371), (686, 15452), (687, 15461), (699, 15533), (708, 15563), (712, 15584), (730, 15704), (741, 15776), (745, 15794), (746, 15800),

Gene: Llorens_21 Start: 12116, Stop: 15949, Start Num: 15

Candidate Starts for Llorens_21:

(Start: 15 @12116 has 162 MA's), (Start: 23 @12185 has 1 MA's), (31, 12272), (41, 12347), (59, 12449), (66, 12476), (83, 12548), (84, 12560), (86, 12569), (98, 12641), (109, 12716), (128, 12800), (130, 12809), (133, 12830), (141, 12869), (150, 12905), (157, 12947), (168, 13025), (183, 13115), (196, 13190), (210, 13283), (212, 13292), (214, 13304), (216, 13313), (265, 13550), (275, 13589), (282, 13622), (302, 13709), (309, 13733), (323, 13817), (338, 13901), (341, 13913), (345, 13934), (400, 14090), (439, 14171), (450, 14219), (453, 14237), (463, 14294), (475, 14345), (487, 14402), (503, 14480), (506, 14489), (527, 14567), (531, 14582), (539, 14624), (555, 14678), (602, 14918), (627, 14993), (654, 15104), (667, 15323), (669, 15335), (686, 15518), (687, 15527), (699, 15599), (708, 15629), (712, 15650), (730, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: LouisV14_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for LouisV14_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Lunahalos_21 Start: 12116, Stop: 15949, Start Num: 15

Candidate Starts for Lunahalos_21:

(Start: 15 @12116 has 162 MA's), (Start: 23 @12185 has 1 MA's), (31, 12272), (41, 12347), (59, 12449), (66, 12476), (83, 12548), (84, 12560), (86, 12569), (98, 12641), (109, 12716), (128, 12800), (130, 12809), (133, 12830), (141, 12869), (150, 12905), (157, 12947), (168, 13025), (183, 13115), (196, 13190), (210, 13283), (212, 13292), (214, 13304), (216, 13313), (265, 13550), (275, 13589), (282, 13622), (302, 13709), (309, 13733), (323, 13817), (338, 13901), (341, 13913), (345, 13934), (400, 14090), (439, 14171), (450, 14219), (453, 14237), (456, 14258), (463, 14294), (475, 14345), (487, 14402), (503, 14480), (506, 14489), (527, 14567), (531, 14582), (539, 14624), (555, 14678), (602, 14918), (627, 14993), (654, 15104), (667, 15323), (669, 15335), (686, 15518), (687, 15527), (699, 15599), (708, 15629), (712, 15650), (730, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: MOOREtheMARYer_16 Start: 11710, Stop: 15720, Start Num: 16

Candidate Starts for MOOREtheMARYer_16:

(Start: 16 @11710 has 58 MA's), (26, 11806), (50, 11986), (57, 12016), (62, 12040), (68, 12061), (73, 12079), (90, 12175), (92, 12181), (95, 12196), (97, 12208), (100, 12226), (106, 12268), (107, 12271), (115, 12307), (117, 12319), (125, 12349), (128, 12361), (130, 12370), (145, 12445), (151, 12487), (154, 12502), (160, 12538), (161, 12553), (168, 12601), (169, 12610), (188, 12712), (201, 12796), (211, 12853), (219, 12895), (228, 12928), (229, 12931), (230, 12937), (232, 12946), (237, 12988), (254, 13060), (256, 13066), (259, 13081), (262, 13099), (263, 13102), (277, 13162), (289, 13207), (295, 13231), (298, 13249), (302, 13270), (309, 13294), (312, 13306), (313, 13309), (321, 13366), (333, 13438), (341, 13480), (363, 13645), (378, 13732), (383, 13759), (386, 13780), (400, 13843), (410, 13894), (423, 13951), (428, 13975), (435, 14026), (442, 14068), (468, 14197), (490, 14287), (493, 14302), (494, 14305), (508, 14371), (510, 14386), (529, 14452), (540, 14506), (544, 14521), (559, 14602), (561, 14611), (584, 14704), (593, 14761), (600, 14794), (618, 14848), (624, 14869), (680, 15325), (681, 15352), (683, 15379), (686, 15394), (687, 15403), (699, 15490), (725, 15628), (728, 15646), (732, 15661),

Gene: MacKat_22 Start: 12093, Stop: 15926, Start Num: 15

Candidate Starts for MacKat_22:

(Start: 15 @12093 has 162 MA's), (Start: 23 @12162 has 1 MA's), (31, 12249), (59, 12426), (66, 12453), (84, 12537), (86, 12546), (98, 12618), (109, 12693), (128, 12777), (130, 12786), (133, 12807), (141, 12846), (157, 12924), (168, 13002), (183, 13092), (196, 13167), (210, 13260), (212, 13269), (214, 13281), (216, 13290), (265, 13527), (275, 13566), (282, 13599), (302, 13686), (309, 13710), (323, 13794), (338, 13878), (341, 13890), (345, 13911), (400, 14067), (439, 14148), (444, 14172), (450, 14196), (453, 14214), (456, 14235), (463, 14271), (475, 14322), (487, 14379), (503, 14457), (506, 14466), (527, 14544), (531, 14559), (539, 14601), (555, 14655), (602, 14895), (627, 14970), (654, 15081), (667, 15300), (669, 15312), (686, 15495), (687, 15504), (699, 15576), (708, 15606), (712, 15627), (730, 15747), (741, 15819), (745, 15837), (746, 15843),

Gene: MacnCheese_21 Start: 12433, Stop: 16590, Start Num: 15

Candidate Starts for MacnCheese_21:

(4, 12283), (Start: 15 @12433 has 162 MA's), (Start: 24 @12523 has 1 MA's), (26, 12529), (31, 12589), (57, 12751), (73, 12826), (84, 12877), (86, 12886), (96, 12946), (98, 12958), (102, 12979), (109, 13033), (130, 13126), (133, 13147), (141, 13186), (148, 13210), (157, 13264), (164, 13309), (168, 13342), (173, 13366), (201, 13540), (214, 13621), (250, 13798), (261, 13843), (265, 13867), (270, 13888), (281, 13936), (293, 13981), (298, 14005), (302, 14026), (318, 14104), (329, 14182), (339, 14242), (340, 14245), (343, 14260), (373, 14476), (382, 14524), (390, 14566), (393, 14584), (400, 14614), (403, 14635), (405, 14644), (412, 14674), (428, 14746), (432, 14776), (453, 14893), (456, 14914), (463, 14950), (468, 14968), (475, 15001), (481, 15046), (488, 15061), (503, 15142), (504, 15145), (525, 15214), (527, 15229), (529, 15235), (531, 15244), (555, 15340), (558, 15379), (599, 15556), (602, 15580), (627, 15655), (674, 16069), (678, 16099), (679, 16108), (680, 16111), (687, 16189), (690, 16207), (691, 16210), (721, 16384), (723, 16402), (734, 16447), (739, 16480), (746, 16516), (748, 16531), (749, 16543),

Gene: Maco6_17 Start: 10697, Stop: 14146, Start Num: 28

Candidate Starts for Maco6_17:

(Start: 28 @10697 has 2 MA's), (30, 10712), (36, 10760), (38, 10763), (45, 10808), (81, 10931), (142, 11258), (146, 11270), (149, 11291), (162, 11375), (169, 11429), (171, 11438), (180, 11492), (181, 11501), (187, 11525), (188, 11534), (193, 11576), (201, 11621), (202, 11633), (205, 11654), (210, 11678), (215, 11708), (222, 11732), (240, 11807), (243, 11819), (247, 11843), (249, 11852), (268, 11930), (318, 11987), (335, 12056), (367, 12272), (376, 12317), (402, 12440), (420, 12518), (430, 12551), (434, 12578), (437, 12590), (457, 12698), (458, 12707), (486, 12800), (495, 12830), (505, 12866), (515, 12896), (521, 12914), (528, 12941), (529, 12944), (547, 12998), (548, 13001), (566, 13091), (577, 13139), (579, 13154), (586, 13172), (591, 13187), (599, 13247), (605, 13280), (609, 13289), (612, 13298), (623, 13334), (628, 13349), (653, 13421), (661, 13544), (677, 13739), (687, 13835), (690, 13853), (697, 13895), (698, 13901), (706, 13928), (724, 14030), (726, 14039), (734, 14078),

Gene: Maliketh_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Maliketh_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Malthus_22 Start: 13237, Stop: 17412, Start Num: 16

Candidate Starts for Malthus_22:

(9, 13201), (Start: 16 @13237 has 58 MA's), (34, 13435), (84, 13675), (86, 13684), (102, 13777), (121, 13879), (130, 13924), (141, 13984), (157, 14062), (168, 14140), (182, 14227), (183, 14230), (190, 14260), (194, 14293), (198, 14317), (211, 14401), (217, 14431), (223, 14458), (245, 14566), (248, 14587), (251, 14599), (255, 14611), (265, 14665), (302, 14824), (308, 14845), (323, 14953), (342, 15073), (394, 15415), (400, 15433), (410, 15484), (412, 15493), (422, 15538), (426, 15559), (451, 15679), (469, 15778), (470, 15790), (474, 15799), (494, 15871), (503, 15922), (504, 15925), (512, 15952), (539, 16051), (545, 16069), (558, 16144), (600, 16333), (602, 16345), (627, 16420), (637, 16450), (657, 16606), (665, 16726), (673, 16834), (686, 16984), (706, 17113), (708, 17116), (722, 17215), (729, 17242), (746, 17338), (753, 17401),

Gene: Marcoliusprime_17 Start: 10116, Stop: 13784, Start Num: 14

Candidate Starts for Marcoliusprime_17:

(Start: 14 @10116 has 31 MA's), (Start: 23 @10188 has 1 MA's), (65, 10422), (83, 10473), (98, 10566), (102, 10587), (109, 10641), (130, 10734), (133, 10755), (138, 10776), (139, 10782), (157, 10872), (163, 10914), (168, 10950), (176, 10983), (177, 10995), (180, 11019), (183, 11040), (189, 11064), (190, 11070), (195, 11106), (196, 11115), (201, 11148), (202, 11160), (206, 11187), (247, 11370), (250, 11382), (252, 11388), (258, 11406), (261, 11427), (265, 11451), (280, 11475), (303, 11484), (307, 11499), (311, 11511), (322, 11544), (331, 11592), (350, 11733), (351, 11739), (355, 11775), (361, 11802), (366, 11820), (393, 11946), (411, 12012), (427, 12066), (433, 12099), (437, 12120), (442, 12144), (447, 12174), (452, 12195), (511, 12417), (536, 12510), (556, 12588), (590, 12711), (615, 12816), (635, 12864), (674, 13251), (678, 13281), (679, 13290), (681, 13320), (710, 13485), (730, 13614), (746, 13707),

Gene: MarkPhew_21 Start: 10973, Stop: 15046, Start Num: 16

Candidate Starts for MarkPhew_21:

(2, 10757), (9, 10937), (Start: 16 @10973 has 58 MA's), (26, 11066), (42, 11198), (47, 11225), (48, 11234), (62, 11297), (73, 11336), (77, 11351), (88, 11414), (89, 11426), (97, 11465), (112, 11558), (114, 11570), (127, 11624), (151, 11741), (154, 11756), (160, 11792), (167, 11852), (168, 11855), (177, 11897), (188, 11966), (219, 12149), (232, 12200), (234, 12212), (250, 12302), (254, 12314), (256, 12320), (259, 12335), (266, 12374), (300, 12512), (302, 12524), (304, 12530), (308, 12545), (310, 12551), (373, 12869), (382, 12917), (384, 12932), (393, 12977), (400, 13007), (410, 13058), (414, 13079), (423, 13115), (428, 13139), (456, 13307), (463, 13343), (468, 13361), (475, 13394), (487, 13451), (503, 13529), (504, 13532), (527, 13616), (555, 13727), (558, 13766), (587, 13871), (602, 13967), (627, 14042), (667, 14390), (686, 14588), (730, 14876), (732, 14888), (741, 14960), (746, 14981),

Gene: Marmie_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Marmie_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Marshawn_22 Start: 11657, Stop: 15661, Start Num: 16

Candidate Starts for Marshawn_22:

(1, 11312), (2, 11444), (9, 11621), (Start: 16 @11657 has 58 MA's), (19, 11681), (26, 11750), (47, 11909), (48, 11918), (61, 11975), (87, 12089), (88, 12098), (89, 12110), (95, 12137), (97, 12149), (101, 12170), (113, 12251), (127, 12308), (132, 12338), (151, 12425), (154, 12440), (155, 12449), (160,

12476), (168, 12539), (169, 12548), (188, 12650), (200, 12725), (219, 12833), (228, 12866), (235, 12908), (237, 12926), (250, 12986), (254, 12998), (256, 13004), (259, 13019), (262, 13037), (263, 13040), (266, 13058), (270, 13073), (278, 13109), (292, 13154), (293, 13163), (296, 13178), (300, 13196), (302, 13208), (304, 13214), (308, 13229), (310, 13235), (340, 13322), (353, 13430), (373, 13553), (384, 13616), (393, 13661), (400, 13691), (410, 13742), (423, 13799), (428, 13823), (439, 13904), (450, 13952), (456, 13991), (463, 14027), (475, 14078), (503, 14219), (504, 14222), (527, 14306), (531, 14321), (539, 14363), (558, 14456), (602, 14657), (627, 14732), (646, 14810), (665, 15026), (667, 15083), (680, 15212), (681, 15239), (686, 15281), (699, 15371), (702, 15383), (715, 15422), (737, 15548), (740, 15572), (741, 15575), (746, 15596),

Gene: McMater_21 Start: 11128, Stop: 15282, Start Num: 16

Candidate Starts for McMater_21:

(9, 11086), (Start: 16 @11128 has 58 MA's), (26, 11221), (47, 11380), (53, 11407), (74, 11497), (75, 11500), (90, 11587), (108, 11695), (124, 11764), (128, 11782), (145, 11866), (151, 11908), (154, 11923), (155, 11932), (160, 11959), (168, 12022), (177, 12064), (188, 12133), (198, 12196), (199, 12205), (219, 12319), (220, 12325), (230, 12361), (232, 12370), (234, 12382), (235, 12394), (237, 12412), (250, 12472), (254, 12484), (256, 12490), (259, 12505), (262, 12523), (263, 12526), (266, 12544), (270, 12559), (279, 12598), (295, 12655), (296, 12664), (302, 12694), (308, 12715), (315, 12745), (319, 12778), (333, 12862), (338, 12892), (341, 12904), (353, 13006), (365, 13084), (373, 13129), (377, 13153), (387, 13207), (388, 13210), (391, 13225), (400, 13267), (404, 13294), (406, 13303), (410, 13318), (411, 13324), (412, 13327), (438, 13468), (444, 13504), (445, 13510), (450, 13528), (454, 13555), (456, 13567), (468, 13621), (475, 13654), (488, 13714), (503, 13795), (504, 13798), (527, 13882), (531, 13897), (558, 14032), (575, 14098), (602, 14233), (665, 14584), (686, 14839), (687, 14848), (694, 14914), (730, 15109), (734, 15130), (741, 15181), (745, 15199), (746, 15205), (750, 15244),

Gene: Mdavu_17 Start: 11315, Stop: 15448, Start Num: 15

Candidate Starts for Mdavu_17:

(10, 11276), (Start: 15 @11315 has 162 MA's), (Start: 23 @11384 has 1 MA's), (31, 11471), (41, 11549), (61, 11657), (66, 11678), (73, 11711), (98, 11843), (100, 11858), (102, 11864), (109, 11918), (115, 11948), (130, 12011), (133, 12032), (141, 12071), (157, 12149), (168, 12227), (173, 12251), (210, 12485), (228, 12566), (238, 12626), (250, 12683), (260, 12719), (265, 12752), (271, 12776), (287, 12842), (290, 12851), (302, 12911), (323, 13019), (331, 13064), (354, 13220), (371, 13331), (373, 13340), (375, 13352), (384, 13403), (388, 13421), (393, 13448), (400, 13478), (419, 13571), (428, 13610), (456, 13778), (468, 13832), (475, 13865), (485, 13910), (503, 13991), (504, 13994), (527, 14078), (529, 14084), (531, 14093), (539, 14135), (552, 14171), (555, 14189), (558, 14228), (573, 14288), (602, 14429), (622, 14489), (627, 14504), (669, 14846), (686, 15035), (687, 15044), (697, 15107), (746, 15383),

Gene: MeaningOfLife_21 Start: 12052, Stop: 15885, Start Num: 15

Candidate Starts for MeaningOfLife_21:

(Start: 15 @12052 has 162 MA's), (Start: 23 @12121 has 1 MA's), (Start: 24 @12142 has 1 MA's), (31, 12208), (59, 12385), (66, 12412), (83, 12484), (84, 12496), (86, 12505), (98, 12577), (109, 12652), (128, 12736), (130, 12745), (133, 12766), (141, 12805), (157, 12883), (168, 12961), (183, 13051), (196, 13126), (210, 13219), (212, 13228), (214, 13240), (216, 13249), (265, 13486), (275, 13525), (282, 13558), (302, 13645), (309, 13669), (323, 13753), (338, 13837), (341, 13849), (345, 13870), (400, 14026), (439, 14107), (450, 14155), (453, 14173), (456, 14194), (463, 14230), (475, 14281), (487, 14338), (503, 14416), (506, 14425), (527, 14503), (531, 14518), (539, 14560), (555, 14614), (602, 14854), (627, 14929), (654, 15040), (667, 15259), (669, 15271), (686, 15454), (687, 15463), (699, 15535), (708, 15565), (712, 15586), (730, 15706), (741, 15778), (745, 15796), (746, 15802),

Gene: Megsy_21 Start: 12050, Stop: 15886, Start Num: 15

Candidate Starts for Megsy_21:

(Start: 15 @12050 has 162 MA's), (Start: 23 @12119 has 1 MA's), (31, 12206), (59, 12386), (66, 12413), (86, 12506), (96, 12566), (98, 12578), (109, 12653), (122, 12704), (130, 12746), (133, 12767), (141, 12806), (157, 12884), (168, 12962), (173, 12986), (196, 13127), (210, 13220), (212, 13229), (214, 13241), (216, 13250), (265, 13487), (271, 13511), (275, 13526), (282, 13559), (302, 13646), (309, 13670), (323, 13754), (338, 13838), (341, 13850), (345, 13871), (353, 13952), (400, 14027), (439, 14108), (450, 14156), (453, 14174), (455, 14186), (456, 14195), (463, 14231), (475, 14282), (487, 14339), (503, 14417), (506, 14426), (527, 14504), (531, 14519), (555, 14615), (602, 14855), (627, 14930), (654, 15041), (667, 15260), (669, 15272), (678, 15374), (686, 15455), (687, 15464), (699, 15536), (708, 15566), (712, 15587), (730, 15707), (741, 15779), (745, 15797), (746, 15803),

Gene: Mercurio_17 Start: 11458, Stop: 15474, Start Num: 16

Candidate Starts for Mercurio_17:

(Start: 16 @11458 has 58 MA's), (48, 11725), (63, 11791), (69, 11815), (70, 11818), (77, 11842), (79, 11851), (80, 11854), (88, 11905), (93, 11932), (100, 11974), (107, 12019), (111, 12037), (112, 12040), (117, 12067), (129, 12115), (132, 12136), (145, 12193), (151, 12235), (159, 12280), (160, 12286), (168, 12349), (169, 12358), (172, 12370), (175, 12379), (188, 12460), (219, 12637), (227, 12667), (228, 12670), (232, 12688), (234, 12700), (237, 12730), (244, 12757), (250, 12790), (256, 12808), (259, 12823), (263, 12844), (270, 12877), (277, 12904), (289, 12949), (295, 12973), (298, 12991), (302, 13012), (321, 13108), (330, 13153), (333, 13180), (349, 13309), (371, 13438), (393, 13555), (399, 13582), (405, 13615), (422, 13690), (423, 13693), (437, 13777), (442, 13810), (454, 13873), (501, 14098), (508, 14122), (510, 14137), (517, 14161), (544, 14272), (559, 14353), (561, 14362), (584, 14455), (593, 14512), (600, 14545), (604, 14560), (684, 15139), (686, 15151), (688, 15166), (699, 15238), (713, 15289), (728, 15397),

Gene: Milly_17 Start: 10116, Stop: 13784, Start Num: 14

Candidate Starts for Milly_17:

(Start: 14 @10116 has 31 MA's), (Start: 23 @10188 has 1 MA's), (65, 10422), (83, 10473), (98, 10566), (102, 10587), (109, 10641), (130, 10734), (133, 10755), (138, 10776), (139, 10782), (157, 10872), (163, 10914), (168, 10950), (176, 10983), (177, 10995), (180, 11019), (183, 11040), (189, 11064), (190, 11070), (195, 11106), (196, 11115), (201, 11148), (202, 11160), (206, 11187), (247, 11370), (250, 11382), (252, 11388), (258, 11406), (261, 11427), (265, 11451), (280, 11475), (303, 11484), (307, 11499), (311, 11511), (322, 11544), (331, 11592), (350, 11733), (351, 11739), (355, 11775), (361, 11802), (366, 11820), (373, 11850), (393, 11946), (401, 11979), (411, 12012), (427, 12066), (433, 12099), (437, 12120), (442, 12144), (447, 12174), (452, 12195), (511, 12417), (536, 12510), (556, 12588), (590, 12711), (615, 12816), (635, 12864), (678, 13281), (679, 13290), (681, 13320), (710, 13485), (730, 13614), (746, 13707),

Gene: Miryou_19 Start: 12115, Stop: 16230, Start Num: 14

Candidate Starts for Miryou_19:

(Start: 14 @12115 has 31 MA's), (43, 12373), (61, 12457), (76, 12523), (86, 12571), (96, 12631), (98, 12643), (102, 12664), (109, 12718), (115, 12748), (130, 12811), (133, 12832), (147, 12889), (157, 12949), (163, 12991), (168, 13027), (173, 13051), (179, 13093), (186, 13126), (210, 13285), (214, 13306), (235, 13384), (247, 13447), (251, 13462), (252, 13465), (255, 13474), (257, 13480), (259, 13492), (265, 13528), (269, 13546), (295, 13648), (302, 13687), (331, 13840), (339, 13882), (344, 13906), (354, 13996), (356, 14029), (369, 14095), (383, 14170), (384, 14179), (388, 14197), (393, 14224), (409, 14302), (428, 14386), (448, 14509), (460, 14575), (481, 14677), (503, 14770), (512, 14800), (519, 14827), (522, 14833), (534, 14884), (537, 14905), (541, 14920), (542, 14926), (558, 15010), (570, 15040), (572, 15058), (582, 15097), (594, 15157), (601, 15190), (606, 15211), (614, 15235), (622, 15268), (645, 15352), (656, 15424), (678, 15739), (682, 15793), (684, 15808), (686, 15820), (691, 15850), (724, 16036), (732, 16072), (747, 16159), (749, 16183),

Gene: MissDaisy_22 Start: 13088, Stop: 17254, Start Num: 16

Candidate Starts for MissDaisy_22:

(9, 13052), (Start: 16 @13088 has 58 MA's), (34, 13286), (83, 13514), (84, 13526), (86, 13535), (89, 13565), (102, 13628), (130, 13775), (133, 13796), (141, 13835), (143, 13838), (157, 13913), (168, 13991), (182, 14078), (183, 14081), (190, 14111), (194, 14144), (198, 14168), (211, 14252), (217, 14282), (223, 14309), (245, 14417), (248, 14438), (251, 14450), (255, 14462), (265, 14516), (302, 14675), (308, 14696), (323, 14804), (342, 14924), (378, 15173), (400, 15284), (410, 15335), (412, 15344), (422, 15389), (426, 15410), (446, 15509), (450, 15524), (451, 15530), (464, 15599), (468, 15620), (469, 15629), (470, 15641), (474, 15650), (494, 15722), (503, 15773), (504, 15776), (512, 15803), (539, 15902), (545, 15920), (558, 15995), (600, 16184), (602, 16196), (627, 16271), (657, 16451), (665, 16571), (673, 16679), (677, 16739), (686, 16826), (691, 16856), (703, 16946), (706, 16955), (708, 16958), (722, 17057), (729, 17084), (746, 17180), (753, 17243),

Gene: Mitti_22 Start: 13237, Stop: 17412, Start Num: 16

Candidate Starts for Mitti_22:

(9, 13201), (Start: 16 @13237 has 58 MA's), (34, 13435), (84, 13675), (86, 13684), (102, 13777), (130, 13924), (133, 13945), (141, 13984), (143, 13987), (157, 14062), (168, 14140), (182, 14227), (183, 14230), (190, 14260), (194, 14293), (198, 14317), (211, 14401), (217, 14431), (223, 14458), (245, 14566), (248, 14587), (251, 14599), (255, 14611), (265, 14665), (302, 14824), (308, 14845), (323, 14953), (342, 15073), (400, 15433), (410, 15484), (412, 15493), (422, 15538), (426, 15559), (469, 15778), (470, 15790), (474, 15799), (494, 15871), (503, 15922), (504, 15925), (512, 15952), (539, 16051), (545, 16069), (558, 16144), (600, 16333), (602, 16345), (627, 16420), (657, 16606), (665, 16726), (673, 16834), (686, 16984), (703, 17104), (706, 17113), (708, 17116), (722, 17215), (729, 17242), (746, 17338), (753, 17401),

Gene: Mowgli_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Mowgli_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Muddy_19 Start: 11647, Stop: 15096, Start Num: 28

Candidate Starts for Muddy_19:

(Start: 28 @11647 has 2 MA's), (30, 11662), (36, 11710), (38, 11713), (45, 11758), (81, 11881), (137, 12187), (142, 12208), (146, 12220), (149, 12241), (162, 12325), (169, 12379), (171, 12388), (187, 12475), (188, 12484), (193, 12526), (201, 12571), (202, 12583), (205, 12604), (210, 12628), (222, 12682), (236, 12736), (240, 12757), (243, 12769), (247, 12793), (249, 12802), (268, 12880), (302, 12898), (318, 12937), (335, 13006), (345, 13060), (357, 13180), (366, 13216), (367, 13222), (374, 13255), (376, 13267), (402, 13390), (430, 13501), (434, 13528), (437, 13540), (457, 13648), (458, 13657), (486, 13750), (495, 13780), (505, 13816), (515, 13846), (521, 13864), (528, 13891), (529, 13894), (547, 13948), (548, 13951), (566, 14041), (577, 14089), (579, 14104), (586, 14122), (591, 14137), (599, 14197), (605, 14230), (609, 14239), (612, 14248), (623, 14284), (628, 14299), (661, 14494), (677, 14689), (687, 14785), (690, 14803), (697, 14845), (698, 14851), (706, 14878), (724, 14980), (726, 14989), (734, 15028),

Gene: Mufasa_17 Start: 10138, Stop: 13812, Start Num: 14

Candidate Starts for Mufasa_17:

(Start: 14 @10138 has 31 MA's), (Start: 23 @10210 has 1 MA's), (32, 10309), (65, 10444), (83, 10495), (98, 10588), (109, 10663), (130, 10756), (133, 10777), (138, 10798), (139, 10804), (157, 10894), (163,

10936), (168, 10972), (176, 11005), (177, 11017), (180, 11041), (183, 11062), (189, 11086), (190, 11092), (195, 11128), (196, 11137), (201, 11170), (202, 11182), (206, 11209), (247, 11392), (250, 11404), (252, 11410), (261, 11449), (265, 11473), (303, 11506), (308, 11524), (311, 11533), (322, 11566), (350, 11755), (351, 11761), (355, 11797), (361, 11824), (366, 11842), (370, 11860), (373, 11872), (393, 11968), (401, 12001), (411, 12034), (427, 12088), (433, 12121), (437, 12142), (442, 12166), (447, 12196), (452, 12217), (496, 12385), (498, 12403), (511, 12439), (536, 12532), (556, 12610), (590, 12733), (635, 12886), (674, 13273), (678, 13303), (679, 13312), (681, 13342), (689, 13402), (710, 13510), (730, 13642), (746, 13735),

Gene: Murucutumbu_21 Start: 12036, Stop: 15869, Start Num: 15

Candidate Starts for Murucutumbu_21:

(Start: 15 @12036 has 162 MA's), (Start: 23 @12105 has 1 MA's), (31, 12192), (59, 12372), (66, 12399), (84, 12483), (86, 12492), (96, 12552), (98, 12564), (109, 12639), (118, 12681), (128, 12723), (130, 12732), (133, 12753), (141, 12792), (157, 12870), (168, 12948), (196, 13113), (210, 13206), (214, 13227), (216, 13236), (265, 13473), (271, 13497), (275, 13512), (282, 13545), (302, 13632), (323, 13740), (338, 13824), (341, 13836), (345, 13857), (353, 13938), (400, 14013), (439, 14094), (441, 14103), (450, 14142), (453, 14160), (456, 14181), (463, 14217), (475, 14268), (487, 14325), (503, 14403), (506, 14412), (527, 14490), (531, 14505), (539, 14547), (555, 14601), (602, 14841), (627, 14916), (654, 15027), (667, 15246), (678, 15360), (686, 15441), (687, 15450), (699, 15522), (708, 15552), (712, 15573), (730, 15690), (741, 15762), (746, 15786),

Gene: Mynx_21 Start: 12099, Stop: 15932, Start Num: 15

Candidate Starts for Mynx_21:

(Start: 15 @12099 has 162 MA's), (Start: 23 @12168 has 1 MA's), (31, 12255), (59, 12432), (66, 12459), (83, 12531), (84, 12543), (86, 12552), (98, 12624), (109, 12699), (128, 12783), (130, 12792), (133, 12813), (141, 12852), (157, 12930), (168, 13008), (183, 13098), (196, 13173), (210, 13266), (212, 13275), (214, 13287), (216, 13296), (265, 13533), (275, 13572), (282, 13605), (302, 13692), (309, 13716), (323, 13800), (338, 13884), (341, 13896), (345, 13917), (400, 14073), (439, 14154), (450, 14202), (453, 14220), (456, 14241), (463, 14277), (475, 14328), (487, 14385), (503, 14463), (506, 14472), (527, 14550), (531, 14565), (539, 14607), (555, 14661), (602, 14901), (627, 14976), (654, 15087), (667, 15306), (669, 15318), (686, 15501), (687, 15510), (699, 15582), (708, 15612), (712, 15633), (730, 15753), (741, 15825), (745, 15843), (746, 15849),

Gene: Neighly_19 Start: 11979, Stop: 16091, Start Num: 14

Candidate Starts for Neighly_19:

(Start: 14 @11979 has 31 MA's), (Start: 24 @12072 has 1 MA's), (32, 12150), (33, 12174), (43, 12234), (61, 12318), (86, 12432), (96, 12492), (98, 12504), (102, 12525), (109, 12579), (121, 12627), (130, 12672), (133, 12693), (157, 12810), (168, 12888), (173, 12912), (183, 12978), (196, 13053), (210, 13146), (216, 13176), (252, 13350), (261, 13389), (265, 13413), (270, 13434), (284, 13494), (302, 13572), (320, 13659), (331, 13725), (339, 13767), (341, 13776), (348, 13860), (354, 13881), (356, 13914), (369, 13980), (373, 14001), (383, 14055), (384, 14064), (388, 14082), (393, 14109), (400, 14139), (406, 14175), (426, 14265), (428, 14271), (429, 14289), (448, 14394), (460, 14460), (503, 14655), (512, 14685), (522, 14718), (534, 14769), (537, 14790), (541, 14805), (542, 14811), (558, 14895), (572, 14943), (582, 14982), (594, 15042), (601, 15075), (606, 15096), (614, 15120), (622, 15150), (645, 15216), (656, 15288), (678, 15603), (679, 15612), (680, 15615), (681, 15642), (682, 15657), (684, 15672), (686, 15684), (691, 15714), (699, 15768), (703, 15786), (719, 15855), (724, 15903), (730, 15927), (732, 15939), (734, 15948), (747, 16020), (749, 16044), (754, 16083),

Gene: Nibb_20 Start: 11122, Stop: 15189, Start Num: 16

Candidate Starts for Nibb_20:

(9, 11086), (Start: 16 @11122 has 58 MA's), (42, 11347), (47, 11374), (48, 11383), (73, 11485), (97, 11614), (112, 11707), (114, 11719), (127, 11773), (132, 11803), (151, 11890), (154, 11905), (167, 12001), (168, 12004), (177, 12046), (188, 12115), (219, 12298), (232, 12349), (234, 12361), (237,

12391), (250, 12451), (254, 12463), (256, 12469), (259, 12484), (262, 12502), (263, 12505), (298, 12652), (300, 12661), (302, 12673), (304, 12679), (308, 12694), (310, 12700), (339, 12784), (346, 12853), (373, 13018), (382, 13066), (393, 13126), (400, 13156), (410, 13207), (414, 13228), (423, 13264), (432, 13318), (456, 13456), (468, 13510), (475, 13543), (479, 13561), (487, 13600), (503, 13678), (504, 13681), (527, 13765), (539, 13822), (552, 13858), (555, 13876), (558, 13915), (602, 14116), (617, 14158), (627, 14191), (667, 14533), (686, 14731), (730, 15019), (732, 15031), (741, 15103), (746, 15124),

Gene: Nikao_17 Start: 11327, Stop: 15460, Start Num: 15

Candidate Starts for Nikao_17:

(10, 11288), (Start: 15 @11327 has 162 MA's), (Start: 23 @11396 has 1 MA's), (31, 11483), (41, 11561), (61, 11669), (66, 11690), (73, 11723), (98, 11855), (100, 11870), (102, 11876), (109, 11930), (115, 11960), (130, 12023), (133, 12044), (141, 12083), (157, 12161), (168, 12239), (173, 12263), (210, 12497), (228, 12578), (238, 12638), (250, 12695), (260, 12731), (265, 12764), (271, 12788), (287, 12854), (290, 12863), (302, 12923), (323, 13031), (331, 13076), (354, 13232), (371, 13343), (373, 13352), (375, 13364), (384, 13415), (388, 13433), (393, 13460), (400, 13490), (419, 13583), (428, 13622), (431, 13649), (456, 13790), (468, 13844), (475, 13877), (485, 13922), (503, 14003), (504, 14006), (527, 14090), (529, 14096), (531, 14105), (539, 14147), (552, 14183), (555, 14201), (558, 14240), (573, 14300), (602, 14441), (622, 14501), (627, 14516), (669, 14858), (686, 15047), (687, 15056), (697, 15119), (746, 15395),

Gene: Niklas_21 Start: 11128, Stop: 15282, Start Num: 16

Candidate Starts for Niklas_21:

(9, 11086), (Start: 16 @11128 has 58 MA's), (26, 11221), (47, 11380), (53, 11407), (74, 11497), (75, 11500), (90, 11587), (108, 11695), (124, 11764), (128, 11782), (145, 11866), (151, 11908), (154, 11923), (155, 11932), (160, 11959), (168, 12022), (177, 12064), (188, 12133), (198, 12196), (199, 12205), (219, 12319), (220, 12325), (230, 12361), (232, 12370), (234, 12382), (235, 12394), (237, 12412), (250, 12472), (254, 12484), (256, 12490), (259, 12505), (262, 12523), (263, 12526), (266, 12544), (270, 12559), (279, 12598), (295, 12655), (296, 12664), (302, 12694), (308, 12715), (315, 12745), (319, 12778), (333, 12862), (338, 12892), (341, 12904), (353, 13006), (365, 13084), (373, 13129), (377, 13153), (387, 13207), (388, 13210), (391, 13225), (400, 13267), (404, 13294), (406, 13303), (410, 13318), (411, 13324), (412, 13327), (438, 13468), (444, 13504), (445, 13510), (450, 13528), (454, 13555), (456, 13567), (468, 13621), (475, 13654), (488, 13714), (503, 13795), (504, 13798), (527, 13882), (531, 13897), (558, 14032), (575, 14098), (602, 14233), (665, 14584), (686, 14839), (687, 14848), (694, 14914), (730, 15109), (734, 15130), (741, 15181), (745, 15199), (746, 15205), (750, 15244),

Gene: NoShow_16 Start: 10206, Stop: 14354, Start Num: 5

Candidate Starts for NoShow_16:

(Start: 5 @10206 has 1 MA's), (6, 10218), (Start: 12 @10323 has 1 MA's), (13, 10344), (44, 10602), (51, 10635), (53, 10638), (59, 10671), (74, 10728), (78, 10743), (79, 10746), (88, 10800), (91, 10821), (95, 10839), (97, 10851), (101, 10872), (103, 10881), (106, 10911), (130, 11013), (131, 11022), (138, 11055), (152, 11121), (154, 11133), (155, 11142), (162, 11187), (166, 11220), (168, 11232), (174, 11259), (188, 11343), (200, 11418), (204, 11457), (214, 11502), (219, 11526), (230, 11568), (231, 11571), (232, 11577), (234, 11589), (241, 11634), (254, 11691), (256, 11697), (259, 11712), (262, 11730), (270, 11766), (275, 11784), (278, 11802), (286, 11829), (289, 11838), (298, 11880), (299, 11886), (308, 11922), (310, 11928), (316, 11961), (319, 11985), (323, 12009), (354, 12213), (356, 12246), (358, 12258), (366, 12294), (381, 12378), (382, 12384), (398, 12477), (407, 12519), (409, 12531), (411, 12540), (416, 12564), (424, 12597), (435, 12675), (439, 12705), (442, 12717), (443, 12726), (448, 12747), (459, 12801), (469, 12846), (484, 12921), (497, 12996), (508, 13032), (514, 13059), (516, 13068), (520, 13080), (530, 13116), (559, 13257), (561, 13266), (575, 13311), (584, 13344), (593, 13398), (600, 13431), (613, 13470), (619, 13491), (629, 13518), (651, 13599), (659, 13680), (660, 13692), (677, 13938), (681, 13983), (686, 14025), (690, 14052), (695, 14106), (701,

14127), (704, 14142), (706, 14148), (716, 14202), (717, 14208), (721, 14244), (733, 14301), (735, 14310),

Gene: November_20 Start: 12038, Stop: 16228, Start Num: 15

Candidate Starts for November_20:

(Start: 15 @12038 has 162 MA's), (Start: 23 @12107 has 1 MA's), (Start: 24 @12128 has 1 MA's), (31, 12194), (57, 12356), (73, 12431), (84, 12482), (86, 12491), (96, 12551), (98, 12563), (102, 12584), (109, 12638), (115, 12668), (130, 12731), (133, 12752), (141, 12791), (157, 12869), (168, 12947), (173, 12971), (181, 13025), (183, 13037), (195, 13103), (201, 13145), (206, 13184), (208, 13196), (214, 13226), (216, 13235), (239, 13349), (242, 13364), (255, 13418), (261, 13448), (265, 13472), (270, 13493), (281, 13541), (293, 13586), (294, 13589), (302, 13631), (308, 13652), (317, 13700), (322, 13757), (325, 13772), (329, 13787), (332, 13808), (334, 13820), (343, 13865), (354, 13961), (400, 14219), (403, 14240), (423, 14327), (428, 14351), (431, 14378), (432, 14381), (437, 14411), (445, 14462), (453, 14498), (475, 14606), (503, 14741), (504, 14744), (524, 14810), (526, 14816), (534, 14855), (550, 14927), (551, 14933), (555, 14954), (571, 15038), (576, 15068), (580, 15089), (583, 15101), (598, 15182), (603, 15215), (607, 15224), (610, 15230), (622, 15272), (630, 15290), (638, 15323), (639, 15329), (667, 15617), (678, 15731), (679, 15740), (680, 15743), (686, 15812), (712, 15947), (730, 16067), (746, 16163), (750, 16202),

Gene: Nutello_17 Start: 11327, Stop: 15460, Start Num: 15

Candidate Starts for Nutello_17:

(10, 11288), (Start: 15 @11327 has 162 MA's), (Start: 23 @11396 has 1 MA's), (31, 11483), (41, 11561), (61, 11669), (66, 11690), (73, 11723), (98, 11855), (100, 11870), (102, 11876), (109, 11930), (115, 11960), (130, 12023), (133, 12044), (141, 12083), (157, 12161), (168, 12239), (173, 12263), (210, 12497), (228, 12578), (238, 12638), (250, 12695), (260, 12731), (265, 12764), (271, 12788), (287, 12854), (290, 12863), (302, 12923), (323, 13031), (331, 13076), (354, 13232), (371, 13343), (373, 13352), (375, 13364), (384, 13415), (388, 13433), (393, 13460), (400, 13490), (419, 13583), (428, 13622), (456, 13790), (468, 13844), (475, 13877), (485, 13922), (503, 14003), (504, 14006), (527, 14090), (529, 14096), (531, 14105), (539, 14147), (552, 14183), (555, 14201), (558, 14240), (573, 14300), (602, 14441), (622, 14501), (627, 14516), (669, 14858), (686, 15047), (687, 15056), (697, 15119), (746, 15395),

Gene: OctaviousRex_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for OctaviousRex_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: OkiRoe_19 Start: 12137, Stop: 16246, Start Num: 14

Candidate Starts for OkiRoe_19:

(Start: 14 @12137 has 31 MA's), (43, 12395), (61, 12479), (76, 12545), (86, 12593), (96, 12653), (98, 12665), (102, 12686), (109, 12740), (115, 12770), (130, 12833), (133, 12854), (147, 12911), (157, 12971), (168, 13049), (173, 13073), (179, 13115), (186, 13148), (210, 13307), (214, 13328), (235, 13406), (247, 13469), (251, 13484), (252, 13487), (255, 13496), (257, 13502), (259, 13514), (269, 13568), (295, 13670), (302, 13709), (331, 13862), (339, 13904), (344, 13928), (354, 14018), (356, 14051), (383, 14192), (384, 14201), (388, 14219), (393, 14246), (409, 14324), (428, 14408), (448, 14531), (460, 14597), (481, 14699), (503, 14792), (512, 14822), (519, 14849), (522, 14855), (534,

14906), (537, 14927), (541, 14942), (542, 14948), (558, 15032), (572, 15080), (582, 15119), (594, 15179), (601, 15212), (606, 15233), (614, 15257), (622, 15290), (645, 15374), (656, 15446), (678, 15755), (682, 15809), (684, 15824), (686, 15836), (691, 15866), (724, 16052), (732, 16088), (747, 16175), (749, 16199),

Gene: Olga_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Olga_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: OmniCritical_22 Start: 13225, Stop: 17397, Start Num: 16

Candidate Starts for OmniCritical_22:

(9, 13189), (Start: 16 @13225 has 58 MA's), (34, 13423), (84, 13663), (86, 13672), (102, 13765), (130, 13912), (133, 13933), (141, 13972), (143, 13975), (157, 14050), (168, 14128), (182, 14215), (183, 14218), (190, 14248), (194, 14281), (198, 14305), (211, 14389), (217, 14419), (223, 14446), (245, 14554), (248, 14575), (251, 14587), (255, 14599), (265, 14653), (302, 14812), (308, 14833), (323, 14941), (342, 15061), (400, 15421), (410, 15472), (412, 15481), (422, 15526), (426, 15547), (469, 15766), (470, 15778), (474, 15787), (494, 15859), (503, 15910), (504, 15913), (512, 15940), (539, 16039), (545, 16057), (558, 16132), (600, 16321), (602, 16333), (627, 16408), (657, 16594), (665, 16714), (673, 16822), (686, 16969), (703, 17089), (706, 17098), (708, 17101), (722, 17200), (729, 17227), (746, 17323), (753, 17386),

Gene: Omnicron_19 Start: 11169, Stop: 15011, Start Num: 14

Candidate Starts for Omnicron_19:

(Start: 14 @11169 has 31 MA's), (39, 11355), (41, 11367), (56, 11433), (57, 11445), (60, 11457), (65, 11475), (66, 11478), (98, 11631), (102, 11652), (109, 11706), (115, 11736), (121, 11754), (126, 11784), (128, 11790), (130, 11799), (133, 11820), (139, 11847), (157, 11937), (168, 12015), (176, 12048), (177, 12060), (181, 12093), (191, 12138), (195, 12171), (201, 12213), (202, 12225), (203, 12228), (232, 12348), (235, 12372), (248, 12438), (252, 12453), (255, 12462), (257, 12468), (265, 12516), (326, 12627), (328, 12636), (336, 12687), (337, 12693), (341, 12708), (344, 12723), (354, 12813), (356, 12846), (381, 12975), (383, 12987), (384, 12996), (388, 13014), (391, 13029), (393, 13041), (400, 13071), (408, 13110), (412, 13131), (413, 13140), (421, 13173), (424, 13185), (426, 13197), (428, 13203), (437, 13263), (438, 13272), (447, 13326), (451, 13338), (482, 13488), (503, 13569), (504, 13572), (519, 13626), (533, 13674), (535, 13683), (538, 13707), (565, 13827), (566, 13830), (588, 13917), (591, 13926), (599, 13986), (605, 14019), (611, 14034), (613, 14040), (626, 14085), (636, 14106), (640, 14133), (660, 14268), (664, 14343), (672, 14451), (678, 14520), (679, 14529), (680, 14532), (681, 14559), (686, 14601), (691, 14631), (699, 14688), (706, 14715), (719, 14775), (730, 14847), (734, 14868), (747, 14940), (749, 14964), (755, 15003),

Gene: Oscar_20 Start: 11083, Stop: 15156, Start Num: 16

Candidate Starts for Oscar_20:

(Start: 16 @11083 has 58 MA's), (26, 11176), (42, 11308), (73, 11446), (88, 11524), (89, 11536), (90, 11542), (97, 11575), (104, 11611), (112, 11668), (114, 11680), (127, 11734), (132, 11764), (151, 11851), (154, 11866), (160, 11902), (175, 11995), (188, 12076), (219, 12259), (221, 12268), (232, 12310), (237, 12352), (250, 12412), (254, 12424), (256, 12430), (259, 12445), (263, 12466), (270, 12499), (300, 12622), (302, 12634), (304, 12640), (308, 12655), (310, 12661), (339, 12745), (347,

12826), (373, 12979), (391, 13075), (393, 13087), (400, 13117), (410, 13168), (414, 13189), (421, 13219), (423, 13225), (428, 13249), (437, 13309), (445, 13360), (454, 13405), (456, 13417), (468, 13471), (475, 13504), (487, 13561), (503, 13639), (504, 13642), (527, 13726), (534, 13753), (539, 13783), (555, 13837), (558, 13876), (602, 14077), (617, 14119), (627, 14152), (630, 14158), (665, 14437), (667, 14494), (686, 14695), (702, 14809), (730, 14986), (741, 15070), (746, 15091),

Gene: Pace1224_16 Start: 11630, Stop: 15664, Start Num: 16

Candidate Starts for Pace1224_16:

(Start: 16 @11630 has 58 MA's), (25, 11723), (29, 11753), (43, 11900), (61, 11984), (71, 12032), (96, 12158), (98, 12170), (102, 12191), (130, 12338), (133, 12359), (138, 12380), (141, 12398), (148, 12422), (150, 12434), (161, 12506), (164, 12521), (168, 12554), (192, 12686), (195, 12710), (198, 12731), (201, 12752), (202, 12764), (206, 12791), (208, 12803), (214, 12833), (223, 12881), (251, 13022), (261, 13064), (265, 13088), (276, 13133), (277, 13136), (302, 13247), (341, 13451), (344, 13466), (351, 13547), (354, 13556), (362, 13616), (383, 13730), (386, 13751), (399, 13811), (405, 13844), (412, 13874), (428, 13946), (432, 13976), (435, 13997), (454, 14102), (455, 14105), (466, 14159), (491, 14258), (494, 14276), (509, 14342), (513, 14357), (520, 14381), (532, 14423), (534, 14432), (549, 14492), (566, 14582), (588, 14678), (596, 14735), (602, 14768), (625, 14828), (634, 14843), (662, 15038), (678, 15245), (684, 15314), (686, 15326), (691, 15356), (693, 15416), (719, 15512), (727, 15572), (731, 15590),

Gene: Padfoot_21 Start: 12116, Stop: 15949, Start Num: 15

Candidate Starts for Padfoot_21:

(Start: 15 @12116 has 162 MA's), (Start: 23 @12185 has 1 MA's), (31, 12272), (41, 12347), (59, 12449), (66, 12476), (83, 12548), (84, 12560), (86, 12569), (98, 12641), (109, 12716), (128, 12800), (130, 12809), (133, 12830), (141, 12869), (150, 12905), (157, 12947), (168, 13025), (183, 13115), (196, 13190), (210, 13283), (212, 13292), (214, 13304), (216, 13313), (265, 13550), (275, 13589), (282, 13622), (302, 13709), (309, 13733), (323, 13817), (338, 13901), (341, 13913), (345, 13934), (400, 14090), (439, 14171), (450, 14219), (453, 14237), (456, 14258), (463, 14294), (475, 14345), (487, 14402), (503, 14480), (506, 14489), (527, 14567), (531, 14582), (539, 14624), (555, 14678), (602, 14918), (627, 14993), (654, 15104), (667, 15323), (669, 15335), (686, 15518), (687, 15527), (699, 15599), (708, 15629), (712, 15650), (730, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: Padpat_21 Start: 12076, Stop: 15909, Start Num: 15

Candidate Starts for Padpat_21:

(Start: 15 @12076 has 162 MA's), (Start: 23 @12145 has 1 MA's), (31, 12232), (41, 12307), (59, 12409), (66, 12436), (83, 12508), (84, 12520), (86, 12529), (98, 12601), (109, 12676), (128, 12760), (130, 12769), (133, 12790), (141, 12829), (157, 12907), (168, 12985), (183, 13075), (196, 13150), (210, 13243), (212, 13252), (214, 13264), (216, 13273), (265, 13510), (275, 13549), (282, 13582), (302, 13669), (309, 13693), (323, 13777), (338, 13861), (341, 13873), (345, 13894), (400, 14050), (439, 14131), (450, 14179), (453, 14197), (456, 14218), (463, 14254), (475, 14305), (487, 14362), (503, 14440), (506, 14449), (527, 14527), (531, 14542), (539, 14584), (555, 14638), (602, 14878), (627, 14953), (654, 15064), (667, 15283), (669, 15295), (686, 15478), (687, 15487), (699, 15559), (708, 15589), (712, 15610), (730, 15730), (741, 15802), (745, 15820), (746, 15826),

Gene: Paito_16 Start: 11582, Stop: 15610, Start Num: 15

Candidate Starts for Paito_16:

(Start: 15 @11582 has 162 MA's), (34, 11783), (56, 11885), (57, 11897), (61, 11918), (68, 11954), (72, 11969), (83, 12011), (98, 12104), (102, 12125), (128, 12263), (130, 12272), (138, 12314), (141, 12332), (143, 12335), (148, 12356), (150, 12368), (161, 12440), (168, 12488), (195, 12644), (233, 12848), (235, 12869), (246, 12920), (259, 12977), (265, 13013), (282, 13085), (288, 13106), (297, 13145), (302, 13172), (314, 13220), (317, 13241), (323, 13280), (341, 13376), (344, 13391), (360, 13538), (362, 13541), (382, 13649), (438, 13940), (445, 13982), (450, 14000), (455, 14030), (456, 14039), (500, 14246), (501, 14252), (509, 14276), (513, 14291), (518, 14312), (520, 14315), (534,

14366), (549, 14426), (562, 14507), (566, 14516), (572, 14549), (574, 14564), (588, 14612), (596, 14669), (602, 14702), (608, 14717), (633, 14780), (680, 15224), (681, 15251), (686, 15293), (687, 15302), (706, 15401), (719, 15458), (727, 15518), (731, 15536), (733, 15545),

Gene: Paola_19 Start: 12137, Stop: 16246, Start Num: 14

Candidate Starts for Paola_19:

(Start: 14 @12137 has 31 MA's), (43, 12395), (61, 12479), (76, 12545), (86, 12593), (96, 12653), (98, 12665), (102, 12686), (109, 12740), (115, 12770), (130, 12833), (133, 12854), (147, 12911), (157, 12971), (168, 13049), (173, 13073), (179, 13115), (186, 13148), (210, 13307), (214, 13328), (235, 13406), (247, 13469), (251, 13484), (252, 13487), (255, 13496), (257, 13502), (259, 13514), (265, 13550), (269, 13568), (295, 13670), (302, 13709), (331, 13862), (339, 13904), (344, 13928), (354, 14018), (356, 14051), (369, 14117), (383, 14192), (384, 14201), (388, 14219), (393, 14246), (409, 14324), (428, 14408), (448, 14531), (460, 14597), (481, 14699), (503, 14792), (512, 14822), (519, 14849), (522, 14855), (534, 14906), (537, 14927), (541, 14942), (542, 14948), (558, 15032), (570, 15062), (572, 15080), (582, 15119), (594, 15179), (601, 15212), (606, 15233), (614, 15257), (622, 15290), (645, 15374), (656, 15446), (678, 15755), (682, 15809), (684, 15824), (686, 15836), (691, 15866), (724, 16052), (730, 16076), (732, 16088), (747, 16175), (749, 16199),

Gene: Patt_22 Start: 13064, Stop: 17230, Start Num: 16

Candidate Starts for Patt_22:

(9, 13028), (Start: 16 @13064 has 58 MA's), (34, 13262), (83, 13490), (84, 13502), (86, 13511), (89, 13541), (102, 13604), (130, 13751), (133, 13772), (141, 13811), (143, 13814), (157, 13889), (168, 13967), (182, 14054), (183, 14057), (190, 14087), (194, 14120), (198, 14144), (211, 14228), (217, 14258), (223, 14285), (245, 14393), (248, 14414), (251, 14426), (255, 14438), (265, 14492), (302, 14651), (308, 14672), (323, 14780), (342, 14900), (378, 15149), (400, 15260), (410, 15311), (412, 15320), (422, 15365), (426, 15386), (446, 15485), (450, 15500), (451, 15506), (464, 15575), (468, 15596), (469, 15605), (470, 15617), (474, 15626), (494, 15698), (503, 15749), (504, 15752), (512, 15779), (539, 15878), (545, 15896), (558, 15971), (600, 16160), (602, 16172), (627, 16247), (657, 16427), (665, 16547), (673, 16655), (677, 16715), (686, 16802), (691, 16832), (703, 16922), (706, 16931), (708, 16934), (722, 17033), (729, 17060), (746, 17156), (753, 17219),

Gene: Peanam_21 Start: 11128, Stop: 15282, Start Num: 16

Candidate Starts for Peanam_21:

(9, 11086), (Start: 16 @11128 has 58 MA's), (26, 11221), (47, 11380), (53, 11407), (74, 11497), (75, 11500), (90, 11587), (108, 11695), (124, 11764), (128, 11782), (145, 11866), (151, 11908), (154, 11923), (155, 11932), (160, 11959), (168, 12022), (177, 12064), (188, 12133), (198, 12196), (199, 12205), (219, 12319), (220, 12325), (230, 12361), (232, 12370), (234, 12382), (235, 12394), (237, 12412), (250, 12472), (254, 12484), (256, 12490), (259, 12505), (262, 12523), (263, 12526), (266, 12544), (270, 12559), (279, 12598), (295, 12655), (296, 12664), (302, 12694), (308, 12715), (315, 12745), (319, 12778), (333, 12862), (338, 12892), (341, 12904), (353, 13006), (365, 13084), (373, 13129), (377, 13153), (387, 13207), (388, 13210), (391, 13225), (400, 13267), (404, 13294), (406, 13303), (410, 13318), (411, 13324), (412, 13327), (438, 13468), (444, 13504), (445, 13510), (450, 13528), (454, 13555), (456, 13567), (468, 13621), (475, 13654), (488, 13714), (503, 13795), (504, 13798), (527, 13882), (531, 13897), (558, 14032), (575, 14098), (602, 14233), (665, 14584), (686, 14839), (687, 14848), (694, 14914), (730, 15109), (734, 15130), (741, 15181), (745, 15199), (746, 15205), (750, 15244),

Gene: Peeb_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Peeb_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362,

13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Peel_21 Start: 12116, Stop: 15949, Start Num: 15

Candidate Starts for Peel_21:

(Start: 15 @12116 has 162 MA's), (Start: 23 @12185 has 1 MA's), (31, 12272), (41, 12347), (59, 12449), (66, 12476), (83, 12548), (84, 12560), (86, 12569), (98, 12641), (109, 12716), (128, 12800), (130, 12809), (133, 12830), (141, 12869), (150, 12905), (157, 12947), (168, 13025), (183, 13115), (196, 13190), (210, 13283), (212, 13292), (214, 13304), (216, 13313), (265, 13550), (275, 13589), (282, 13622), (302, 13709), (309, 13733), (323, 13817), (338, 13901), (341, 13913), (345, 13934), (400, 14090), (439, 14171), (450, 14219), (453, 14237), (456, 14258), (463, 14294), (475, 14345), (487, 14402), (503, 14480), (506, 14489), (527, 14567), (531, 14582), (539, 14624), (555, 14678), (602, 14918), (627, 14993), (654, 15104), (667, 15323), (669, 15335), (686, 15518), (687, 15527), (699, 15599), (708, 15629), (712, 15650), (730, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: Periodt_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Periodt_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Pharb_20 Start: 12014, Stop: 16198, Start Num: 15

Candidate Starts for Pharb_20:

(8, 11966), (Start: 15 @12014 has 162 MA's), (Start: 23 @12083 has 1 MA's), (Start: 24 @12104 has 1 MA's), (26, 12110), (31, 12170), (61, 12353), (64, 12365), (66, 12374), (84, 12458), (96, 12527), (98, 12539), (102, 12560), (109, 12614), (115, 12644), (130, 12707), (133, 12728), (141, 12767), (157, 12845), (168, 12923), (173, 12947), (201, 13121), (207, 13169), (210, 13181), (214, 13202), (216, 13211), (240, 13331), (257, 13400), (260, 13415), (265, 13448), (270, 13469), (272, 13478), (279, 13508), (282, 13520), (293, 13562), (294, 13565), (295, 13568), (302, 13607), (318, 13685), (329, 13763), (334, 13796), (340, 13826), (347, 13904), (360, 13994), (368, 14024), (373, 14057), (390, 14147), (400, 14195), (428, 14327), (432, 14357), (445, 14438), (453, 14474), (463, 14531), (468, 14549), (475, 14582), (488, 14642), (503, 14723), (515, 14762), (525, 14795), (527, 14810), (529, 14816), (531, 14825), (539, 14867), (555, 14921), (558, 14960), (578, 15038), (602, 15161), (627, 15236), (658, 15425), (674, 15665), (678, 15695), (680, 15707), (687, 15785), (710, 15914), (723, 16001), (724, 16004), (732, 16037), (739, 16082), (746, 16118), (748, 16133), (749, 16145), (752, 16181),

Gene: PhelpsODU_20 Start: 11123, Stop: 15124, Start Num: 16

Candidate Starts for PhelpsODU_20:

(Start: 16 @11123 has 58 MA's), (26, 11216), (37, 11321), (47, 11375), (50, 11393), (55, 11411), (59, 11435), (61, 11441), (68, 11468), (69, 11474), (73, 11486), (82, 11519), (97, 11615), (100, 11633), (101, 11636), (124, 11750), (127, 11765), (151, 11882), (165, 11978), (172, 12017), (177, 12038), (178, 12047), (188, 12107), (219, 12290), (220, 12296), (221, 12299), (234, 12353), (237, 12383), (250, 12443), (254, 12455), (256, 12461), (259, 12476), (263, 12497), (266, 12515), (300, 12653),

(302, 12665), (308, 12686), (316, 12725), (340, 12779), (341, 12785), (353, 12887), (360, 12947), (373, 13010), (388, 13091), (391, 13106), (392, 13109), (400, 13148), (406, 13184), (410, 13199), (411, 13205), (417, 13232), (423, 13256), (435, 13331), (445, 13391), (456, 13448), (463, 13484), (475, 13535), (503, 13676), (504, 13679), (527, 13763), (534, 13790), (555, 13874), (558, 13913), (602, 14114), (627, 14189), (662, 14408), (668, 14522), (678, 14624), (679, 14633), (686, 14705), (699, 14789), (708, 14819), (712, 14840), (730, 14957), (741, 15032), (748, 15071), (749, 15083),

Gene: Phish_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Phish_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Phrank_20 Start: 11071, Stop: 15072, Start Num: 16

Candidate Starts for Phrank_20:

(Start: 16 @11071 has 58 MA's), (26, 11164), (37, 11269), (42, 11296), (47, 11323), (50, 11341), (55, 11359), (59, 11383), (61, 11389), (68, 11416), (69, 11422), (79, 11458), (82, 11467), (85, 11491), (97, 11563), (100, 11581), (101, 11584), (127, 11713), (151, 11830), (165, 11926), (172, 11965), (178, 11995), (188, 12055), (219, 12238), (220, 12244), (221, 12247), (234, 12301), (237, 12331), (250, 12391), (254, 12403), (256, 12409), (259, 12424), (263, 12445), (266, 12463), (300, 12601), (302, 12613), (308, 12634), (316, 12673), (340, 12727), (341, 12733), (360, 12895), (373, 12958), (388, 13039), (391, 13054), (400, 13096), (410, 13147), (414, 13168), (421, 13198), (423, 13204), (428, 13228), (435, 13279), (445, 13339), (456, 13396), (463, 13432), (468, 13450), (475, 13483), (503, 13624), (504, 13627), (527, 13711), (534, 13738), (555, 13822), (602, 14062), (627, 14137), (668, 14470), (678, 14572), (679, 14581), (686, 14653), (699, 14737), (708, 14767), (712, 14788), (730, 14905), (741, 14980), (748, 15019), (749, 15031),

Gene: Phreak_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Phreak_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Piatt_21 Start: 12116, Stop: 15949, Start Num: 15

Candidate Starts for Piatt_21:

(Start: 15 @12116 has 162 MA's), (Start: 23 @12185 has 1 MA's), (31, 12272), (41, 12347), (59, 12449), (66, 12476), (83, 12548), (84, 12560), (86, 12569), (98, 12641), (109, 12716), (128, 12800), (130, 12809), (133, 12830), (141, 12869), (150, 12905), (157, 12947), (168, 13025), (183, 13115), (196, 13190), (210, 13283), (212, 13292), (214, 13304), (216, 13313), (265, 13550), (275, 13589), (282, 13622), (302, 13709), (309, 13733), (323, 13817), (338, 13901), (341, 13913), (345, 13934), (400, 14090), (439, 14171), (450, 14219), (453, 14237), (456, 14258), (463, 14294), (475, 14345),

(487, 14402), (503, 14480), (506, 14489), (527, 14567), (531, 14582), (539, 14624), (555, 14678), (602, 14918), (627, 14993), (654, 15104), (667, 15323), (669, 15335), (686, 15518), (687, 15527), (699, 15599), (708, 15629), (712, 15650), (730, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: PinkYoshi_16 Start: 11455, Stop: 15468, Start Num: 15

Candidate Starts for PinkYoshi_16:

(Start: 15 @11455 has 162 MA's), (34, 11656), (57, 11770), (66, 11812), (72, 11842), (98, 11977), (99, 11989), (102, 11998), (138, 12187), (141, 12205), (143, 12208), (148, 12229), (150, 12241), (161, 12313), (168, 12361), (192, 12493), (195, 12517), (206, 12598), (233, 12721), (247, 12805), (258, 12841), (265, 12886), (266, 12892), (293, 13000), (298, 13024), (302, 13045), (344, 13264), (362, 13414), (378, 13501), (399, 13609), (428, 13744), (445, 13855), (450, 13873), (455, 13903), (501, 14125), (509, 14149), (513, 14164), (518, 14185), (527, 14212), (534, 14239), (549, 14299), (566, 14389), (572, 14422), (588, 14485), (596, 14542), (602, 14575), (605, 14584), (680, 15088), (681, 15115), (684, 15145), (686, 15157), (687, 15166), (699, 15235), (719, 15316), (727, 15376), (731, 15394), (733, 15403),

Gene: Pinnie_17 Start: 12158, Stop: 16180, Start Num: 16

Candidate Starts for Pinnie_17:

(Start: 16 @12158 has 58 MA's), (21, 12203), (35, 12359), (37, 12362), (50, 12434), (55, 12452), (57, 12464), (68, 12509), (73, 12527), (90, 12623), (92, 12629), (95, 12644), (97, 12656), (100, 12674), (106, 12716), (107, 12719), (115, 12755), (117, 12767), (124, 12791), (125, 12797), (130, 12818), (145, 12893), (151, 12935), (154, 12950), (160, 12986), (161, 13001), (168, 13049), (169, 13058), (188, 13160), (211, 13301), (219, 13343), (227, 13373), (229, 13379), (230, 13385), (237, 13436), (254, 13508), (256, 13514), (259, 13529), (262, 13547), (263, 13550), (277, 13610), (289, 13655), (298, 13697), (302, 13718), (309, 13742), (312, 13754), (313, 13757), (321, 13814), (333, 13886), (341, 13928), (353, 14030), (363, 14093), (383, 14207), (386, 14228), (399, 14288), (410, 14342), (411, 14348), (423, 14399), (435, 14474), (442, 14516), (454, 14579), (490, 14744), (508, 14828), (510, 14843), (516, 14861), (517, 14867), (529, 14909), (531, 14918), (540, 14963), (544, 14978), (559, 15059), (561, 15068), (584, 15161), (593, 15218), (600, 15251), (618, 15305), (624, 15326), (680, 15785), (681, 15812), (683, 15839), (686, 15854), (687, 15863), (699, 15950), (725, 16088), (728, 16106), (736, 16145),

Gene: Pixie_20 Start: 11949, Stop: 16127, Start Num: 15

Candidate Starts for Pixie_20:

(Start: 15 @11949 has 162 MA's), (Start: 23 @12018 has 1 MA's), (Start: 24 @12039 has 1 MA's), (26, 12045), (31, 12105), (52, 12243), (61, 12288), (66, 12309), (96, 12462), (98, 12474), (102, 12495), (109, 12549), (115, 12579), (122, 12600), (128, 12633), (130, 12642), (133, 12663), (141, 12702), (157, 12780), (163, 12822), (168, 12858), (173, 12882), (201, 13056), (206, 13095), (210, 13116), (214, 13137), (216, 13146), (250, 13314), (257, 13335), (261, 13359), (265, 13383), (270, 13404), (275, 13422), (282, 13455), (293, 13497), (294, 13500), (295, 13503), (302, 13542), (305, 13551), (318, 13620), (334, 13731), (340, 13761), (368, 13959), (373, 13992), (390, 14082), (393, 14100), (400, 14130), (404, 14157), (432, 14292), (445, 14373), (453, 14409), (463, 14466), (468, 14484), (472, 14505), (475, 14517), (488, 14577), (503, 14658), (515, 14697), (525, 14730), (527, 14745), (529, 14751), (531, 14760), (539, 14802), (558, 14895), (578, 14973), (602, 15096), (627, 15171), (678, 15636), (680, 15648), (686, 15717), (687, 15726), (721, 15918), (723, 15936), (732, 15972), (734, 15981), (745, 16047), (746, 16053), (748, 16068), (749, 16080),

Gene: Plagueis_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Plagueis_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362,

13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Pokerus_20 Start: 12033, Stop: 15866, Start Num: 15

Candidate Starts for Pokerus_20:

(Start: 15 @12033 has 162 MA's), (Start: 23 @12102 has 1 MA's), (31, 12189), (59, 12366), (66, 12393), (83, 12465), (84, 12477), (86, 12486), (98, 12558), (109, 12633), (128, 12717), (130, 12726), (133, 12747), (141, 12786), (157, 12864), (168, 12942), (183, 13032), (196, 13107), (210, 13200), (212, 13209), (214, 13221), (216, 13230), (265, 13467), (275, 13506), (282, 13539), (302, 13626), (309, 13650), (323, 13734), (338, 13818), (341, 13830), (345, 13851), (400, 14007), (439, 14088), (450, 14136), (453, 14154), (456, 14175), (463, 14211), (475, 14262), (487, 14319), (503, 14397), (506, 14406), (527, 14484), (531, 14499), (539, 14541), (555, 14595), (602, 14835), (627, 14910), (654, 15021), (667, 15240), (669, 15252), (686, 15435), (687, 15444), (699, 15516), (708, 15546), (712, 15567), (730, 15687), (741, 15759), (745, 15777), (746, 15783),

Gene: Prithvi_21 Start: 12047, Stop: 15883, Start Num: 15

Candidate Starts for Prithvi_21:

(Start: 15 @12047 has 162 MA's), (Start: 23 @12116 has 1 MA's), (31, 12203), (59, 12383), (66, 12410), (86, 12503), (96, 12563), (98, 12575), (109, 12650), (122, 12701), (130, 12743), (133, 12764), (141, 12803), (157, 12881), (168, 12959), (173, 12983), (196, 13124), (210, 13217), (212, 13226), (214, 13238), (216, 13247), (265, 13484), (271, 13508), (275, 13523), (282, 13556), (302, 13643), (309, 13667), (323, 13751), (338, 13835), (341, 13847), (345, 13868), (353, 13949), (400, 14024), (439, 14105), (450, 14153), (453, 14171), (455, 14183), (456, 14192), (463, 14228), (475, 14279), (487, 14336), (503, 14414), (506, 14423), (527, 14501), (531, 14516), (539, 14558), (555, 14612), (602, 14852), (627, 14927), (654, 15038), (667, 15257), (669, 15269), (678, 15371), (686, 15452), (687, 15461), (699, 15533), (708, 15563), (712, 15584), (730, 15704), (741, 15776), (745, 15794), (746, 15800),

Gene: Psycho_19 Start: 12089, Stop: 16222, Start Num: 12

Candidate Starts for Psycho_19:

(Start: 12 @12089 has 1 MA's), (Start: 14 @12110 has 31 MA's), (Start: 24 @12203 has 1 MA's), (32, 12281), (33, 12305), (43, 12365), (61, 12449), (86, 12563), (96, 12623), (98, 12635), (102, 12656), (109, 12710), (121, 12758), (130, 12803), (133, 12824), (157, 12941), (168, 13019), (173, 13043), (179, 13085), (183, 13109), (196, 13184), (210, 13277), (216, 13307), (252, 13481), (261, 13520), (265, 13544), (270, 13565), (284, 13625), (302, 13703), (305, 13712), (320, 13790), (331, 13856), (339, 13898), (341, 13907), (348, 13991), (354, 14012), (356, 14045), (369, 14111), (373, 14132), (383, 14186), (384, 14195), (388, 14213), (393, 14240), (400, 14270), (406, 14306), (426, 14396), (428, 14402), (429, 14420), (448, 14525), (460, 14591), (503, 14786), (512, 14816), (522, 14849), (534, 14900), (537, 14921), (541, 14936), (542, 14942), (558, 15026), (572, 15074), (582, 15113), (594, 15173), (601, 15206), (606, 15227), (614, 15251), (622, 15281), (645, 15347), (656, 15419), (678, 15734), (679, 15743), (680, 15746), (681, 15773), (682, 15788), (684, 15803), (686, 15815), (691, 15845), (699, 15899), (703, 15917), (719, 15986), (724, 16034), (730, 16058), (732, 16070), (734, 16079), (747, 16151), (749, 16175), (754, 16214),

Gene: QuincyRose_20 Start: 12096, Stop: 15929, Start Num: 15

Candidate Starts for QuincyRose_20:

(Start: 15 @12096 has 162 MA's), (Start: 23 @12165 has 1 MA's), (31, 12252), (59, 12429), (66, 12456), (84, 12540), (86, 12549), (98, 12621), (109, 12696), (128, 12780), (130, 12789), (133, 12810), (141, 12849), (157, 12927), (168, 13005), (183, 13095), (196, 13170), (210, 13263), (214, 13284), (216, 13293), (246, 13437), (265, 13530), (275, 13569), (282, 13602), (302, 13689), (309, 13713),

(323, 13797), (338, 13881), (341, 13893), (345, 13914), (400, 14070), (439, 14151), (450, 14199), (453, 14217), (456, 14238), (463, 14274), (475, 14325), (487, 14382), (503, 14460), (506, 14469), (527, 14547), (539, 14604), (555, 14658), (602, 14898), (627, 14973), (654, 15084), (667, 15303), (669, 15315), (686, 15498), (687, 15507), (699, 15579), (708, 15609), (712, 15630), (730, 15750), (741, 15822), (745, 15840), (746, 15846),

Gene: Rabbs_16 Start: 11454, Stop: 15479, Start Num: 15

Candidate Starts for Rabbs_16:

(Start: 15 @11454 has 162 MA's), (19, 11478), (34, 11655), (57, 11769), (66, 11811), (69, 11832), (72, 11841), (98, 11976), (102, 11997), (130, 12144), (138, 12186), (141, 12204), (143, 12207), (148, 12228), (150, 12240), (168, 12360), (179, 12426), (192, 12492), (195, 12516), (206, 12597), (233, 12720), (235, 12741), (255, 12831), (258, 12840), (266, 12891), (275, 12924), (278, 12942), (293, 12999), (302, 13044), (320, 13131), (323, 13152), (341, 13248), (344, 13263), (354, 13353), (360, 13410), (362, 13413), (392, 13572), (393, 13581), (399, 13608), (428, 13743), (450, 13872), (455, 13902), (501, 14124), (509, 14148), (513, 14163), (518, 14184), (534, 14238), (549, 14298), (566, 14388), (572, 14421), (574, 14436), (588, 14484), (596, 14541), (602, 14574), (671, 15006), (680, 15096), (681, 15123), (686, 15165), (687, 15174), (699, 15243), (706, 15270), (719, 15327), (727, 15387), (731, 15405), (733, 15414),

Gene: Ramen_21 Start: 12079, Stop: 15915, Start Num: 15

Candidate Starts for Ramen_21:

(Start: 15 @12079 has 162 MA's), (Start: 23 @12148 has 1 MA's), (31, 12235), (59, 12412), (66, 12439), (83, 12511), (84, 12523), (86, 12532), (98, 12604), (109, 12679), (128, 12763), (130, 12772), (133, 12793), (141, 12832), (157, 12910), (168, 12988), (183, 13078), (196, 13153), (210, 13246), (212, 13255), (214, 13267), (216, 13276), (271, 13537), (275, 13552), (282, 13585), (302, 13672), (309, 13696), (323, 13780), (338, 13864), (341, 13876), (345, 13897), (400, 14053), (439, 14134), (450, 14182), (453, 14200), (456, 14221), (463, 14257), (475, 14308), (487, 14365), (503, 14443), (506, 14452), (527, 14530), (539, 14587), (555, 14641), (602, 14881), (627, 14956), (654, 15067), (667, 15286), (669, 15298), (686, 15484), (687, 15493), (699, 15565), (708, 15595), (712, 15616), (730, 15736), (741, 15808), (745, 15826), (746, 15832),

Gene: Rando14_19 Start: 11071, Stop: 14910, Start Num: 14

Candidate Starts for Rando14_19:

(Start: 14 @11071 has 31 MA's), (26, 11170), (39, 11257), (41, 11269), (56, 11335), (57, 11347), (60, 11359), (65, 11377), (98, 11533), (102, 11554), (115, 11638), (121, 11656), (126, 11686), (128, 11692), (130, 11701), (133, 11722), (139, 11749), (140, 11755), (147, 11779), (157, 11839), (168, 11917), (176, 11950), (177, 11962), (181, 11995), (195, 12073), (197, 12091), (201, 12115), (202, 12127), (203, 12130), (232, 12250), (235, 12274), (247, 12337), (248, 12340), (252, 12355), (265, 12418), (307, 12466), (331, 12559), (334, 12574), (354, 12715), (356, 12748), (381, 12877), (383, 12889), (384, 12898), (387, 12913), (391, 12931), (393, 12943), (400, 12973), (408, 13012), (411, 13030), (412, 13033), (426, 13099), (428, 13105), (432, 13135), (437, 13165), (444, 13210), (447, 13228), (451, 13240), (478, 13375), (482, 13390), (503, 13471), (504, 13474), (519, 13528), (533, 13576), (535, 13585), (538, 13609), (543, 13630), (565, 13729), (566, 13732), (579, 13795), (591, 13828), (599, 13888), (605, 13921), (611, 13936), (613, 13942), (626, 13987), (636, 14008), (640, 14035), (660, 14170), (664, 14245), (671, 14335), (678, 14422), (679, 14431), (680, 14434), (681, 14461), (684, 14491), (686, 14503), (691, 14533), (699, 14587), (703, 14605), (719, 14674), (730, 14746), (734, 14767), (747, 14839), (749, 14863), (755, 14902),

Gene: Rapunzel97_21 Start: 12080, Stop: 15916, Start Num: 15

Candidate Starts for Rapunzel97_21:

(Start: 15 @12080 has 162 MA's), (Start: 23 @12149 has 1 MA's), (31, 12236), (59, 12413), (66, 12440), (83, 12512), (84, 12524), (86, 12533), (98, 12605), (109, 12680), (128, 12764), (130, 12773), (133, 12794), (141, 12833), (157, 12911), (168, 12989), (183, 13079), (196, 13154), (210, 13247),

(212, 13256), (214, 13268), (216, 13277), (271, 13538), (275, 13553), (282, 13586), (302, 13673), (309, 13697), (323, 13781), (338, 13865), (341, 13877), (345, 13898), (400, 14054), (439, 14135), (450, 14183), (453, 14201), (456, 14222), (463, 14258), (475, 14309), (487, 14366), (503, 14444), (506, 14453), (527, 14531), (539, 14588), (555, 14642), (602, 14882), (627, 14957), (654, 15068), (667, 15287), (669, 15299), (686, 15485), (687, 15494), (699, 15566), (708, 15596), (712, 15617), (730, 15737), (741, 15809), (745, 15827), (746, 15833),

Gene: Remy19_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Remy19_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Renaissance_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Renaissance_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Reptar3000_22 Start: 13066, Stop: 17232, Start Num: 16

Candidate Starts for Reptar3000_22:

(9, 13030), (Start: 16 @13066 has 58 MA's), (34, 13264), (83, 13492), (84, 13504), (86, 13513), (89, 13543), (102, 13606), (130, 13753), (133, 13774), (141, 13813), (143, 13816), (157, 13891), (168, 13969), (182, 14056), (183, 14059), (190, 14089), (194, 14122), (198, 14146), (211, 14230), (217, 14260), (223, 14287), (245, 14395), (248, 14416), (251, 14428), (255, 14440), (265, 14494), (302, 14653), (308, 14674), (323, 14782), (342, 14902), (378, 15151), (400, 15262), (410, 15313), (412, 15322), (422, 15367), (426, 15388), (446, 15487), (450, 15502), (451, 15508), (464, 15577), (468, 15598), (469, 15607), (470, 15619), (474, 15628), (494, 15700), (503, 15751), (504, 15754), (512, 15781), (539, 15880), (545, 15898), (558, 15973), (600, 16162), (602, 16174), (627, 16249), (657, 16429), (665, 16549), (673, 16657), (677, 16717), (686, 16804), (691, 16834), (703, 16924), (706, 16933), (708, 16936), (722, 17035), (729, 17062), (746, 17158), (753, 17221),

Gene: Richo_21 Start: 11128, Stop: 15282, Start Num: 16

Candidate Starts for Richo_21:

(9, 11086), (Start: 16 @11128 has 58 MA's), (26, 11221), (47, 11380), (53, 11407), (74, 11497), (75, 11500), (90, 11587), (108, 11695), (124, 11764), (128, 11782), (145, 11866), (151, 11908), (154, 11923), (155, 11932), (160, 11959), (168, 12022), (177, 12064), (188, 12133), (198, 12196), (199, 12205), (219, 12319), (220, 12325), (230, 12361), (232, 12370), (234, 12382), (235, 12394), (237, 12412), (250, 12472), (254, 12484), (256, 12490), (259, 12505), (262, 12523), (263, 12526), (266, 12544), (270, 12559), (279, 12598), (295, 12655), (296, 12664), (302, 12694), (308, 12715), (315, 12745), (319, 12778), (333, 12862), (338, 12892), (341, 12904), (353, 13006), (365, 13084), (373,

13129), (377, 13153), (387, 13207), (388, 13210), (391, 13225), (400, 13267), (404, 13294), (406, 13303), (410, 13318), (411, 13324), (412, 13327), (438, 13468), (444, 13504), (445, 13510), (450, 13528), (454, 13555), (456, 13567), (468, 13621), (475, 13654), (488, 13714), (503, 13795), (504, 13798), (527, 13882), (531, 13897), (558, 14032), (575, 14098), (602, 14233), (665, 14584), (686, 14839), (687, 14848), (694, 14914), (730, 15109), (734, 15130), (741, 15181), (745, 15199), (746, 15205), (750, 15244),

Gene: Rosmarinus_21 Start: 12104, Stop: 15937, Start Num: 15

Candidate Starts for Rosmarinus_21:

(Start: 15 @12104 has 162 MA's), (Start: 23 @12173 has 1 MA's), (31, 12260), (41, 12335), (59, 12437), (66, 12464), (83, 12536), (84, 12548), (86, 12557), (98, 12629), (109, 12704), (128, 12788), (130, 12797), (133, 12818), (141, 12857), (150, 12893), (157, 12935), (168, 13013), (183, 13103), (196, 13178), (210, 13271), (212, 13280), (214, 13292), (216, 13301), (265, 13538), (275, 13577), (282, 13610), (302, 13697), (309, 13721), (323, 13805), (338, 13889), (341, 13901), (345, 13922), (400, 14078), (439, 14159), (450, 14207), (453, 14225), (456, 14246), (463, 14282), (475, 14333), (487, 14390), (503, 14468), (506, 14477), (527, 14555), (531, 14570), (539, 14612), (555, 14666), (602, 14906), (627, 14981), (654, 15092), (667, 15311), (669, 15323), (686, 15506), (687, 15515), (699, 15587), (708, 15617), (712, 15638), (730, 15758), (741, 15830), (745, 15848), (746, 15854),

Gene: Ruthiejr_21 Start: 12924, Stop: 17120, Start Num: 16

Candidate Starts for Ruthiejr_21:

(Start: 16 @12924 has 58 MA's), (34, 13122), (79, 13335), (84, 13362), (86, 13371), (98, 13443), (102, 13464), (128, 13602), (130, 13611), (133, 13632), (141, 13671), (155, 13740), (157, 13749), (168, 13827), (170, 13839), (183, 13917), (190, 13947), (194, 13980), (195, 13983), (198, 14004), (223, 14145), (225, 14154), (251, 14286), (255, 14298), (265, 14352), (275, 14391), (282, 14424), (302, 14511), (308, 14532), (332, 14709), (342, 14760), (360, 14919), (400, 15120), (410, 15171), (412, 15180), (422, 15225), (426, 15246), (430, 15252), (451, 15366), (469, 15465), (470, 15477), (474, 15486), (494, 15558), (499, 15591), (503, 15609), (504, 15612), (512, 15639), (539, 15738), (545, 15756), (558, 15831), (600, 16020), (602, 16032), (627, 16107), (644, 16176), (657, 16308), (663, 16422), (686, 16689), (689, 16707), (706, 16818), (708, 16821), (722, 16920), (729, 16947), (730, 16950), (746, 17046), (753, 17109),

Gene: SamScheppers_20 Start: 12840, Stop: 17027, Start Num: 16

Candidate Starts for SamScheppers_20:

(9, 12804), (Start: 16 @12840 has 58 MA's), (34, 13038), (84, 13278), (86, 13287), (102, 13380), (130, 13527), (133, 13548), (141, 13587), (143, 13590), (157, 13665), (168, 13743), (182, 13830), (183, 13833), (190, 13863), (194, 13896), (198, 13920), (211, 14004), (217, 14034), (223, 14061), (245, 14169), (248, 14190), (251, 14202), (255, 14214), (265, 14268), (302, 14427), (308, 14448), (323, 14556), (342, 14676), (400, 15036), (410, 15087), (412, 15096), (422, 15141), (426, 15162), (469, 15381), (470, 15393), (474, 15402), (494, 15474), (503, 15525), (504, 15528), (512, 15555), (539, 15654), (545, 15672), (558, 15747), (600, 15936), (602, 15948), (627, 16023), (657, 16224), (665, 16344), (673, 16452), (686, 16599), (703, 16719), (706, 16728), (708, 16731), (722, 16830), (729, 16857), (746, 16953), (753, 17016),

Gene: SamuelLPlaqson_21 Start: 12024, Stop: 15863, Start Num: 15

Candidate Starts for SamuelLPlaqson_21:

(Start: 15 @12024 has 162 MA's), (Start: 23 @12093 has 1 MA's), (31, 12180), (59, 12360), (66, 12387), (84, 12471), (86, 12480), (96, 12540), (98, 12552), (109, 12627), (122, 12678), (130, 12720), (133, 12741), (141, 12780), (157, 12858), (168, 12936), (173, 12960), (196, 13101), (210, 13194), (214, 13215), (216, 13224), (265, 13461), (271, 13485), (275, 13500), (282, 13533), (302, 13620), (320, 13707), (323, 13728), (338, 13812), (341, 13824), (345, 13845), (400, 14001), (439, 14082), (453, 14148), (456, 14169), (463, 14205), (475, 14256), (479, 14274), (487, 14313), (503, 14391), (527, 14478), (531, 14493), (539, 14535), (555, 14589), (602, 14829), (627, 14904), (654, 15015),

(656, 15036), (657, 15057), (665, 15177), (678, 15351), (686, 15432), (687, 15441), (699, 15513), (708, 15543), (712, 15564), (730, 15684), (741, 15756), (745, 15774), (746, 15780),

Gene: Scarlett_20 Start: 11082, Stop: 15158, Start Num: 16

Candidate Starts for Scarlett_20:

(Start: 16 @11082 has 58 MA's), (26, 11175), (42, 11307), (73, 11445), (88, 11523), (89, 11535), (90, 11541), (97, 11574), (104, 11610), (112, 11667), (114, 11679), (127, 11733), (132, 11763), (151, 11850), (154, 11865), (160, 11901), (175, 11994), (188, 12075), (219, 12258), (221, 12267), (232, 12309), (237, 12351), (250, 12411), (254, 12423), (256, 12429), (259, 12444), (263, 12465), (270, 12498), (300, 12621), (302, 12633), (304, 12639), (308, 12654), (310, 12660), (339, 12744), (347, 12825), (373, 12978), (391, 13074), (393, 13086), (400, 13116), (410, 13167), (414, 13188), (421, 13218), (423, 13224), (428, 13248), (437, 13308), (445, 13359), (454, 13404), (456, 13416), (468, 13470), (475, 13503), (487, 13560), (503, 13638), (504, 13641), (527, 13725), (534, 13752), (539, 13782), (555, 13836), (558, 13875), (602, 14076), (617, 14118), (627, 14151), (665, 14439), (667, 14496), (686, 14697), (702, 14811), (730, 14988), (741, 15072), (746, 15093),

Gene: Schiebel_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Schiebel_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: SgtBeansprout_17 Start: 11327, Stop: 15460, Start Num: 15

Candidate Starts for SgtBeansprout_17:

(10, 11288), (Start: 15 @11327 has 162 MA's), (Start: 23 @11396 has 1 MA's), (31, 11483), (41, 11561), (61, 11669), (66, 11690), (73, 11723), (98, 11855), (100, 11870), (102, 11876), (109, 11930), (115, 11960), (130, 12023), (133, 12044), (141, 12083), (157, 12161), (168, 12239), (173, 12263), (210, 12497), (228, 12578), (238, 12638), (250, 12695), (260, 12731), (265, 12764), (271, 12788), (287, 12854), (290, 12863), (302, 12923), (323, 13031), (331, 13076), (354, 13232), (371, 13343), (373, 13352), (375, 13364), (384, 13415), (388, 13433), (393, 13460), (400, 13490), (419, 13583), (428, 13622), (456, 13790), (468, 13844), (475, 13877), (485, 13922), (503, 14003), (504, 14006), (527, 14090), (529, 14096), (531, 14105), (539, 14147), (552, 14183), (555, 14201), (558, 14240), (573, 14300), (602, 14441), (622, 14501), (627, 14516), (669, 14858), (686, 15047), (687, 15056), (697, 15119), (746, 15395),

Gene: ShaboiShabazz_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for ShaboiShabazz_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Shadow1_19 Start: 10962, Stop: 14963, Start Num: 16

Candidate Starts for Shadow1_19:

(Start: 16 @10962 has 58 MA's), (26, 11055), (37, 11160), (47, 11214), (50, 11232), (55, 11250), (61, 11280), (68, 11307), (69, 11313), (97, 11454), (100, 11472), (101, 11475), (124, 11589), (127, 11604), (151, 11721), (154, 11736), (165, 11817), (178, 11886), (188, 11946), (219, 12129), (220, 12135), (234, 12192), (250, 12282), (254, 12294), (256, 12300), (259, 12315), (263, 12336), (266, 12354), (285, 12429), (300, 12492), (302, 12504), (308, 12525), (316, 12564), (337, 12609), (341, 12624), (360, 12786), (378, 12876), (392, 12948), (400, 12987), (410, 13038), (414, 13059), (421, 13089), (423, 13095), (428, 13119), (435, 13170), (453, 13266), (456, 13287), (463, 13323), (475, 13374), (503, 13515), (527, 13602), (534, 13629), (555, 13713), (602, 13953), (627, 14028), (668, 14361), (678, 14463), (679, 14472), (686, 14544), (687, 14553), (699, 14628), (708, 14658), (712, 14679), (730, 14796), (738, 14847), (741, 14871), (748, 14910), (749, 14922),

Gene: Shaobing_21 Start: 11128, Stop: 15282, Start Num: 16

Candidate Starts for Shaobing_21:

(9, 11086), (Start: 16 @11128 has 58 MA's), (26, 11221), (47, 11380), (53, 11407), (74, 11497), (75, 11500), (90, 11587), (108, 11695), (124, 11764), (128, 11782), (145, 11866), (151, 11908), (154, 11923), (155, 11932), (160, 11959), (168, 12022), (177, 12064), (188, 12133), (198, 12196), (199, 12205), (219, 12319), (220, 12325), (230, 12361), (232, 12370), (234, 12382), (235, 12394), (237, 12412), (250, 12472), (254, 12484), (256, 12490), (259, 12505), (262, 12523), (263, 12526), (266, 12544), (270, 12559), (279, 12598), (295, 12655), (296, 12664), (301, 12688), (302, 12694), (308, 12715), (315, 12745), (319, 12778), (333, 12862), (338, 12892), (341, 12904), (353, 13006), (365, 13084), (373, 13129), (377, 13153), (387, 13207), (388, 13210), (391, 13225), (400, 13267), (404, 13294), (406, 13303), (410, 13318), (411, 13324), (412, 13327), (438, 13468), (444, 13504), (445, 13510), (450, 13528), (454, 13555), (456, 13567), (468, 13621), (475, 13654), (488, 13714), (503, 13795), (504, 13798), (527, 13882), (531, 13897), (558, 14032), (575, 14098), (602, 14233), (665, 14584), (686, 14839), (687, 14848), (694, 14914), (730, 15109), (734, 15130), (741, 15181), (745, 15199), (746, 15205), (750, 15244),

Gene: ShedlockHolmes_20 Start: 12197, Stop: 16345, Start Num: 15

Candidate Starts for ShedlockHolmes_20:

(Start: 15 @12197 has 162 MA's), (Start: 23 @12266 has 1 MA's), (Start: 24 @12287 has 1 MA's), (26, 12293), (31, 12353), (52, 12491), (61, 12536), (66, 12557), (76, 12602), (96, 12710), (98, 12722), (102, 12743), (109, 12797), (115, 12827), (122, 12848), (128, 12881), (130, 12890), (133, 12911), (141, 12950), (157, 13028), (163, 13070), (168, 13106), (173, 13130), (201, 13304), (210, 13364), (214, 13385), (216, 13394), (250, 13562), (257, 13583), (261, 13607), (265, 13631), (270, 13652), (275, 13670), (282, 13703), (293, 13745), (294, 13748), (295, 13751), (302, 13790), (305, 13799), (318, 13868), (334, 13979), (340, 14009), (368, 14207), (373, 14240), (390, 14330), (393, 14348), (400, 14378), (404, 14405), (445, 14621), (453, 14657), (463, 14714), (468, 14732), (475, 14765), (476, 14777), (488, 14825), (503, 14906), (504, 14909), (539, 15026), (558, 15119), (578, 15197), (599, 15296), (602, 15320), (627, 15395), (678, 15854), (680, 15866), (686, 15935), (687, 15944), (721, 16136), (723, 16154), (732, 16190), (734, 16199), (745, 16265), (746, 16271), (748, 16286), (749, 16298),

Gene: ShiaSurprise_21 Start: 12116, Stop: 15949, Start Num: 15

Candidate Starts for ShiaSurprise_21:

(Start: 15 @12116 has 162 MA's), (Start: 23 @12185 has 1 MA's), (31, 12272), (41, 12347), (59, 12449), (66, 12476), (83, 12548), (84, 12560), (86, 12569), (98, 12641), (109, 12716), (128, 12800), (130, 12809), (133, 12830), (141, 12869), (150, 12905), (157, 12947), (168, 13025), (183, 13115), (196, 13190), (210, 13283), (212, 13292), (214, 13304), (216, 13313), (265, 13550), (275, 13589), (282, 13622), (302, 13709), (309, 13733), (323, 13817), (338, 13901), (341, 13913), (345, 13934), (400, 14090), (439, 14171), (450, 14219), (453, 14237), (456, 14258), (463, 14294), (475, 14345), (487, 14402), (503, 14480), (506, 14489), (527, 14567), (531, 14582), (539, 14624), (555, 14678),

(602, 14918), (627, 14993), (654, 15104), (667, 15323), (669, 15335), (686, 15518), (687, 15527), (699, 15599), (708, 15629), (712, 15650), (730, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: SirPhilip_20 Start: 10854, Stop: 14759, Start Num: 16

Candidate Starts for SirPhilip_20:

(Start: 16 @10854 has 58 MA's), (26, 10947), (37, 11052), (46, 11103), (47, 11106), (69, 11205), (87, 11286), (88, 11295), (95, 11334), (97, 11346), (100, 11364), (101, 11367), (103, 11376), (109, 11424), (112, 11439), (117, 11457), (120, 11463), (123, 11475), (151, 11613), (154, 11628), (164, 11694), (165, 11709), (219, 12021), (231, 12066), (232, 12072), (234, 12084), (237, 12114), (250, 12174), (254, 12186), (256, 12192), (259, 12207), (263, 12228), (266, 12246), (267, 12249), (294, 12354), (302, 12396), (308, 12417), (316, 12456), (340, 12510), (341, 12516), (373, 12675), (380, 12708), (397, 12753), (399, 12756), (400, 12759), (404, 12786), (405, 12789), (406, 12795), (412, 12819), (419, 12852), (426, 12885), (438, 12960), (448, 13014), (450, 13020), (453, 13038), (456, 13059), (462, 13092), (488, 13206), (503, 13287), (504, 13290), (527, 13374), (555, 13485), (558, 13524), (573, 13584), (602, 13725), (627, 13800), (679, 14253), (686, 14325), (692, 14379), (702, 14430), (721, 14556), (730, 14598), (741, 14673), (746, 14694),

Gene: Sizemore_16 Start: 11465, Stop: 15478, Start Num: 15

Candidate Starts for Sizemore_16:

(Start: 15 @11465 has 162 MA's), (34, 11666), (57, 11780), (66, 11822), (72, 11852), (98, 11987), (99, 11999), (102, 12008), (138, 12197), (141, 12215), (143, 12218), (148, 12239), (150, 12251), (161, 12323), (168, 12371), (192, 12503), (195, 12527), (206, 12608), (233, 12731), (247, 12815), (258, 12851), (265, 12896), (266, 12902), (293, 13010), (298, 13034), (302, 13055), (344, 13274), (362, 13424), (378, 13511), (399, 13619), (428, 13754), (445, 13865), (450, 13883), (455, 13913), (501, 14135), (509, 14159), (513, 14174), (518, 14195), (527, 14222), (534, 14249), (549, 14309), (566, 14399), (572, 14432), (588, 14495), (596, 14552), (602, 14585), (605, 14594), (680, 15098), (681, 15125), (684, 15155), (686, 15167), (687, 15176), (699, 15245), (719, 15326), (727, 15386), (731, 15404), (733, 15413),

Gene: Slarp_22 Start: 13324, Stop: 17499, Start Num: 16

Candidate Starts for Slarp_22:

(9, 13288), (Start: 16 @13324 has 58 MA's), (27, 13423), (34, 13522), (84, 13762), (86, 13771), (102, 13864), (130, 14011), (133, 14032), (141, 14071), (143, 14074), (157, 14149), (168, 14227), (182, 14314), (183, 14317), (190, 14347), (194, 14380), (198, 14404), (211, 14488), (217, 14518), (223, 14545), (245, 14653), (248, 14674), (251, 14686), (255, 14698), (265, 14752), (302, 14911), (308, 14932), (323, 15040), (342, 15160), (400, 15520), (410, 15571), (412, 15580), (422, 15625), (426, 15646), (469, 15865), (470, 15877), (474, 15886), (494, 15958), (503, 16009), (504, 16012), (512, 16039), (539, 16138), (545, 16156), (558, 16231), (600, 16420), (602, 16432), (627, 16507), (657, 16693), (665, 16813), (673, 16921), (686, 17071), (703, 17191), (706, 17200), (708, 17203), (722, 17302), (729, 17329), (746, 17425), (753, 17488),

Gene: Slimphazie_21 Start: 12080, Stop: 15916, Start Num: 15

Candidate Starts for Slimphazie_21:

(Start: 15 @12080 has 162 MA's), (Start: 23 @12149 has 1 MA's), (31, 12236), (59, 12413), (66, 12440), (83, 12512), (84, 12524), (86, 12533), (98, 12605), (109, 12680), (128, 12764), (130, 12773), (133, 12794), (141, 12833), (157, 12911), (168, 12989), (183, 13079), (196, 13154), (210, 13247), (212, 13256), (214, 13268), (216, 13277), (271, 13538), (275, 13553), (282, 13586), (302, 13673), (309, 13697), (323, 13781), (338, 13865), (341, 13877), (345, 13898), (400, 14054), (439, 14135), (450, 14183), (453, 14201), (456, 14222), (463, 14258), (475, 14309), (487, 14366), (503, 14444), (506, 14453), (527, 14531), (539, 14588), (555, 14642), (602, 14882), (627, 14957), (654, 15068), (667, 15287), (669, 15299), (686, 15485), (687, 15494), (699, 15566), (708, 15596), (712, 15617), (730, 15737), (741, 15809), (745, 15827), (746, 15833),

Gene: Sneeze_16 Start: 11453, Stop: 15478, Start Num: 15

Candidate Starts for Sneeze_16:

(Start: 15 @11453 has 162 MA's), (19, 11477), (34, 11654), (57, 11768), (66, 11810), (69, 11831), (72, 11840), (98, 11975), (102, 11996), (130, 12143), (138, 12185), (141, 12203), (143, 12206), (148, 12227), (150, 12239), (168, 12359), (179, 12425), (192, 12491), (195, 12515), (206, 12596), (233, 12719), (235, 12740), (255, 12830), (258, 12839), (266, 12890), (275, 12923), (278, 12941), (293, 12998), (302, 13043), (320, 13130), (323, 13151), (341, 13247), (344, 13262), (354, 13352), (360, 13409), (362, 13412), (392, 13571), (393, 13580), (399, 13607), (428, 13742), (450, 13871), (455, 13901), (501, 14123), (509, 14147), (513, 14162), (518, 14183), (534, 14237), (549, 14297), (566, 14387), (572, 14420), (574, 14435), (588, 14483), (596, 14540), (602, 14573), (671, 15005), (680, 15095), (681, 15122), (686, 15164), (687, 15173), (699, 15242), (706, 15269), (719, 15326), (727, 15386), (731, 15404), (733, 15413),

Gene: SoSeph_19 Start: 12264, Stop: 16394, Start Num: 14

Candidate Starts for SoSeph_19:

(Start: 14 @12264 has 31 MA's), (Start: 24 @12357 has 1 MA's), (32, 12435), (33, 12459), (43, 12519), (61, 12603), (64, 12615), (86, 12717), (96, 12777), (98, 12789), (102, 12810), (109, 12864), (121, 12912), (130, 12957), (133, 12978), (157, 13095), (168, 13173), (173, 13197), (183, 13263), (196, 13338), (210, 13431), (216, 13461), (252, 13635), (255, 13644), (261, 13674), (265, 13698), (270, 13719), (284, 13779), (302, 13857), (305, 13866), (320, 13944), (331, 14010), (339, 14052), (341, 14061), (348, 14145), (354, 14166), (356, 14199), (383, 14340), (384, 14349), (388, 14367), (393, 14394), (409, 14472), (428, 14556), (448, 14679), (460, 14745), (503, 14940), (512, 14970), (519, 14997), (522, 15003), (528, 15030), (537, 15075), (541, 15090), (542, 15096), (558, 15180), (572, 15228), (582, 15267), (594, 15327), (601, 15360), (606, 15381), (614, 15405), (622, 15438), (645, 15522), (656, 15594), (678, 15903), (682, 15957), (684, 15972), (686, 15984), (691, 16014), (724, 16200), (730, 16224), (732, 16236), (747, 16323), (749, 16347),

Gene: Spock_21 Start: 12116, Stop: 15949, Start Num: 15

Candidate Starts for Spock_21:

(Start: 15 @12116 has 162 MA's), (Start: 23 @12185 has 1 MA's), (31, 12272), (41, 12347), (59, 12449), (66, 12476), (83, 12548), (84, 12560), (86, 12569), (98, 12641), (109, 12716), (128, 12800), (130, 12809), (133, 12830), (141, 12869), (150, 12905), (157, 12947), (168, 13025), (183, 13115), (196, 13190), (210, 13283), (212, 13292), (214, 13304), (216, 13313), (265, 13550), (275, 13589), (282, 13622), (302, 13709), (309, 13733), (323, 13817), (338, 13901), (341, 13913), (345, 13934), (400, 14090), (439, 14171), (450, 14219), (453, 14237), (456, 14258), (463, 14294), (475, 14345), (487, 14402), (503, 14480), (506, 14489), (527, 14567), (531, 14582), (539, 14624), (555, 14678), (602, 14918), (627, 14993), (654, 15104), (667, 15323), (669, 15335), (686, 15518), (687, 15527), (699, 15599), (708, 15629), (712, 15650), (730, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: Stargaze_16 Start: 11766, Stop: 15800, Start Num: 16

Candidate Starts for Stargaze_16:

(Start: 16 @11766 has 58 MA's), (26, 11862), (35, 11967), (50, 12042), (55, 12060), (57, 12072), (61, 12090), (68, 12117), (69, 12123), (90, 12231), (92, 12237), (95, 12252), (97, 12264), (100, 12282), (107, 12327), (115, 12363), (119, 12378), (123, 12393), (124, 12399), (145, 12501), (151, 12543), (154, 12558), (160, 12594), (168, 12657), (172, 12678), (175, 12687), (185, 12750), (188, 12768), (211, 12909), (219, 12951), (227, 12981), (228, 12984), (230, 12993), (232, 13002), (237, 13044), (253, 13113), (254, 13116), (256, 13122), (259, 13137), (263, 13158), (264, 13167), (289, 13263), (298, 13305), (302, 13326), (309, 13350), (312, 13362), (313, 13365), (321, 13422), (327, 13455), (333, 13494), (341, 13536), (342, 13539), (354, 13641), (363, 13701), (365, 13716), (371, 13752), (383, 13815), (386, 13836), (399, 13896), (423, 14007), (428, 14031), (435, 14082), (436, 14088), (460, 14220), (490, 14352), (508, 14436), (510, 14451), (529, 14517), (544, 14586), (559, 14667), (561, 14676), (584, 14769), (593, 14826), (600, 14859), (619, 14919), (624, 14934), (665, 15213), (680, 15402), (681, 15429), (686, 15471), (725, 15708), (728, 15726), (732, 15741), (735, 15753),

Gene: Stinson_21 Start: 12048, Stop: 15881, Start Num: 15

Candidate Starts for Stinson_21:

(Start: 15 @12048 has 162 MA's), (Start: 23 @12117 has 1 MA's), (31, 12204), (59, 12384), (66, 12411), (84, 12495), (86, 12504), (96, 12564), (98, 12576), (109, 12651), (118, 12693), (128, 12735), (130, 12744), (133, 12765), (141, 12804), (157, 12882), (168, 12960), (196, 13125), (210, 13218), (214, 13239), (216, 13248), (265, 13485), (271, 13509), (275, 13524), (282, 13557), (302, 13644), (323, 13752), (338, 13836), (341, 13848), (345, 13869), (353, 13950), (400, 14025), (439, 14106), (441, 14115), (450, 14154), (453, 14172), (456, 14193), (463, 14229), (475, 14280), (487, 14337), (503, 14415), (506, 14424), (527, 14502), (531, 14517), (539, 14559), (555, 14613), (602, 14853), (627, 14928), (654, 15039), (667, 15258), (678, 15372), (686, 15453), (687, 15462), (699, 15534), (708, 15564), (712, 15585), (730, 15702), (741, 15774), (746, 15798),

Gene: Strobilo_17 Start: 10116, Stop: 13787, Start Num: 14

Candidate Starts for Strobilo_17:

(Start: 14 @10116 has 31 MA's), (Start: 23 @10188 has 1 MA's), (65, 10422), (83, 10473), (98, 10566), (102, 10587), (109, 10641), (130, 10734), (133, 10755), (138, 10776), (139, 10782), (157, 10872), (163, 10914), (168, 10950), (176, 10983), (177, 10995), (180, 11019), (183, 11040), (189, 11064), (190, 11070), (195, 11106), (196, 11115), (201, 11148), (202, 11160), (206, 11187), (247, 11370), (250, 11382), (252, 11388), (258, 11406), (261, 11427), (265, 11451), (280, 11475), (303, 11484), (307, 11499), (311, 11511), (322, 11544), (331, 11592), (350, 11733), (351, 11739), (355, 11775), (361, 11802), (366, 11820), (373, 11850), (393, 11946), (401, 11979), (412, 12015), (427, 12066), (433, 12099), (437, 12120), (442, 12144), (447, 12174), (452, 12195), (511, 12417), (536, 12510), (556, 12588), (590, 12711), (615, 12816), (635, 12864), (678, 13284), (679, 13293), (681, 13323), (710, 13488), (730, 13617), (746, 13710),

Gene: Sulley_21 Start: 12049, Stop: 15882, Start Num: 15

Candidate Starts for Sulley_21:

(Start: 15 @12049 has 162 MA's), (Start: 23 @12118 has 1 MA's), (31, 12205), (59, 12382), (66, 12409), (84, 12493), (86, 12502), (98, 12574), (109, 12649), (128, 12733), (130, 12742), (133, 12763), (141, 12802), (157, 12880), (168, 12958), (183, 13048), (196, 13123), (210, 13216), (214, 13237), (216, 13246), (265, 13483), (275, 13522), (282, 13555), (302, 13642), (309, 13666), (323, 13750), (338, 13834), (341, 13846), (345, 13867), (400, 14023), (439, 14104), (450, 14152), (453, 14170), (456, 14191), (463, 14227), (475, 14278), (487, 14335), (503, 14413), (506, 14422), (527, 14500), (531, 14515), (539, 14557), (555, 14611), (602, 14851), (627, 14926), (654, 15037), (667, 15256), (669, 15268), (686, 15451), (687, 15460), (708, 15562), (712, 15583), (730, 15703), (741, 15775), (745, 15793), (746, 15799),

Gene: Sunflower1121_19 Start: 10973, Stop: 14974, Start Num: 16

Candidate Starts for Sunflower1121_19:

(7, 10925), (Start: 16 @10973 has 58 MA's), (26, 11066), (37, 11171), (47, 11225), (50, 11243), (55, 11261), (61, 11291), (68, 11318), (69, 11324), (82, 11369), (97, 11465), (100, 11483), (101, 11486), (124, 11600), (127, 11615), (151, 11732), (154, 11747), (165, 11828), (177, 11888), (178, 11897), (188, 11957), (219, 12140), (220, 12146), (234, 12203), (250, 12293), (254, 12305), (256, 12311), (259, 12326), (263, 12347), (266, 12365), (285, 12440), (300, 12503), (302, 12515), (308, 12536), (316, 12575), (337, 12620), (341, 12635), (360, 12797), (373, 12860), (378, 12887), (392, 12959), (400, 12998), (410, 13049), (414, 13070), (421, 13100), (423, 13106), (428, 13130), (435, 13181), (456, 13298), (463, 13334), (475, 13385), (503, 13526), (527, 13613), (534, 13640), (555, 13724), (602, 13964), (627, 14039), (668, 14372), (678, 14474), (679, 14483), (686, 14555), (687, 14564), (699, 14639), (708, 14669), (712, 14690), (730, 14807), (738, 14858), (741, 14882), (748, 14921), (749, 14933),

Gene: Sweets_16 Start: 11459, Stop: 15472, Start Num: 15

Candidate Starts for Sweets_16:

(Start: 15 @11459 has 162 MA's), (34, 11660), (57, 11774), (66, 11816), (72, 11846), (98, 11981), (99, 11993), (102, 12002), (138, 12191), (141, 12209), (143, 12212), (148, 12233), (150, 12245), (161, 12317), (168, 12365), (192, 12497), (195, 12521), (206, 12602), (233, 12725), (247, 12809), (258, 12845), (265, 12890), (266, 12896), (293, 13004), (298, 13028), (302, 13049), (344, 13268), (362, 13418), (378, 13505), (399, 13613), (428, 13748), (445, 13859), (450, 13877), (455, 13907), (501, 14129), (509, 14153), (513, 14168), (518, 14189), (527, 14216), (534, 14243), (549, 14303), (566, 14393), (572, 14426), (588, 14489), (596, 14546), (602, 14579), (605, 14588), (680, 15092), (681, 15119), (684, 15149), (686, 15161), (687, 15170), (699, 15239), (719, 15320), (727, 15380), (731, 15398), (733, 15407),

Gene: Syra333_20 Start: 11068, Stop: 15069, Start Num: 16

Candidate Starts for Syra333_20:

(Start: 16 @11068 has 58 MA's), (26, 11161), (37, 11266), (47, 11320), (50, 11338), (55, 11356), (61, 11386), (68, 11413), (69, 11419), (82, 11464), (97, 11560), (100, 11578), (101, 11581), (124, 11695), (127, 11710), (151, 11827), (154, 11842), (165, 11923), (177, 11983), (178, 11992), (188, 12052), (219, 12235), (220, 12241), (234, 12298), (250, 12388), (254, 12400), (256, 12406), (259, 12421), (263, 12442), (266, 12460), (285, 12535), (294, 12568), (300, 12598), (302, 12610), (308, 12631), (316, 12670), (337, 12715), (341, 12730), (360, 12892), (373, 12955), (378, 12982), (392, 13054), (400, 13093), (410, 13144), (414, 13165), (421, 13195), (423, 13201), (428, 13225), (435, 13276), (453, 13372), (456, 13393), (463, 13429), (475, 13480), (503, 13621), (504, 13624), (527, 13708), (534, 13735), (555, 13819), (557, 13831), (602, 14059), (627, 14134), (686, 14650), (687, 14659), (699, 14734), (708, 14764), (712, 14785), (730, 14902), (741, 14977), (748, 15016), (749, 15028),

Gene: TBond007_20 Start: 11948, Stop: 16126, Start Num: 15

Candidate Starts for TBond007_20:

(Start: 15 @11948 has 162 MA's), (Start: 23 @12017 has 1 MA's), (Start: 24 @12038 has 1 MA's), (26, 12044), (31, 12104), (52, 12242), (61, 12287), (66, 12308), (96, 12461), (98, 12473), (102, 12494), (109, 12548), (115, 12578), (122, 12599), (128, 12632), (130, 12641), (133, 12662), (141, 12701), (157, 12779), (163, 12821), (168, 12857), (173, 12881), (201, 13055), (206, 13094), (210, 13115), (214, 13136), (216, 13145), (250, 13313), (257, 13334), (261, 13358), (265, 13382), (270, 13403), (275, 13421), (282, 13454), (293, 13496), (294, 13499), (295, 13502), (302, 13541), (305, 13550), (318, 13619), (334, 13730), (340, 13760), (368, 13958), (373, 13991), (390, 14081), (393, 14099), (400, 14129), (404, 14156), (445, 14372), (453, 14408), (463, 14465), (468, 14483), (472, 14504), (475, 14516), (488, 14576), (503, 14657), (515, 14696), (525, 14729), (527, 14744), (529, 14750), (531, 14759), (539, 14801), (558, 14894), (578, 14972), (602, 15095), (627, 15170), (678, 15635), (680, 15647), (686, 15716), (687, 15725), (721, 15917), (732, 15971), (734, 15980), (745, 16046), (746, 16052), (748, 16067), (749, 16079),

Gene: TClif_20 Start: 11063, Stop: 15118, Start Num: 16

Candidate Starts for TClif_20:

(7, 11015), (Start: 16 @11063 has 58 MA's), (18, 11081), (26, 11156), (47, 11315), (68, 11408), (70, 11417), (75, 11435), (79, 11450), (88, 11504), (95, 11543), (97, 11555), (101, 11576), (107, 11618), (112, 11648), (120, 11672), (144, 11783), (151, 11822), (154, 11837), (155, 11846), (160, 11873), (168, 11936), (188, 12047), (196, 12098), (219, 12230), (231, 12275), (232, 12281), (237, 12323), (250, 12383), (254, 12395), (256, 12401), (259, 12416), (263, 12437), (266, 12455), (270, 12470), (278, 12506), (294, 12563), (300, 12593), (302, 12605), (307, 12623), (334, 12689), (340, 12719), (341, 12725), (352, 12824), (354, 12830), (373, 12950), (382, 12998), (384, 13013), (391, 13046), (393, 13058), (400, 13088), (406, 13124), (410, 13139), (411, 13145), (417, 13172), (423, 13196), (428, 13220), (432, 13250), (435, 13271), (450, 13349), (456, 13388), (463, 13424), (475, 13475), (489, 13538), (503, 13616), (504, 13619), (511, 13643), (527, 13703), (558, 13853), (602, 14054), (627, 14129), (643, 14198), (686, 14678), (687, 14687), (691, 14708), (699, 14783), (702, 14795), (708, 14813), (712, 14834), (730, 14951), (741, 15026), (745, 15044), (746, 15050), (748, 15065),

(749, 15077), (750, 15089), (751, 15092), (752, 15113),

Gene: TM4_17 Start: 10184, Stop: 13873, Start Num: 14

Candidate Starts for TM4_17:

(Start: 14 @10184 has 31 MA's), (Start: 23 @10256 has 1 MA's), (65, 10490), (83, 10541), (98, 10634), (102, 10655), (109, 10709), (130, 10802), (133, 10823), (138, 10844), (139, 10850), (157, 10940), (163, 10982), (168, 11018), (173, 11042), (176, 11051), (177, 11063), (180, 11087), (183, 11108), (189, 11132), (190, 11138), (195, 11174), (196, 11183), (197, 11192), (201, 11216), (202, 11228), (206, 11255), (247, 11438), (250, 11450), (252, 11456), (261, 11495), (265, 11519), (307, 11567), (311, 11579), (322, 11612), (324, 11618), (351, 11807), (353, 11813), (355, 11843), (361, 11870), (366, 11888), (367, 11894), (373, 11918), (388, 11987), (393, 12014), (401, 12047), (411, 12080), (412, 12083), (427, 12134), (433, 12167), (437, 12188), (442, 12212), (447, 12242), (452, 12263), (529, 12545), (554, 12638), (563, 12686), (564, 12689), (569, 12701), (589, 12782), (595, 12815), (597, 12824), (599, 12830), (605, 12863), (616, 12890), (621, 12908), (629, 12926), (632, 12932), (663, 13178), (678, 13358), (679, 13367), (687, 13448), (730, 13703), (746, 13796),

Gene: Tachez_21 Start: 12042, Stop: 15878, Start Num: 15

Candidate Starts for Tachez_21:

(Start: 15 @12042 has 162 MA's), (Start: 23 @12111 has 1 MA's), (31, 12198), (59, 12375), (66, 12402), (83, 12474), (84, 12486), (86, 12495), (98, 12567), (109, 12642), (128, 12726), (130, 12735), (133, 12756), (141, 12795), (157, 12873), (168, 12951), (183, 13041), (196, 13116), (210, 13209), (212, 13218), (214, 13230), (216, 13239), (271, 13500), (275, 13515), (282, 13548), (302, 13635), (309, 13659), (323, 13743), (338, 13827), (341, 13839), (345, 13860), (400, 14016), (439, 14097), (450, 14145), (453, 14163), (456, 14184), (463, 14220), (475, 14271), (487, 14328), (503, 14406), (506, 14415), (527, 14493), (539, 14550), (555, 14604), (602, 14844), (627, 14919), (654, 15030), (667, 15249), (669, 15261), (686, 15447), (687, 15456), (699, 15528), (708, 15558), (712, 15579), (730, 15699), (741, 15771), (745, 15789), (746, 15795),

Gene: Taheera_16 Start: 11466, Stop: 15491, Start Num: 15

Candidate Starts for Taheera_16:

(Start: 15 @11466 has 162 MA's), (19, 11490), (34, 11667), (57, 11781), (66, 11823), (69, 11844), (72, 11853), (98, 11988), (102, 12009), (130, 12156), (138, 12198), (141, 12216), (143, 12219), (147, 12234), (148, 12240), (150, 12252), (168, 12372), (179, 12438), (192, 12504), (195, 12528), (206, 12609), (233, 12732), (235, 12753), (247, 12816), (255, 12843), (258, 12852), (266, 12903), (278, 12954), (293, 13011), (302, 13056), (320, 13143), (341, 13260), (344, 13275), (354, 13365), (360, 13422), (362, 13425), (390, 13575), (393, 13593), (450, 13884), (455, 13914), (501, 14136), (509, 14160), (513, 14175), (518, 14196), (534, 14250), (549, 14310), (566, 14400), (572, 14433), (574, 14448), (588, 14496), (596, 14553), (602, 14586), (671, 15018), (680, 15108), (681, 15135), (686, 15177), (687, 15186), (699, 15255), (706, 15282), (719, 15339), (727, 15399), (731, 15417), (733, 15426),

Gene: TaiwanKao_22 Start: 12053, Stop: 15889, Start Num: 15

Candidate Starts for TaiwanKao_22:

(Start: 15 @12053 has 162 MA's), (Start: 23 @12122 has 1 MA's), (31, 12209), (59, 12389), (66, 12416), (84, 12500), (86, 12509), (96, 12569), (98, 12581), (109, 12656), (118, 12698), (128, 12740), (130, 12749), (133, 12770), (141, 12809), (157, 12887), (168, 12965), (196, 13130), (210, 13223), (212, 13232), (214, 13244), (216, 13253), (265, 13490), (271, 13514), (275, 13529), (282, 13562), (302, 13649), (309, 13673), (323, 13757), (338, 13841), (341, 13853), (353, 13955), (400, 14030), (439, 14111), (450, 14159), (453, 14177), (455, 14189), (456, 14198), (463, 14234), (475, 14285), (487, 14342), (503, 14420), (506, 14429), (527, 14507), (531, 14522), (539, 14564), (555, 14618), (602, 14858), (627, 14933), (654, 15044), (667, 15263), (669, 15275), (678, 15377), (686, 15458), (687, 15467), (699, 15539), (708, 15569), (712, 15590), (730, 15710), (741, 15782), (745, 15800), (746, 15806),

Gene: Taquito_20 Start: 12915, Stop: 17108, Start Num: 16

Candidate Starts for Taquito_20:

(Start: 16 @12915 has 58 MA's), (34, 13113), (84, 13353), (86, 13362), (98, 13434), (102, 13455), (128, 13593), (130, 13602), (133, 13623), (141, 13662), (155, 13731), (157, 13740), (168, 13818), (170, 13830), (183, 13908), (190, 13938), (194, 13971), (195, 13974), (198, 13995), (223, 14136), (225, 14145), (251, 14277), (255, 14289), (265, 14343), (275, 14382), (282, 14415), (302, 14502), (308, 14523), (332, 14700), (342, 14751), (360, 14910), (400, 15111), (410, 15162), (412, 15171), (422, 15216), (426, 15237), (469, 15456), (470, 15468), (474, 15477), (483, 15522), (494, 15549), (499, 15582), (503, 15600), (504, 15603), (512, 15630), (539, 15729), (545, 15747), (558, 15822), (577, 15894), (600, 16011), (602, 16023), (627, 16098), (644, 16167), (657, 16296), (663, 16410), (686, 16677), (689, 16695), (706, 16806), (708, 16809), (722, 16908), (729, 16935), (730, 16938), (746, 17034), (753, 17097),

Gene: Teejan_17 Start: 11327, Stop: 15460, Start Num: 15

Candidate Starts for Teejan_17:

(10, 11288), (Start: 15 @11327 has 162 MA's), (Start: 23 @11396 has 1 MA's), (31, 11483), (41, 11561), (61, 11669), (66, 11690), (73, 11723), (98, 11855), (100, 11870), (102, 11876), (109, 11930), (115, 11960), (130, 12023), (133, 12044), (141, 12083), (157, 12161), (168, 12239), (173, 12263), (210, 12497), (228, 12578), (238, 12638), (250, 12695), (260, 12731), (265, 12764), (271, 12788), (287, 12854), (290, 12863), (302, 12923), (323, 13031), (331, 13076), (354, 13232), (371, 13343), (373, 13352), (375, 13364), (384, 13415), (388, 13433), (393, 13460), (400, 13490), (419, 13583), (428, 13622), (456, 13790), (468, 13844), (475, 13877), (485, 13922), (503, 14003), (504, 14006), (527, 14090), (529, 14096), (531, 14105), (539, 14147), (552, 14183), (555, 14201), (558, 14240), (573, 14300), (602, 14441), (622, 14501), (627, 14516), (669, 14858), (686, 15047), (687, 15056), (697, 15119), (746, 15395),

Gene: Terror_16 Start: 11466, Stop: 15491, Start Num: 15

Candidate Starts for Terror_16:

(Start: 15 @11466 has 162 MA's), (19, 11490), (34, 11667), (57, 11781), (66, 11823), (69, 11844), (72, 11853), (98, 11988), (102, 12009), (130, 12156), (138, 12198), (141, 12216), (143, 12219), (147, 12234), (148, 12240), (150, 12252), (168, 12372), (179, 12438), (192, 12504), (195, 12528), (206, 12609), (233, 12732), (235, 12753), (247, 12816), (255, 12843), (258, 12852), (266, 12903), (278, 12954), (293, 13011), (302, 13056), (320, 13143), (341, 13260), (344, 13275), (354, 13365), (360, 13422), (362, 13425), (390, 13575), (393, 13593), (450, 13884), (455, 13914), (501, 14136), (509, 14160), (513, 14175), (518, 14196), (534, 14250), (549, 14310), (566, 14400), (572, 14433), (574, 14448), (588, 14496), (596, 14553), (602, 14586), (671, 15018), (680, 15108), (681, 15135), (686, 15177), (687, 15186), (699, 15255), (706, 15282), (719, 15339), (727, 15399), (731, 15417), (733, 15426),

Gene: Thyatira_19 Start: 12136, Stop: 16245, Start Num: 14

Candidate Starts for Thyatira_19:

(Start: 14 @12136 has 31 MA's), (43, 12394), (61, 12478), (76, 12544), (86, 12592), (96, 12652), (98, 12664), (102, 12685), (109, 12739), (115, 12769), (130, 12832), (133, 12853), (147, 12910), (157, 12970), (168, 13048), (173, 13072), (179, 13114), (186, 13147), (210, 13306), (214, 13327), (235, 13405), (247, 13468), (251, 13483), (252, 13486), (255, 13495), (257, 13501), (259, 13513), (269, 13567), (295, 13669), (302, 13708), (331, 13861), (339, 13903), (344, 13927), (354, 14017), (356, 14050), (383, 14191), (384, 14200), (388, 14218), (393, 14245), (409, 14323), (428, 14407), (448, 14530), (460, 14596), (481, 14698), (503, 14791), (506, 14800), (512, 14821), (522, 14854), (534, 14905), (537, 14926), (541, 14941), (542, 14947), (558, 15031), (570, 15061), (572, 15079), (582, 15118), (594, 15178), (601, 15211), (606, 15232), (614, 15256), (622, 15289), (645, 15373), (656, 15445), (678, 15754), (682, 15808), (684, 15823), (686, 15835), (691, 15865), (724, 16051), (730, 16075), (732, 16087), (747, 16174), (749, 16198),

Gene: Tierra_20 Start: 11792, Stop: 15793, Start Num: 16

Candidate Starts for Tierra_20:

(Start: 16 @11792 has 58 MA's), (26, 11885), (37, 11990), (42, 12017), (47, 12044), (50, 12062), (55, 12080), (59, 12104), (61, 12110), (68, 12137), (69, 12143), (79, 12179), (82, 12188), (85, 12212), (97, 12284), (100, 12302), (101, 12305), (127, 12434), (151, 12551), (165, 12647), (172, 12686), (178, 12716), (188, 12776), (219, 12959), (220, 12965), (221, 12968), (234, 13022), (237, 13052), (250, 13112), (254, 13124), (256, 13130), (259, 13145), (263, 13166), (266, 13184), (300, 13322), (302, 13334), (308, 13355), (316, 13394), (340, 13448), (341, 13454), (360, 13616), (373, 13679), (388, 13760), (391, 13775), (400, 13817), (410, 13868), (414, 13889), (421, 13919), (423, 13925), (428, 13949), (435, 14000), (445, 14060), (456, 14117), (463, 14153), (468, 14171), (475, 14204), (503, 14345), (504, 14348), (527, 14432), (534, 14459), (555, 14543), (602, 14783), (627, 14858), (668, 15191), (678, 15293), (679, 15302), (686, 15374), (699, 15458), (708, 15488), (712, 15509), (730, 15626), (741, 15701), (748, 15740), (749, 15752),

Gene: TinaBug_16 Start: 11459, Stop: 15472, Start Num: 15

Candidate Starts for TinaBug_16:

(Start: 15 @11459 has 162 MA's), (34, 11660), (57, 11774), (66, 11816), (72, 11846), (98, 11981), (99, 11993), (102, 12002), (138, 12191), (141, 12209), (143, 12212), (148, 12233), (150, 12245), (161, 12317), (168, 12365), (192, 12497), (195, 12521), (206, 12602), (233, 12725), (247, 12809), (258, 12845), (265, 12890), (266, 12896), (293, 13004), (298, 13028), (302, 13049), (344, 13268), (362, 13418), (378, 13505), (399, 13613), (428, 13748), (445, 13859), (450, 13877), (455, 13907), (501, 14129), (509, 14153), (513, 14168), (518, 14189), (527, 14216), (534, 14243), (549, 14303), (566, 14393), (572, 14426), (588, 14489), (596, 14546), (602, 14579), (605, 14588), (680, 15092), (681, 15119), (684, 15149), (686, 15161), (687, 15170), (699, 15239), (719, 15320), (727, 15380), (731, 15398), (733, 15407),

Gene: TingHuaYa_21 Start: 11093, Stop: 15220, Start Num: 16

Candidate Starts for TingHuaYa_21:

(9, 11045), (Start: 16 @11093 has 58 MA's), (26, 11186), (42, 11318), (46, 11342), (53, 11372), (57, 11393), (59, 11405), (68, 11438), (75, 11465), (90, 11552), (97, 11585), (100, 11603), (101, 11606), (107, 11648), (117, 11696), (145, 11822), (151, 11864), (154, 11879), (160, 11915), (169, 11987), (188, 12089), (219, 12272), (230, 12314), (231, 12317), (232, 12323), (234, 12335), (237, 12365), (250, 12425), (256, 12443), (259, 12458), (262, 12476), (263, 12479), (270, 12512), (292, 12593), (295, 12608), (302, 12647), (308, 12668), (338, 12845), (341, 12857), (343, 12866), (346, 12917), (353, 12959), (373, 13082), (377, 13106), (388, 13163), (391, 13178), (392, 13181), (404, 13247), (406, 13256), (412, 13280), (423, 13328), (435, 13403), (438, 13421), (450, 13481), (454, 13508), (456, 13520), (463, 13556), (468, 13574), (477, 13619), (480, 13649), (488, 13667), (503, 13748), (504, 13751), (527, 13835), (531, 13850), (538, 13889), (539, 13892), (558, 13985), (575, 14051), (602, 14186), (665, 14537), (678, 14708), (686, 14789), (699, 14873), (730, 15041), (741, 15113), (745, 15131), (746, 15137),

Gene: TiniBug_21 Start: 12024, Stop: 15860, Start Num: 15

Candidate Starts for TiniBug_21:

(Start: 15 @12024 has 162 MA's), (Start: 23 @12093 has 1 MA's), (31, 12180), (59, 12360), (66, 12387), (84, 12471), (86, 12480), (96, 12540), (98, 12552), (109, 12627), (118, 12669), (128, 12711), (130, 12720), (133, 12741), (141, 12780), (157, 12858), (168, 12936), (196, 13101), (210, 13194), (214, 13215), (216, 13224), (265, 13461), (271, 13485), (275, 13500), (282, 13533), (302, 13620), (320, 13707), (323, 13728), (338, 13812), (341, 13824), (345, 13845), (400, 14001), (439, 14082), (453, 14148), (456, 14169), (463, 14205), (475, 14256), (479, 14274), (487, 14313), (503, 14391), (527, 14478), (531, 14493), (539, 14535), (555, 14589), (602, 14829), (627, 14904), (654, 15015), (656, 15036), (657, 15057), (665, 15177), (678, 15348), (686, 15429), (687, 15438), (699, 15510), (708, 15540), (712, 15561), (730, 15681), (741, 15753), (745, 15771), (746, 15777),

Gene: Tiri_21 Start: 12088, Stop: 15921, Start Num: 15

Candidate Starts for Tiri_21:

(3, 11869), (10, 12049), (Start: 15 @12088 has 162 MA's), (Start: 23 @12157 has 1 MA's), (31, 12244), (59, 12421), (66, 12448), (84, 12532), (86, 12541), (98, 12613), (109, 12688), (128, 12772), (130, 12781), (133, 12802), (141, 12841), (157, 12919), (168, 12997), (183, 13087), (196, 13162), (210, 13255), (212, 13264), (214, 13276), (216, 13285), (255, 13468), (265, 13522), (275, 13561), (282, 13594), (302, 13681), (309, 13705), (323, 13789), (338, 13873), (341, 13885), (345, 13906), (400, 14062), (439, 14143), (450, 14191), (453, 14209), (456, 14230), (463, 14266), (475, 14317), (487, 14374), (503, 14452), (506, 14461), (527, 14539), (539, 14596), (555, 14650), (602, 14890), (627, 14965), (654, 15076), (667, 15295), (669, 15307), (678, 15409), (686, 15490), (687, 15499), (708, 15601), (712, 15622), (730, 15742), (741, 15814), (745, 15832), (746, 15838),

Gene: TomBrady_16 Start: 11465, Stop: 15478, Start Num: 15

Candidate Starts for TomBrady_16:

(Start: 15 @11465 has 162 MA's), (34, 11666), (57, 11780), (66, 11822), (72, 11852), (98, 11987), (99, 11999), (102, 12008), (138, 12197), (141, 12215), (143, 12218), (148, 12239), (150, 12251), (161, 12323), (168, 12371), (192, 12503), (195, 12527), (206, 12608), (233, 12731), (247, 12815), (258, 12851), (265, 12896), (266, 12902), (293, 13010), (298, 13034), (302, 13055), (344, 13274), (362, 13424), (378, 13511), (399, 13619), (428, 13754), (445, 13865), (450, 13883), (455, 13913), (501, 14135), (509, 14159), (513, 14174), (518, 14195), (527, 14222), (534, 14249), (549, 14309), (566, 14399), (572, 14432), (588, 14495), (596, 14552), (602, 14585), (605, 14594), (680, 15098), (681, 15125), (684, 15155), (686, 15167), (687, 15176), (699, 15245), (719, 15326), (727, 15386), (731, 15404), (733, 15413),

Gene: Topper_21 Start: 12116, Stop: 15949, Start Num: 15

Candidate Starts for Topper_21:

(Start: 15 @12116 has 162 MA's), (Start: 23 @12185 has 1 MA's), (31, 12272), (41, 12347), (59, 12449), (66, 12476), (83, 12548), (84, 12560), (86, 12569), (98, 12641), (109, 12716), (128, 12800), (130, 12809), (133, 12830), (141, 12869), (150, 12905), (157, 12947), (168, 13025), (183, 13115), (196, 13190), (210, 13283), (212, 13292), (214, 13304), (216, 13313), (265, 13550), (275, 13589), (282, 13622), (302, 13709), (309, 13733), (323, 13817), (338, 13901), (341, 13913), (345, 13934), (400, 14090), (439, 14171), (450, 14219), (453, 14237), (456, 14258), (463, 14294), (475, 14345), (487, 14402), (503, 14480), (506, 14489), (527, 14567), (531, 14582), (539, 14624), (555, 14678), (602, 14918), (627, 14993), (654, 15104), (667, 15323), (669, 15335), (686, 15518), (687, 15527), (699, 15599), (708, 15629), (712, 15650), (730, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: Torres_17 Start: 11327, Stop: 15460, Start Num: 15

Candidate Starts for Torres_17:

(10, 11288), (Start: 15 @11327 has 162 MA's), (Start: 23 @11396 has 1 MA's), (31, 11483), (41, 11561), (61, 11669), (66, 11690), (73, 11723), (98, 11855), (100, 11870), (102, 11876), (109, 11930), (115, 11960), (130, 12023), (133, 12044), (141, 12083), (157, 12161), (168, 12239), (173, 12263), (210, 12497), (228, 12578), (238, 12638), (250, 12695), (260, 12731), (265, 12764), (271, 12788), (287, 12854), (290, 12863), (302, 12923), (323, 13031), (331, 13076), (354, 13232), (371, 13343), (373, 13352), (375, 13364), (384, 13415), (388, 13433), (393, 13460), (400, 13490), (419, 13583), (428, 13622), (456, 13790), (468, 13844), (475, 13877), (485, 13922), (503, 14003), (504, 14006), (527, 14090), (529, 14096), (531, 14105), (539, 14147), (552, 14183), (555, 14201), (558, 14240), (573, 14300), (602, 14441), (622, 14501), (627, 14516), (669, 14858), (686, 15047), (687, 15056), (697, 15119), (746, 15395),

Gene: TreyKay_21 Start: 12047, Stop: 15883, Start Num: 15

Candidate Starts for TreyKay_21:

(Start: 15 @12047 has 162 MA's), (Start: 23 @12116 has 1 MA's), (31, 12203), (59, 12383), (66, 12410), (86, 12503), (96, 12563), (98, 12575), (109, 12650), (122, 12701), (130, 12743), (133, 12764), (141, 12803), (157, 12881), (168, 12959), (173, 12983), (196, 13124), (210, 13217), (212, 13226), (214, 13238), (216, 13247), (265, 13484), (271, 13508), (275, 13523), (282, 13556), (302, 13643), (309, 13667), (323, 13751), (338, 13835), (341, 13847), (345, 13868), (353, 13949), (400, 14024), (439, 14105), (450, 14153), (453, 14171), (455, 14183), (456, 14192), (463, 14228), (475, 14279), (487, 14336), (503, 14414), (506, 14423), (527, 14501), (531, 14516), (539, 14558), (555, 14612), (602, 14852), (627, 14927), (654, 15038), (667, 15257), (669, 15269), (678, 15371), (686, 15452), (687, 15461), (699, 15533), (708, 15563), (712, 15584), (730, 15704), (741, 15776), (745, 15794), (746, 15800),

Gene: TribbleTrouble_19 Start: 12006, Stop: 16166, Start Num: 15

Candidate Starts for TribbleTrouble_19:

(Start: 15 @12006 has 162 MA's), (Start: 23 @12075 has 1 MA's), (Start: 24 @12096 has 1 MA's), (26, 12102), (31, 12162), (58, 12327), (61, 12345), (66, 12366), (69, 12387), (76, 12411), (84, 12450), (94, 12513), (96, 12519), (98, 12531), (109, 12606), (130, 12699), (133, 12720), (141, 12759), (157, 12837), (164, 12882), (168, 12915), (173, 12939), (179, 12981), (201, 13113), (210, 13173), (214, 13194), (216, 13203), (235, 13296), (250, 13371), (261, 13416), (265, 13440), (270, 13461), (276, 13485), (281, 13509), (294, 13557), (302, 13599), (329, 13755), (338, 13812), (360, 13986), (368, 14016), (373, 14049), (400, 14187), (404, 14214), (412, 14247), (424, 14301), (428, 14319), (432, 14349), (445, 14430), (453, 14466), (468, 14541), (475, 14574), (481, 14619), (488, 14634), (503, 14715), (504, 14718), (525, 14787), (527, 14802), (529, 14808), (531, 14817), (555, 14913), (558, 14952), (578, 15030), (599, 15129), (602, 15153), (627, 15228), (674, 15654), (678, 15684), (679, 15693), (680, 15696), (687, 15774), (712, 15900), (721, 15960), (723, 15978), (739, 16056), (746, 16092), (748, 16107), (749, 16119), (754, 16158),

Gene: TruffulaTree_21 Start: 12076, Stop: 15912, Start Num: 15

Candidate Starts for TruffulaTree_21:

(Start: 15 @12076 has 162 MA's), (Start: 23 @12145 has 1 MA's), (31, 12232), (59, 12409), (66, 12436), (83, 12508), (84, 12520), (86, 12529), (98, 12601), (109, 12676), (128, 12760), (130, 12769), (133, 12790), (141, 12829), (157, 12907), (168, 12985), (183, 13075), (196, 13150), (210, 13243), (212, 13252), (214, 13264), (216, 13273), (271, 13534), (275, 13549), (282, 13582), (302, 13669), (309, 13693), (323, 13777), (338, 13861), (341, 13873), (345, 13894), (400, 14050), (439, 14131), (450, 14179), (453, 14197), (456, 14218), (463, 14254), (475, 14305), (487, 14362), (503, 14440), (506, 14449), (527, 14527), (539, 14584), (555, 14638), (602, 14878), (627, 14953), (654, 15064), (667, 15283), (669, 15295), (686, 15481), (687, 15490), (699, 15562), (708, 15592), (712, 15613), (730, 15733), (741, 15805), (745, 15823), (746, 15829),

Gene: Twitch_21 Start: 12116, Stop: 15949, Start Num: 15

Candidate Starts for Twitch_21:

(Start: 15 @12116 has 162 MA's), (Start: 23 @12185 has 1 MA's), (31, 12272), (41, 12347), (59, 12449), (66, 12476), (83, 12548), (84, 12560), (86, 12569), (98, 12641), (109, 12716), (128, 12800), (130, 12809), (133, 12830), (141, 12869), (150, 12905), (157, 12947), (168, 13025), (183, 13115), (196, 13190), (210, 13283), (212, 13292), (214, 13304), (216, 13313), (265, 13550), (275, 13589), (282, 13622), (302, 13709), (309, 13733), (323, 13817), (338, 13901), (341, 13913), (345, 13934), (400, 14090), (439, 14171), (450, 14219), (453, 14237), (456, 14258), (463, 14294), (475, 14345), (487, 14402), (503, 14480), (506, 14489), (527, 14567), (531, 14582), (539, 14624), (555, 14678), (602, 14918), (627, 14993), (654, 15104), (667, 15323), (669, 15335), (686, 15518), (687, 15527), (699, 15599), (708, 15629), (712, 15650), (730, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: Unicorn_20 Start: 11123, Stop: 15124, Start Num: 16

Candidate Starts for Unicorn_20:

(Start: 16 @11123 has 58 MA's), (26, 11216), (37, 11321), (47, 11375), (50, 11393), (55, 11411), (59, 11435), (61, 11441), (68, 11468), (69, 11474), (73, 11486), (82, 11519), (97, 11615), (100, 11633), (101, 11636), (124, 11750), (127, 11765), (151, 11882), (165, 11978), (172, 12017), (177, 12038), (178, 12047), (188, 12107), (219, 12290), (220, 12296), (221, 12299), (234, 12353), (237, 12383), (250, 12443), (254, 12455), (256, 12461), (259, 12476), (263, 12497), (266, 12515), (300, 12653), (302, 12665), (308, 12686), (316, 12725), (340, 12779), (341, 12785), (353, 12887), (360, 12947), (373, 13010), (388, 13091), (391, 13106), (392, 13109), (400, 13148), (406, 13184), (410, 13199), (411, 13205), (417, 13232), (423, 13256), (435, 13331), (445, 13391), (456, 13448), (463, 13484), (475, 13535), (503, 13676), (504, 13679), (527, 13763), (534, 13790), (555, 13874), (558, 13913), (602, 14114), (627, 14189), (662, 14408), (668, 14522), (678, 14624), (679, 14633), (686, 14705), (699, 14789), (708, 14819), (712, 14840), (730, 14957), (741, 15032), (748, 15071), (749, 15083),

Gene: Urkel_21 Start: 12024, Stop: 15863, Start Num: 15

Candidate Starts for Urkel_21:

(Start: 15 @12024 has 162 MA's), (Start: 23 @12093 has 1 MA's), (31, 12180), (59, 12360), (66, 12387), (84, 12471), (86, 12480), (96, 12540), (98, 12552), (109, 12627), (122, 12678), (130, 12720), (133, 12741), (141, 12780), (157, 12858), (168, 12936), (173, 12960), (196, 13101), (210, 13194), (214, 13215), (216, 13224), (265, 13461), (271, 13485), (275, 13500), (282, 13533), (302, 13620), (320, 13707), (323, 13728), (338, 13812), (341, 13824), (345, 13845), (400, 14001), (439, 14082), (453, 14148), (456, 14169), (463, 14205), (475, 14256), (479, 14274), (487, 14313), (503, 14391), (527, 14478), (531, 14493), (539, 14535), (555, 14589), (602, 14829), (627, 14904), (654, 15015), (656, 15036), (657, 15057), (665, 15177), (678, 15351), (686, 15432), (687, 15441), (699, 15513), (708, 15543), (712, 15564), (730, 15684), (741, 15756), (745, 15774), (746, 15780),

Gene: Validus_21 Start: 11056, Stop: 15213, Start Num: 16

Candidate Starts for Validus_21:

(9, 11008), (Start: 16 @11056 has 58 MA's), (26, 11149), (Start: 28 @11161 has 2 MA's), (46, 11305), (47, 11308), (75, 11428), (90, 11515), (97, 11548), (108, 11623), (109, 11626), (124, 11692), (145, 11794), (151, 11836), (154, 11851), (155, 11860), (160, 11887), (164, 11917), (168, 11950), (177, 11992), (188, 12061), (219, 12247), (220, 12253), (230, 12289), (234, 12310), (235, 12322), (237, 12340), (250, 12400), (254, 12412), (256, 12418), (259, 12433), (262, 12451), (263, 12454), (270, 12487), (295, 12583), (302, 12622), (308, 12643), (315, 12673), (319, 12706), (333, 12790), (338, 12820), (341, 12832), (353, 12934), (365, 13012), (373, 13057), (377, 13081), (387, 13135), (388, 13138), (391, 13153), (392, 13156), (400, 13195), (404, 13222), (410, 13246), (411, 13252), (417, 13279), (428, 13327), (435, 13378), (438, 13396), (444, 13432), (445, 13438), (450, 13456), (454, 13483), (456, 13495), (468, 13549), (475, 13582), (488, 13642), (503, 13723), (504, 13726), (527, 13810), (531, 13825), (539, 13867), (558, 13960), (575, 14026), (602, 14161), (664, 14509), (679, 14701), (686, 14773), (687, 14782), (691, 14803), (694, 14845), (730, 15040), (732, 15052), (741, 15112), (746, 15136), (750, 15175),

Gene: Veliki_21 Start: 12116, Stop: 15952, Start Num: 15

Candidate Starts for Veliki_21:

(Start: 15 @12116 has 162 MA's), (Start: 23 @12185 has 1 MA's), (Start: 24 @12206 has 1 MA's), (31, 12272), (59, 12449), (66, 12476), (83, 12548), (84, 12560), (86, 12569), (98, 12641), (109, 12716), (128, 12800), (130, 12809), (133, 12830), (141, 12869), (157, 12947), (168, 13025), (183, 13115), (196, 13190), (210, 13283), (212, 13292), (214, 13304), (216, 13313), (265, 13550), (275, 13589), (282, 13622), (302, 13709), (309, 13733), (323, 13817), (338, 13901), (341, 13913), (345, 13934), (400, 14090), (439, 14171), (450, 14219), (453, 14237), (456, 14258), (463, 14294), (475, 14345), (487, 14402), (503, 14480), (506, 14489), (527, 14567), (539, 14624), (555, 14678), (602, 14918), (627, 14993), (654, 15104), (667, 15323), (669, 15335), (686, 15521), (687, 15530), (699, 15602), (708, 15632), (712, 15653), (730, 15773), (741, 15845), (745, 15863), (746, 15869),

Gene: ViviJ_18 Start: 11997, Stop: 16103, Start Num: 14

Candidate Starts for ViviJ_18:

(Start: 14 @11997 has 31 MA's), (Start: 24 @12090 has 1 MA's), (32, 12168), (33, 12192), (43, 12252), (61, 12336), (64, 12348), (86, 12450), (96, 12510), (98, 12522), (102, 12543), (109, 12597), (121, 12645), (130, 12690), (133, 12711), (157, 12828), (168, 12906), (173, 12930), (183, 12996), (196, 13071), (210, 13164), (216, 13194), (252, 13368), (255, 13377), (261, 13407), (265, 13431), (270, 13452), (284, 13512), (302, 13590), (305, 13599), (320, 13677), (331, 13743), (339, 13785), (341, 13794), (348, 13878), (354, 13899), (356, 13932), (369, 13998), (373, 14019), (383, 14073), (384, 14082), (388, 14100), (392, 14118), (393, 14127), (400, 14157), (406, 14193), (418, 14247), (426, 14283), (428, 14289), (429, 14307), (448, 14412), (460, 14478), (503, 14673), (512, 14703), (522, 14736), (534, 14787), (537, 14808), (541, 14823), (542, 14829), (558, 14913), (572, 14961), (582, 15000), (594, 15060), (601, 15093), (606, 15114), (614, 15138), (622, 15168), (645, 15234), (656, 15306), (678, 15621), (679, 15630), (680, 15633), (682, 15675), (686, 15702), (691, 15732), (699, 15783), (703, 15801), (719, 15867), (724, 15915), (730, 15939), (732, 15951), (747, 16032), (749, 16056), (754, 16095),

Gene: Waterfoul_19 Start: 12158, Stop: 16267, Start Num: 14

Candidate Starts for Waterfoul_19:

(Start: 14 @12158 has 31 MA's), (43, 12416), (61, 12500), (76, 12566), (86, 12614), (96, 12674), (98, 12686), (102, 12707), (109, 12761), (115, 12791), (130, 12854), (133, 12875), (147, 12932), (157, 12992), (168, 13070), (173, 13094), (179, 13136), (186, 13169), (210, 13328), (214, 13349), (235, 13427), (247, 13490), (251, 13505), (252, 13508), (255, 13517), (257, 13523), (259, 13535), (269, 13589), (295, 13691), (302, 13730), (331, 13883), (339, 13925), (344, 13949), (354, 14039), (356, 14072), (383, 14213), (384, 14222), (388, 14240), (393, 14267), (409, 14345), (428, 14429), (448, 14552), (460, 14618), (481, 14720), (503, 14813), (506, 14822), (512, 14843), (522, 14876), (534, 14927), (537, 14948), (541, 14963), (542, 14969), (558, 15053), (570, 15083), (572, 15101), (582, 15140), (594, 15200), (601, 15233), (606, 15254), (614, 15278), (622, 15311), (645, 15395), (656, 15467), (678, 15776), (682, 15830), (684, 15845), (686, 15857), (691, 15887), (724, 16073), (730, 16097), (732, 16109), (747, 16196), (749, 16220),

Gene: Wendigo_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Wendigo_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: Wintermute_22 Start: 13313, Stop: 17488, Start Num: 16

Candidate Starts for Wintermute_22:

(9, 13277), (Start: 16 @13313 has 58 MA's), (34, 13511), (84, 13751), (86, 13760), (102, 13853), (121, 13955), (130, 14000), (141, 14060), (157, 14138), (168, 14216), (182, 14303), (183, 14306), (190, 14336), (194, 14369), (198, 14393), (211, 14477), (217, 14507), (223, 14534), (245, 14642), (248, 14663), (251, 14675), (255, 14687), (265, 14741), (302, 14900), (308, 14921), (323, 15029), (342, 15149), (394, 15491), (400, 15509), (410, 15560), (412, 15569), (422, 15614), (426, 15635), (451, 15755), (469, 15854), (470, 15866), (474, 15875), (494, 15947), (503, 15998), (504, 16001), (512, 16028), (539, 16127), (545, 16145), (558, 16220), (600, 16409), (602, 16421), (627, 16496), (637, 16526), (657, 16682), (665, 16802), (673, 16910), (686, 17060), (706, 17189), (708, 17192), (722, 17291), (729, 17318), (746, 17414), (753, 17477),

Gene: Ximenita_21 Start: 11247, Stop: 15251, Start Num: 16

Candidate Starts for Ximenita_21:

(Start: 16 @11247 has 58 MA's), (26, 11340), (37, 11445), (47, 11499), (50, 11517), (59, 11559), (68, 11592), (69, 11598), (87, 11679), (97, 11739), (100, 11757), (101, 11760), (124, 11874), (127, 11889), (151, 12006), (156, 12033), (165, 12102), (177, 12162), (178, 12171), (179, 12183), (188, 12231), (219, 12414), (220, 12420), (221, 12423), (250, 12567), (254, 12579), (256, 12585), (259, 12600), (263, 12621), (266, 12639), (300, 12777), (302, 12789), (308, 12810), (316, 12849), (340, 12903), (341, 12909), (353, 13011), (360, 13071), (373, 13134), (387, 13212), (388, 13215), (391, 13230), (400, 13272), (404, 13299), (406, 13308), (410, 13323), (411, 13329), (417, 13356), (423, 13380), (424, 13386), (432, 13434), (435, 13455), (450, 13533), (453, 13551), (456, 13572), (463, 13608), (475, 13659), (503, 13800), (506, 13809), (527, 13887), (555, 13998), (557, 14010), (602, 14238), (627, 14313), (679, 14757), (686, 14829), (687, 14838), (699, 14913), (708, 14943), (712, 14964), (730, 15081), (741, 15156), (748, 15195), (749, 15207), (754, 15246),

Gene: Y10_22 Start: 13313, Stop: 17488, Start Num: 16

Candidate Starts for Y10_22:

(9, 13277), (Start: 16 @13313 has 58 MA's), (34, 13511), (84, 13751), (86, 13760), (102, 13853), (121, 13955), (130, 14000), (141, 14060), (157, 14138), (168, 14216), (182, 14303), (183, 14306), (190, 14336), (194, 14369), (198, 14393), (211, 14477), (217, 14507), (223, 14534), (245, 14642), (248, 14663), (251, 14675), (255, 14687), (265, 14741), (302, 14900), (308, 14921), (323, 15029), (342, 15149), (394, 15491), (400, 15509), (410, 15560), (412, 15569), (422, 15614), (426, 15635), (451, 15755), (469, 15854), (470, 15866), (474, 15875), (494, 15947), (503, 15998), (504, 16001), (512, 16028), (539, 16127), (545, 16145), (558, 16220), (600, 16409), (602, 16421), (627, 16496), (637, 16526), (657, 16682), (665, 16802), (673, 16910), (686, 17060), (703, 17180), (706, 17189), (708, 17192), (722, 17291), (729, 17318), (746, 17414), (753, 17477),

Gene: Y2_22 Start: 13313, Stop: 17488, Start Num: 16

Candidate Starts for Y2_22:

(9, 13277), (Start: 16 @13313 has 58 MA's), (34, 13511), (84, 13751), (86, 13760), (102, 13853), (121, 13955), (130, 14000), (141, 14060), (157, 14138), (168, 14216), (182, 14303), (183, 14306), (190, 14336), (194, 14369), (198, 14393), (211, 14477), (217, 14507), (223, 14534), (245, 14642), (248, 14663), (251, 14675), (255, 14687), (265, 14741), (302, 14900), (308, 14921), (323, 15029), (342, 15149), (394, 15491), (400, 15509), (410, 15560), (412, 15569), (422, 15614), (426, 15635), (451, 15755), (469, 15854), (470, 15866), (474, 15875), (494, 15947), (503, 15998), (504, 16001), (512, 16028), (539, 16127), (545, 16145), (558, 16220), (600, 16409), (602, 16421), (627, 16496), (637, 16526), (657, 16682), (665, 16802), (673, 16910), (686, 17060), (703, 17180), (706, 17189), (708, 17192), (722, 17291), (729, 17318), (746, 17414), (753, 17477),

Gene: YoureAdopted_20 Start: 12049, Stop: 15885, Start Num: 15

Candidate Starts for YoureAdopted_20:

(Start: 15 @12049 has 162 MA's), (Start: 23 @12118 has 1 MA's), (Start: 24 @12139 has 1 MA's), (31, 12205), (59, 12382), (66, 12409), (83, 12481), (84, 12493), (86, 12502), (98, 12574), (109, 12649), (128, 12733), (130, 12742), (133, 12763), (141, 12802), (157, 12880), (168, 12958), (183, 13048), (196, 13123), (210, 13216), (212, 13225), (214, 13237), (216, 13246), (265, 13483), (275, 13522), (282, 13555), (302, 13642), (309, 13666), (323, 13750), (338, 13834), (341, 13846), (345, 13867), (400, 14023), (439, 14104), (450, 14152), (453, 14170), (456, 14191), (463, 14227), (475, 14278), (487, 14335), (503, 14413), (506, 14422), (527, 14500), (531, 14515), (539, 14557), (555, 14611), (602, 14851), (627, 14926), (654, 15037), (667, 15256), (669, 15268), (686, 15454), (687, 15463), (708, 15565), (712, 15586), (730, 15706), (741, 15778), (745, 15796), (746, 15802),

Gene: Yuna_21 Start: 11197, Stop: 15186, Start Num: 16

Candidate Starts for Yuna_21:

(Start: 16 @11197 has 58 MA's), (26, 11290), (48, 11458), (54, 11479), (61, 11515), (69, 11548), (70, 11551), (73, 11560), (79, 11584), (95, 11677), (97, 11689), (101, 11710), (144, 11926), (151, 11965), (154, 11980), (160, 12016), (167, 12076), (168, 12079), (177, 12121), (188, 12190), (219, 12376), (220, 12382), (221, 12385), (224, 12391), (230, 12418), (232, 12427), (234, 12439), (237, 12469), (250, 12529), (254, 12541), (256, 12547), (259, 12562), (262, 12580), (263, 12583), (266, 12601), (285, 12676), (300, 12739), (302, 12751), (308, 12772), (316, 12811), (337, 12856), (341, 12871), (360, 13033), (373, 13096), (378, 13123), (392, 13195), (400, 13234), (410, 13285), (412, 13294), (414, 13306), (421, 13336), (423, 13342), (428, 13366), (445, 13477), (450, 13495), (456, 13534), (475, 13621), (477, 13633), (503, 13762), (504, 13765), (527, 13849), (557, 13972), (602, 14200), (622, 14260), (627, 14275), (666, 14590), (679, 14722), (681, 14752), (685, 14791), (686, 14794), (689, 14812), (699, 14866), (708, 14896), (712, 14917), (730, 15028), (746, 15121),

Gene: Yunkel11_21 Start: 11016, Stop: 15143, Start Num: 16

Candidate Starts for Yunkel11_21:

(9, 10968), (Start: 16 @11016 has 58 MA's), (26, 11109), (42, 11241), (46, 11265), (53, 11295), (57, 11316), (59, 11328), (75, 11388), (90, 11475), (97, 11508), (100, 11526), (101, 11529), (113, 11601), (145, 11745), (151, 11787), (154, 11802), (160, 11838), (169, 11910), (188, 12012), (219, 12195), (226, 12222), (231, 12240), (232, 12246), (237, 12288), (254, 12360), (256, 12366), (259, 12381), (263, 12402), (266, 12420), (270, 12435), (281, 12483), (292, 12516), (295, 12531), (302, 12570), (308, 12591), (315, 12621), (343, 12789), (346, 12840), (373, 13005), (377, 13029), (388, 13086), (397, 13137), (404, 13170), (406, 13179), (423, 13251), (435, 13326), (438, 13344), (445, 13386), (450, 13404), (454, 13431), (456, 13443), (480, 13572), (488, 13590), (503, 13671), (504, 13674), (527, 13758), (538, 13812), (539, 13815), (558, 13908), (575, 13974), (602, 14109), (641, 14235), (678, 14631), (679, 14640), (686, 14712), (699, 14796), (730, 14964), (741, 15036), (746, 15060), (750, 15099),

Gene: Zabiza_21 Start: 12077, Stop: 15916, Start Num: 15

Candidate Starts for Zabiza_21:

(Start: 15 @12077 has 162 MA's), (Start: 23 @12146 has 1 MA's), (31, 12233), (59, 12410), (66, 12437), (83, 12509), (84, 12521), (86, 12530), (98, 12602), (109, 12677), (128, 12761), (130, 12770), (133, 12791), (141, 12830), (157, 12908), (168, 12986), (183, 13076), (196, 13151), (210, 13244), (212, 13253), (214, 13265), (216, 13274), (271, 13535), (275, 13550), (282, 13583), (302, 13670), (309, 13694), (323, 13778), (338, 13862), (341, 13874), (345, 13895), (400, 14051), (439, 14132), (450, 14180), (453, 14198), (456, 14219), (463, 14255), (475, 14306), (487, 14363), (503, 14441), (506, 14450), (527, 14528), (539, 14585), (555, 14639), (602, 14879), (627, 14954), (654, 15065), (667, 15284), (669, 15296), (686, 15485), (687, 15494), (699, 15566), (708, 15596), (712, 15617), (730, 15737), (741, 15809), (745, 15827), (746, 15833),

Gene: Zavala_21 Start: 12057, Stop: 15890, Start Num: 15

Candidate Starts for Zavala_21:

(Start: 15 @12057 has 162 MA's), (Start: 23 @12126 has 1 MA's), (31, 12213), (59, 12390), (66, 12417), (83, 12489), (84, 12501), (86, 12510), (98, 12582), (109, 12657), (128, 12741), (130, 12750), (133, 12771), (141, 12810), (157, 12888), (168, 12966), (183, 13056), (196, 13131), (210, 13224), (212, 13233), (214, 13245), (216, 13254), (265, 13491), (275, 13530), (282, 13563), (302, 13650), (309, 13674), (323, 13758), (338, 13842), (341, 13854), (345, 13875), (400, 14031), (450, 14160), (453, 14178), (456, 14199), (463, 14235), (475, 14286), (487, 14343), (503, 14421), (506, 14430), (527, 14508), (531, 14523), (539, 14565), (555, 14619), (602, 14859), (627, 14934), (654, 15045), (667, 15264), (669, 15276), (686, 15459), (687, 15468), (699, 15540), (708, 15570), (712, 15591), (730, 15711), (741, 15783), (745, 15801), (746, 15807),

Gene: ZoMa_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for ZoMa_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),

Gene: ZoeJ_17 Start: 10077, Stop: 13724, Start Num: 14

Candidate Starts for ZoeJ_17:

(Start: 14 @10077 has 31 MA's), (Start: 23 @10149 has 1 MA's), (65, 10383), (69, 10398), (96, 10515), (98, 10527), (109, 10602), (130, 10695), (157, 10833), (158, 10836), (163, 10875), (168, 10911), (173, 10935), (176, 10944), (177, 10956), (180, 10980), (183, 11001), (189, 11025), (190, 11031), (195, 11067), (196, 11076), (201, 11109), (202, 11121), (206, 11148), (247, 11331), (250, 11343), (252, 11349), (261, 11388), (265, 11412), (307, 11460), (311, 11472), (322, 11505), (355, 11736), (366, 11781), (373, 11811), (388, 11880), (393, 11907), (401, 11940), (427, 12027), (433, 12060), (437, 12081), (442, 12105), (447, 12135), (511, 12378), (536, 12471), (556, 12549), (590, 12672), (615, 12777), (674, 13188), (678, 13218), (679, 13227), (681, 13257), (730, 13554), (732, 13566), (746, 13647),

Gene: Zombie_16 Start: 11464, Stop: 15477, Start Num: 15

Candidate Starts for Zombie_16:

(Start: 15 @11464 has 162 MA's), (34, 11665), (57, 11779), (66, 11821), (72, 11851), (98, 11986), (99, 11998), (102, 12007), (138, 12196), (141, 12214), (143, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (192, 12502), (195, 12526), (206, 12607), (233, 12730), (247, 12814), (258, 12850), (265, 12895), (266, 12901), (293, 13009), (298, 13033), (302, 13054), (344, 13273), (362, 13423), (378, 13510), (399, 13618), (428, 13753), (445, 13864), (450, 13882), (455, 13912), (501, 14134), (509, 14158), (513, 14173), (518, 14194), (527, 14221), (534, 14248), (549, 14308), (566, 14398), (572, 14431), (588, 14494), (596, 14551), (602, 14584), (605, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (699, 15244), (719, 15325), (727, 15385), (731, 15403), (733, 15412),