

Pham 224271

	388	79	88	120	140	154	160	179	200	218	235	263	300	308	341	360	388	402	426	436	447	456	
1: Chargerpower_26	88	88	88																				
2: Target_26	88	88	88																				
3: Zeuska_25 + 5	88	88	88																				
4: HermioneGrange_24 + 1	88	88	88																				
5: EyeBall_24	88	88	88																				
6: Briton15_26 + 2	88	88	88																				
7: Mule_24 + 2	88	88	88																				
8: Agaitana_25	88	88	88																				
9: Perseus_25	88	88	88																				
10: Mryolo_23	88	88	88																				
11: Rutherford_26	88	88	88																				
12: Lopton_25 + 5	88	88	88																				
13: Rnyhnn_24	88	88	88																				
14: Watermelon_26 + 2	88	88	88																				
15: ConceptII_25	88	88	88																				
16: Chanagan_23	88	88	88																				
17: Jasper_25	88	88	88																				
18: Aisiro_28	88	88	88																				
19: iLeeKay_26 + 1	88	88	88																				
20: Aeneas_26	88	88	88																				
21: JC27_26 + 1	88	88	88																				
22: RidgeCB_24	88	88	88																				
23: Fushigi_25	88	88	88																				
24: Smeagol_26	88	88	88																				
25: Gompell16_24 + 1	88	88	88																				
26: HarryOVV_25	88	88	88						191														
27: Kingrew_22	88	88	88						191														
28: Hope4ever_24	88	88	88																				
29: BeesKnees_25	88	88	88																				
30: Marcell_24	88	88	88																				
31: Doom_25	88	88	88																				
32: Magnar_24	88	88	88																				
33: JackSparrow_25	88	88	88																				
34: Oogway_23	88	88	88						192														
35: Nnonno_24	88	88	88																				
36: Cueylyss_24 + 2	88	88	88																				
37: Papez_26 + 1	88	88	88																				
38: Sibs6_26	88	88	88																				
39: Wheeler_24	88	88	88																				
40: SkiPole_26	88	88	88																				
41: Snape_26 + 3	88	88	88	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300
42: HavenmI_26 + 12	88	88	88	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300
43: Joseito_26	88	88	88	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300
44: Bachome_26 + 1	88	88	88	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300
45: Aneem_26	88	88	88	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300
46: Fibonacci_26 + 1	88	88	88	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300
47: PetersenIas_25	88	88	88	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300
48: HexHilly_24 + 6	88	88	88	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300
49: Pilibi_21	88	88	88	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300
50: SolorFago_25	88	88	88	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300

Pham 224271

ru1: Blinn1_29	38	41	46	73		108	137	143	188	178	185	212		306	225	349	388	392	448	489
ru2: SuperCalle99_29	38	41	46	73	95	108	137	143	188	178	185	212	213				388	392	448	489
ru3: Dorothea_29 + 2	38	41	46	73		108	137	143	188	178	185	212	213				388	392	448	489
ru4: Indra_29	38	41	46	73		108	137	143	188	178	185	212	213				388	392	448	489
ru5: Garak_30 + 2	38	41	46	73		108	137	143	188	178	185	212	213	306	225	349	388	392	448	489
ru6: Priamo_29	38	41	46	73		108	137	143	188	178	185	212	213				388	392	448	489
ru7: Ritter_29	38	41	46	73	95	108	137	143	188	178	185	212	213				388	392	448	489
ru8: Isiphiwo_29	38	41	46	73		108	137	143	188	178	185	212	213				388	392	448	489
ru9: Mills_29	38	41	46	73		108	137	143	188	178	185	212	213				388	392	448	489
ru10: Meadi_29 + 2	38	41	46	73		108	137	143	188	178	185	212	213				388	392	448	489
ru11: Stephie_29 + 2	38	41	46	73		108	137	143	188	178	185	212	213				388	392	448	489
ru12: Dixon_29	38	41	46	73		108	137	143	188	178	185	212	213				388	392	448	489
ru13: Nearly_29, sess_22	38	41	46	73		108	137	143	188	178	185	212	213				388	392	448	489
ru14: Roary_29	38	41	46	73		108	137	143	188	178	185	212	213				388	392	448	489
ru15: Saintus_22	38	41	46	73		108	137	143	188	178	185	212	213				388	392	448	489

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 224271 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224271 has 232 members, 18 are drafts.

Phages represented in each track:

- Track 1 : Chargerpower_26
- Track 2 : Target_26
- Track 3 : Zeuska_25, Applejack_24, KyMonks1A_26, Nerujay_25, Kugel_25, Sunshine924_23
- Track 4 : HermioneGrange_24, TwoPeat_25
- Track 5 : Eyeball_24
- Track 6 : Briton15_26, Dynamix_25, McGuire_25
- Track 7 : Mule_24, Crispicous1_23, PhrostyMug_24
- Track 8 : Agaliana_25
- Track 9 : Perseus_25
- Track 10 : Mryolo_23
- Track 11 : Rutherford_26
- Track 12 : Lopton_25, Molly_25, MPlant7149_23, Zephyr_24, NEHalo_24, Bob3_23
- Track 13 : Rhynn_24
- Track 14 : Watermelon_26, DD5_25, Lockley_24
- Track 15 : ConceptII_25
- Track 16 : Chanagan_23
- Track 17 : Jasper_25
- Track 18 : Alsfro_28
- Track 19 : ILeeKay_26, Sumter_23
- Track 20 : Aeneas_26
- Track 21 : JC27_26, Traft412_26
- Track 22 : RidgeCB_24
- Track 23 : Fushigi_25
- Track 24 : Smeagol_26
- Track 25 : Gompeii16_24, Bircsak_24
- Track 26 : HarryOW_25
- Track 27 : Killigrew_22
- Track 28 : Hope4ever_24
- Track 29 : BeesKnees_25
- Track 30 : Marcell_24
- Track 31 : Doom_25
- Track 32 : Magnar_24
- Track 33 : JackSparrow_25
- Track 34 : Oogway_23
- Track 35 : Nhonho_24
- Track 36 : Cueylyss_24, Kanely_25, Altman_26

- Track 37 : Papez_26, Francis47_24
- Track 38 : Sibs6_26
- Track 39 : Wheeler_24
- Track 40 : SkiPole_26
- Track 41 : Snape_26, Et2Brutus_25, Munch_26, Bud_26
- Track 42 : Flaverint_26, Salz_26, Hutc2_26, Insomnia_26, Mulciber_26, Jabith_26, Lucivia_26, Orange_26, Bowtie_26, Gilberta_26, Mabel_26, MaCh_26, Sham4_26
- Track 43 : Joselito_26
- Track 44 : Bachome_26, Ebony_26
- Track 45 : Aneem_26
- Track 46 : Fibonacci_26, Timothy_26
- Track 47 : Petersenfast_25
- Track 48 : TinyTimmy_26
- Track 49 : Phlei_21
- Track 50 : SororFago_25
- Track 51 : Sunhee_24
- Track 52 : Gail_25
- Track 53 : Jeeves_25
- Track 54 : Luchador_27
- Track 55 : MinecraftSteve_29, Battleship_29, JSwag_28, Anaysia_28
- Track 56 : Soups_28, Waits_28, Switzerland_28, Boohoo_28, LastResort_28, Rosalind_28, Epsocamisio_28, Strosahl_28, Remus_28, ShayRa_29, Oofda_29, ReMo_28, Looper_29
- Track 57 : Anon_26
- Track 58 : KatherineG_28, DekHockey33_28
- Track 59 : Nebulosus_28
- Track 60 : Nedarya_27
- Track 61 : Warrior24_29
- Track 62 : Lucyedi_27
- Track 63 : PainterBoy_27
- Track 64 : EagleEye_28
- Track 65 : MyraDee_23
- Track 66 : Bactobuster_27
- Track 67 : Herbertwm_23
- Track 68 : Jaan_29
- Track 69 : Iwokeuplikedis_27
- Track 70 : Pukovnik_28
- Track 71 : Landor_27
- Track 72 : IronMan_28
- Track 73 : Phaded_29
- Track 74 : Tristan_27
- Track 75 : FatCactus_24
- Track 76 : Anthony_25
- Track 77 : Kinmap_26
- Track 78 : Theia_20, Dublin_21, MarysWell_21
- Track 79 : Swirley_22
- Track 80 : EITiger69_22
- Track 81 : Conspiracy_22, Discoknowium_22, Bluefalcon_21, AgentM_22, Lev2_22, ForGetIt_22, Aragog_22, Phlorence_22, Jovo_22, Archetta_22, PickleBack_22
- Track 82 : George_21
- Track 83 : Prinasha11_23
- Track 84 : Twigg_22, Tarynearal_21, LittleCherry_22, Bonamassa_22
- Track 85 : Milcery_22

- Track 86 : Coog_22, Midas2_22, Cuco_22
- Track 87 : Chadwick_23
- Track 88 : Benedict_22
- Track 89 : Scorpia_23
- Track 90 : Ghouboy_22, Zolita_21, SydNat_22
- Track 91 : Jabiru_22
- Track 92 : Micasa_22
- Track 93 : PetterN_23
- Track 94 : Tiger_22
- Track 95 : Airmid_22
- Track 96 : UnionJack_22
- Track 97 : Naca_22
- Track 98 : HuhtaEnerson15_22
- Track 99 : BABullseye_29, Cookiedough_29, Newrala_29, GreedyLawyer_29, Hoot_29, Kipper29_29, EricB_29, SuperAwesome_29, JewelBug_29, DaVinci_29, Chartreuse_29, Kazan_29, McFly_29, VohminGhazi_29, Neeharika16_29, SmellyB_29, Candra_29
- Track 100 : Yokurt_29, Gruunaga_29, Roksolana_29, Hexamo_29, Blue7_29, CloudWang3_29, Gladiator_29, Tucker_29, Hammer_29, Jeffabunny_29, ToneTone_27, Wiks_29, Artemis2UCLA_29, Zaka_29, Zulu_29, BlessJoy_29, WunderPhul_29, Lilbunny_29
- Track 101 : Blinn1_29
- Track 102 : SuperCallie99_29, Pmask_29
- Track 103 : Dorothea_29, Jordennis_29, Polyphemus_28
- Track 104 : Indra_29
- Track 105 : Garak_30, Helmet_30, Temprado_30
- Track 106 : Priamo_29
- Track 107 : Rifter_29
- Track 108 : Isiphiwo_29
- Track 109 : Phillis_22
- Track 110 : Smeadley_22, Expelliarmus_21, Astro_22
- Track 111 : Stephig9_22, Groundhog_21, Danforth_21
- Track 112 : Dixon_22
- Track 113 : NearlyHeadless_22
- Track 114 : Roary_22
- Track 115 : Saintus_22

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

The start number called the most often in the published annotations is 57, it was called in 60 of the 214 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aeneas_26, Agaliana_25, Alsfro_28, Altman_26, Applejack_24, BeesKnees_25, Bircsak_24, Bob3_23, Briton15_26, Chanagan_23, Conceptll_25, Crispicous1_23, Cueyllyss_24, DD5_25, Doom_25, Dynamix_25, Eyeball_24, Francis47_24, Fushigi_25, Gompeii16_24, HarryOW_25, HermioneGrange_24, Hope4ever_24, ILeeKay_26, JC27_26, JackSparrow_25, Jasper_25, Kanely_25, Kugel_25, KyMonks1A_26, Lockley_24, Lopton_25, MPlant7149_23, Magnar_24, Marcell_24, McGuire_25, Molly_25, Mryolo_23, Mule_24, NEHalo_24, Nerujay_25, Nhonho_24,

Oogway_23, Papez_26, Perseus_25, PhrostyMug_24, Rhynn_24, RidgeCB_24, Rutherford_26, Sibs6_26, SkiPole_26, Smeagol_26, Sumter_23, Sunshine924_23, Target_26, Traft412_26, TwoPeat_25, Watermelon_26, Wheeler_24, Zephyr_24, Zeuska_25,

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

-

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

- AgentM_22, Airmid_22, Anaysia_28, Aneem_26, Anon_26, Anthony_25, Aragog_22, Archetta_22, Artemis2UCLA_29, Astro_22, BABullseye_29, Bachome_26, Bactobuster_27, Battleship_29, Benedict_22, BlessJoy_29, Blinn1_29, Blue7_29, Bluefalcon_21, Bonamassa_22, Boohoo_28, Bowtie_26, Bud_26, Candra_29, Chadwick_23, Chargerpower_26, Chartreuse_29, CloudWang3_29, Conspiracy_22, Coog_22, Cookiedough_29, Cuco_22, DaVinci_29, Danforth_21, DekHockey33_28, Discoknowium_22, Dixon_22, Dorothea_29, Dublin_21, EagleEye_28, Ebony_26, EITiger69_22, Epsocamisio_28, EricB_29, Et2Brutus_25, Expelliarmus_21, FatCactus_24, Fibonacci_26, Flaverint_26, ForGetIt_22, Gail_25, Garak_30, George_21, Ghoulboy_22, Gilberta_26, Gladiator_29, GreedyLawyer_29, Groundhog_21, Gruunaga_29, Hammer_29, Helmet_30, Herbertwm_23, Hexamo_29, Hoot_29, HuhtaEnerson15_22, Hutc2_26, Indra_29, Insomnia_26, IronMan_28, Isiphiwo_29, Iwokeuplikedis_27, JSwag_28, Jaan_29, Jabiru_22, Jabith_26, Jeeves_25, Jeffabunny_29, JewelBug_29, Jordennis_29, Joselito_26, Jovo_22, KatherineG_28, Kazan_29, Killigrew_22, Kinmap_26, Kipper29_29, Landor_27, LastResort_28, Lev2_22, Lilbunny_29, LittleCherry_22, Looper_29, Luchador_27, Lucivia_26, Lucyedi_27, MaCh_26, Mabel_26, MarysWell_21, McFly_29, Micasa_22, Midas2_22, Milcery_22, MinecraftSteve_29, Mulciber_26, Munch_26, MyraDee_23, Naca_22, NearlyHeadless_22, Nebulosus_28, Nedarya_27, Neeharika16_29, Newrala_29, Oofda_29, Orange_26, PainterBoy_27, Petersenfast_25, PetterN_23, Phaded_29, Phillis_22, Phlei_21, Phlorence_22, PickleBack_22, Pmask_29, Polyphemus_28, Priamo_29, Prinash11_23, Pukovnik_28, ReMo_28, Remus_28, Rifter_29, Roary_22, Roksolana_29, Rosalind_28, Saintus_22, Salz_26, Scorpia_23, Sham4_26, ShayRa_29, Smeadley_22, SmellyB_29, Snape_26, SororFago_25, Soups_28, Stephig9_22, Strosahl_28, Sunhee_24, SuperAwesome_29, SuperCallie99_29, Swirley_22, Switzerland_28, SydNat_22, Tarynearal_21, Temprado_30, Theia_20, Tiger_22, Timothy_26, TinyTimmy_26, ToneTone_27, Tristan_27, Tucker_29, Twigg_22, UnionJack_22, VohminGhazi_29, Waits_28, Warrior24_29, Wiks_29, WunderPhul_29, Yokurt_29, Zaka_29, Zolita_21, Zulu_29,

Summary by start number:

Start 1:

- Found in 53 of 232 (22.8%) of genes in pham
- Manual Annotations of this start: 49 of 214
- Called 98.1% of time when present
- Phage (with cluster) where this start called: AgentM_22 (A5), Airmid_22 (A5), Aragog_22 (A5), Archetta_22 (A5), Astro_22 (A8), Benedict_22 (A5), Bluefalcon_21 (A5), Bonamassa_22 (A5), Chadwick_23 (A5), Conspiracy_22 (A5), Coog_22 (A5), Cuco_22 (A5), Danforth_21 (A8), Discoknowium_22 (A5), Dixon_22 (A8), Dublin_21 (A5), EITiger69_22 (A5), Expelliarmus_21 (A8), FatCactus_24 (A20), ForGetIt_22 (A5), George_21 (A5), Ghoulboy_22 (A5), Groundhog_21 (A8), HuhtaEnerson15_22 (A5), Jabiru_22 (A5), Jovo_22 (A5), Lev2_22 (A5), LittleCherry_22 (A5),

MarysWell_21 (A5), Micasa_22 (A5), Midas2_22 (A5), Milcery_22 (A5), Naca_22 (A5), NearlyHeadless_22 (A8), PetterN_23 (A5), Phillis_22 (A8), Phlorence_22 (A5), PickleBack_22 (A5), Prinash11_23 (A5), Roary_22 (A8), Saintus_22 (A8), Scorpia_23 (A5), Smeadley_22 (A8), Stephig9_22 (A8), Swirley_22 (A5), SydNat_22 (A5), Tarynearal_21 (A5), Theia_20 (A5), Tiger_22 (A5), Twigg_22 (A5), UnionJack_22 (A5), Zolita_21 (A5),

Start 2:

- Found in 2 of 232 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 214
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Anthony_25 (A20),

Start 5:

- Found in 1 of 232 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Phlei_21 (A13),

Start 6:

- Found in 3 of 232 (1.3%) of genes in pham
- Manual Annotations of this start: 3 of 214
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EagleEye_28 (A16), Lucyedi_27 (A16), PainterBoy_27 (A16),

Start 51:

- Found in 2 of 232 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 214
- Called 50.0% of time when present
- Phage (with cluster) where this start called: SororFago_25 (A14),

Start 52:

- Found in 14 of 232 (6.0%) of genes in pham
- Manual Annotations of this start: 7 of 214
- Called 57.1% of time when present
- Phage (with cluster) where this start called: Chargerpower_26 (A), Gail_25 (A14), Herbertwm_23 (A2), Iwokeuplikedis_27 (A2), Kinmap_26 (A21), Luchador_27 (A14), Phaded_29 (A2), Pukovnik_28 (A2),

Start 54:

- Found in 1 of 232 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 214
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MyraDee_23 (A18),

Start 55:

- Found in 48 of 232 (20.7%) of genes in pham
- Manual Annotations of this start: 41 of 214
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Artemis2UCLA_29 (A6), BABullseye_29 (A6), BlessJoy_29 (A6), Blinn1_29 (A6), Blue7_29 (A6), Candra_29 (A6), Chartreuse_29 (A6), CloudWang3_29 (A6), Cookiedough_29 (A6), DaVinci_29 (A6),

Dorothea_29 (A6), EricB_29 (A6), Garak_30 (A6), Gladiator_29 (A6), GreedyLawyer_29 (A6), Gruunaga_29 (A6), Hammer_29 (A6), Helmet_30 (A6), Hexamo_29 (A6), Hoot_29 (A6), Indra_29 (A6), Isiphiwo_29 (A6), Jeffabunny_29 (A6), JewelBug_29 (A6), Jordennis_29 (A6), Kazan_29 (A6), Kipper29_29 (A6), Lilbunny_29 (A6), McFly_29 (A6), Neeharika16_29 (A6), Newrala_29 (A6), Pmask_29 (A6), Polyphemus_28 (A6), Priamo_29 (A6), Rifter_29 (A6), Roksolana_29 (A6), SmellyB_29 (A6), SuperAwesome_29 (A6), SuperCallie99_29 (A6), Temprado_30 (A6), ToneTone_27 (A6), Tucker_29 (A6), VohminGhazi_29 (A6), Wiks_29 (A6), WunderPhul_29 (A6), Yokurt_29 (A6), Zaka_29 (A6), Zulu_29 (A6),

Start 57:

- Found in 61 of 232 (26.3%) of genes in pham
- Manual Annotations of this start: 60 of 214
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aeneas_26 (A1), Agaliana_25 (A1), Alsfro_28 (A1), Altman_26 (A1), Applejack_24 (A1), BeesKnees_25 (A1), Bircsak_24 (A1), Bob3_23 (A1), Briton15_26 (A1), Chanagan_23 (A1), Conceptll_25 (A1), Crispicious1_23 (A1), Cueylyss_24 (A1), DD5_25 (A1), Doom_25 (A1), Dynamix_25 (A1), Eyeball_24 (A1), Francis47_24 (A1), Fushigi_25 (A1), Gompeii16_24 (A1), HarryOW_25 (A1), HermioneGrange_24 (A1), Hope4ever_24 (A1), ILeeKay_26 (A1), JC27_26 (A1), JackSparrow_25 (A1), Jasper_25 (A1), Kanely_25 (A1), Kugel_25 (A1), KyMonks1A_26 (A1), Lockley_24 (A1), Lopton_25 (A1), MPlant7149_23 (A1), Magnar_24 (A1), Marcell_24 (A1), McGuire_25 (A1), Molly_25 (A1), Mryolo_23 (A1), Mule_24 (A1), NEHalo_24 (A1), Nerujay_25 (A1), Nhonho_24 (A1), Oogway_23 (A1), Papez_26 (A1), Perseus_25 (A1), PhrostyMug_24 (A1), Rhynn_24 (A1), RidgeCB_24 (A1), Rutherford_26 (A1), Sibs6_26 (A1), SkiPole_26 (A1), Smeagol_26 (A1), Sumter_23 (A1), Sunshine924_23 (A1), Target_26 (A1), Traft412_26 (A1), TwoPeat_25 (A1), Watermelon_26 (A1), Wheeler_24 (A1), Zephyr_24 (A1), Zeuska_25 (A1),

Start 58:

- Found in 16 of 232 (6.9%) of genes in pham
- Manual Annotations of this start: 5 of 214
- Called 43.8% of time when present
- Phage (with cluster) where this start called: Bactobuster_27 (A2), IronMan_28 (A2), Jaan_29 (A2), Jeeves_25 (A14), Landor_27 (A2), Sunhee_24 (A14), Tristan_27 (A2),

Start 59:

- Found in 1 of 232 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 214
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Killigrew_22 (A1),

Start 60:

- Found in 22 of 232 (9.5%) of genes in pham
- Manual Annotations of this start: 1 of 214
- Called 4.5% of time when present
- Phage (with cluster) where this start called: Nebulosus_28 (A15),

Start 62:

- Found in 30 of 232 (12.9%) of genes in pham
- Manual Annotations of this start: 4 of 214
- Called 13.3% of time when present

- Phage (with cluster) where this start called: Anaysia_28 (A15), Battleship_29 (A15), JSwag_28 (A15), MinecraftSteve_29 (A15),

Start 72:

- Found in 25 of 232 (10.8%) of genes in pham
- Manual Annotations of this start: 22 of 214
- Called 88.0% of time when present
- Phage (with cluster) where this start called: Aneem_26 (A11), Bowtie_26 (A11), Bud_26 (A11), Et2Brutus_25 (A11), Fibonacci_26 (A11), Flaverint_26 (A11), Gilberta_26 (A11), Hutc2_26 (A11), Insomnia_26 (A11), Jabith_26 (A11), Joselito_26 (A11), Lucivia_26 (A11), MaCh_26 (A11), Mabel_26 (A11), Mulciber_26 (A11), Munch_26 (A11), Orange_26 (A11), Salz_26 (A11), Sham4_26 (A11), Snape_26 (A11), Timothy_26 (A11), TinyTimmy_26 (A11),

Start 76:

- Found in 46 of 232 (19.8%) of genes in pham
- Manual Annotations of this start: 2 of 214
- Called 6.5% of time when present
- Phage (with cluster) where this start called: Bachome_26 (A11), Ebony_26 (A11), Petersenfast_25 (A11),

Start 79:

- Found in 78 of 232 (33.6%) of genes in pham
- Manual Annotations of this start: 1 of 214
- Called 1.3% of time when present
- Phage (with cluster) where this start called: Anon_26 (A15),

Start 91:

- Found in 22 of 232 (9.5%) of genes in pham
- Manual Annotations of this start: 15 of 214
- Called 77.3% of time when present
- Phage (with cluster) where this start called: Boohoo_28 (A15), DekHockey33_28 (A15), Epsocamisio_28 (A15), KatherineG_28 (A15), LastResort_28 (A15), Looper_29 (A15), Nedarya_27 (A15), Oofda_29 (A15), ReMo_28 (A15), Remus_28 (A15), Rosalind_28 (A15), ShayRa_29 (A15), Soups_28 (A15), Strosahl_28 (A15), Switzerland_28 (A15), Waits_28 (A15), Warrior24_29 (A15),

Summary by clusters:

There are 14 clusters represented in this pham: A15, A14, A16, A11, A, A13, A21, A18, A1, A20, A2, A5, A6, A8,

Info for manual annotations of cluster A:

- Start number 52 was manually annotated 1 time for cluster A.

Info for manual annotations of cluster A1:

- Start number 57 was manually annotated 60 times for cluster A1.
- Start number 59 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster A11:

- Start number 72 was manually annotated 22 times for cluster A11.
- Start number 76 was manually annotated 2 times for cluster A11.

Info for manual annotations of cluster A14:

- Start number 51 was manually annotated 1 time for cluster A14.
- Start number 52 was manually annotated 2 times for cluster A14.
- Start number 58 was manually annotated 1 time for cluster A14.

Info for manual annotations of cluster A15:

- Start number 60 was manually annotated 1 time for cluster A15.
- Start number 62 was manually annotated 4 times for cluster A15.
- Start number 79 was manually annotated 1 time for cluster A15.
- Start number 91 was manually annotated 15 times for cluster A15.

Info for manual annotations of cluster A16:

- Start number 6 was manually annotated 3 times for cluster A16.

Info for manual annotations of cluster A18:

- Start number 54 was manually annotated 1 time for cluster A18.

Info for manual annotations of cluster A2:

- Start number 52 was manually annotated 4 times for cluster A2.
- Start number 58 was manually annotated 4 times for cluster A2.

Info for manual annotations of cluster A20:

- Start number 2 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A5:

- Start number 1 was manually annotated 38 times for cluster A5.

Info for manual annotations of cluster A6:

- Start number 55 was manually annotated 41 times for cluster A6.

Info for manual annotations of cluster A8:

- Start number 1 was manually annotated 11 times for cluster A8.

Gene Information:

Gene: Aeneas_26 Start: 16694, Stop: 19174, Start Num: 57

Candidate Starts for Aeneas_26:

(Start: 57 @16694 has 60 MA's), (65, 16733), (75, 16796), (Start: 79 @16826 has 1 MA's), (88, 16868), (145, 17075), (149, 17093), (160, 17183), (169, 17246), (174, 17270), (175, 17282), (182, 17333), (236, 17717), (261, 17819), (267, 17858), (268, 17873), (276, 17909), (300, 18038), (318, 18137), (337, 18239), (340, 18260), (343, 18272), (348, 18302), (366, 18401), (375, 18464), (408, 18683), (412, 18716), (441, 18998), (453, 19085), (457, 19124), (459, 19139),

Gene: Agaliana_25 Start: 16638, Stop: 19118, Start Num: 57

Candidate Starts for Agaliana_25:

(Start: 57 @16638 has 60 MA's), (65, 16677), (75, 16740), (Start: 79 @16770 has 1 MA's), (88, 16812), (145, 17019), (149, 17037), (160, 17127), (169, 17190), (174, 17214), (175, 17226), (182, 17277), (236, 17661), (261, 17763), (267, 17802), (268, 17817), (271, 17829), (276, 17853), (318, 18081), (337, 18183), (340, 18204), (343, 18216), (348, 18246), (366, 18345), (375, 18408), (408, 18627),

(412, 18660), (441, 18942), (449, 19008), (453, 19029), (457, 19068), (459, 19083),

Gene: AgentM_22 Start: 15319, Stop: 18660, Start Num: 1

Candidate Starts for AgentM_22:

(Start: 1 @15319 has 49 MA's), (27, 15757), (74, 16069), (82, 16147), (84, 16177), (90, 16234), (110, 16381), (112, 16387), (114, 16393), (133, 16519), (137, 16531), (160, 16681), (164, 16717), (169, 16747), (172, 16762), (176, 16792), (177, 16804), (181, 16828), (188, 16897), (199, 16963), (217, 17119), (231, 17188), (232, 17191), (236, 17218), (243, 17242), (269, 17380), (274, 17401), (281, 17446), (289, 17488), (327, 17680), (333, 17710), (336, 17734), (337, 17746), (340, 17767), (348, 17809), (364, 17896), (368, 17932), (372, 17953), (375, 17974), (387, 18052), (390, 18073), (394, 18094), (397, 18115), (401, 18136), (403, 18160), (411, 18223), (419, 18316), (422, 18334), (430, 18415), (433, 18427), (435, 18439), (438, 18448), (443, 18502), (454, 18586), (455, 18595),

Gene: Airmid_22 Start: 15088, Stop: 17901, Start Num: 1

Candidate Starts for Airmid_22:

(Start: 1 @15088 has 49 MA's), (8, 15277), (49, 15625), (74, 15760), (Start: 76 @15766 has 2 MA's), (103, 15859), (114, 15910), (119, 15946), (136, 16036), (147, 16102), (151, 16123), (160, 16198), (163, 16231), (174, 16285), (177, 16318), (180, 16330), (189, 16429), (196, 16462), (210, 16591), (254, 16756), (267, 16789), (281, 16822), (304, 16903), (305, 16912), (307, 16915), (334, 17026), (335, 17035), (346, 17101), (348, 17110), (368, 17173), (375, 17215), (385, 17287), (390, 17314), (393, 17329), (397, 17356), (401, 17377), (411, 17464), (414, 17494), (419, 17557), (430, 17656), (433, 17668), (435, 17680), (438, 17689), (455, 17836),

Gene: Alsfro_28 Start: 17131, Stop: 19605, Start Num: 57

Candidate Starts for Alsfro_28:

(Start: 57 @17131 has 60 MA's), (65, 17170), (70, 17215), (75, 17233), (77, 17239), (Start: 79 @17263 has 1 MA's), (88, 17305), (145, 17506), (149, 17524), (160, 17614), (169, 17677), (174, 17701), (175, 17713), (182, 17764), (233, 18127), (236, 18148), (261, 18250), (267, 18289), (271, 18316), (276, 18340), (300, 18469), (318, 18568), (331, 18622), (337, 18670), (340, 18691), (348, 18733), (362, 18808), (366, 18832), (375, 18895), (399, 19048), (408, 19114), (412, 19147), (441, 19429), (453, 19516), (457, 19555), (459, 19570),

Gene: Altman_26 Start: 17183, Stop: 19663, Start Num: 57

Candidate Starts for Altman_26:

(Start: 57 @17183 has 60 MA's), (65, 17222), (75, 17285), (77, 17291), (Start: 79 @17315 has 1 MA's), (88, 17357), (145, 17564), (149, 17582), (160, 17672), (169, 17735), (174, 17759), (175, 17771), (182, 17822), (236, 18206), (261, 18308), (267, 18347), (271, 18374), (276, 18398), (300, 18527), (318, 18626), (337, 18728), (340, 18749), (343, 18761), (348, 18791), (366, 18890), (375, 18953), (408, 19172), (412, 19205), (441, 19487), (449, 19553), (453, 19574), (457, 19613), (459, 19628),

Gene: Anaysia_28 Start: 15755, Stop: 18112, Start Num: 62

Candidate Starts for Anaysia_28:

(Start: 60 @15746 has 1 MA's), (Start: 62 @15755 has 4 MA's), (Start: 91 @15923 has 15 MA's), (132, 16166), (133, 16172), (148, 16241), (156, 16298), (176, 16442), (182, 16484), (186, 16532), (187, 16535), (201, 16646), (203, 16664), (217, 16769), (226, 16817), (257, 16922), (272, 16982), (283, 17036), (290, 17072), (293, 17096), (295, 17105), (308, 17168), (309, 17189), (313, 17204), (320, 17228), (324, 17240), (337, 17294), (340, 17315), (347, 17345), (383, 17516), (384, 17537), (400, 17621), (438, 17924), (455, 18047), (456, 18059),

Gene: Aneem_26 Start: 17163, Stop: 19709, Start Num: 72

Candidate Starts for Aneem_26:

(Start: 72 @17163 has 22 MA's), (Start: 76 @17181 has 2 MA's), (98, 17355), (100, 17364), (110, 17439), (122, 17493), (130, 17547), (134, 17562), (135, 17565), (142, 17583), (151, 17646), (154,

17658), (160, 17721), (169, 17784), (172, 17799), (174, 17808), (176, 17829), (180, 17853), (182, 17868), (190, 17955), (191, 17958), (194, 17973), (198, 17994), (200, 18006), (205, 18072), (213, 18135), (214, 18144), (217, 18168), (231, 18249), (233, 18258), (235, 18270), (245, 18312), (259, 18369), (266, 18423), (288, 18531), (294, 18570), (328, 18711), (342, 18807), (345, 18828), (352, 18861), (358, 18894), (359, 18897), (367, 18981), (375, 19026), (376, 19029), (392, 19143), (397, 19176), (406, 19248), (411, 19284), (416, 19356), (425, 19434), (431, 19488), (436, 19512), (442, 19560), (452, 19623),

Gene: Anon_26 Start: 16290, Stop: 18746, Start Num: 79

Candidate Starts for Anon_26:

(36, 15978), (37, 15987), (39, 16038), (40, 16047), (41, 16068), (Start: 79 @16290 has 1 MA's), (81, 16311), (83, 16356), (87, 16383), (94, 16431), (105, 16509), (109, 16542), (110, 16545), (112, 16551), (123, 16620), (126, 16635), (127, 16638), (128, 16641), (131, 16656), (155, 16773), (160, 16827), (163, 16860), (169, 16890), (172, 16905), (173, 16911), (174, 16914), (175, 16926), (183, 16977), (185, 17013), (188, 17034), (204, 17151), (218, 17268), (222, 17286), (223, 17289), (232, 17322), (242, 17370), (249, 17394), (328, 17739), (353, 17901), (358, 17922), (363, 17976), (385, 18135), (389, 18153), (390, 18162), (394, 18183), (401, 18225), (402, 18237), (417, 18402), (425, 18474), (439, 18561), (440, 18567), (455, 18678),

Gene: Anthony_25 Start: 14775, Stop: 17657, Start Num: 2

Candidate Starts for Anthony_25:

(Start: 1 @14736 has 49 MA's), (Start: 2 @14775 has 1 MA's), (8, 14934), (9, 14946), (14, 14979), (18, 15024), (19, 15045), (22, 15063), (23, 15072), (25, 15117), (30, 15165), (56, 15288), (Start: 76 @15381 has 2 MA's), (93, 15438), (104, 15468), (122, 15525), (137, 15603), (141, 15612), (143, 15630), (146, 15654), (153, 15684), (160, 15753), (169, 15819), (170, 15822), (174, 15843), (192, 15993), (220, 16209), (232, 16257), (251, 16338), (253, 16341), (280, 16503), (282, 16515), (298, 16596), (304, 16638), (322, 16728), (333, 16776), (341, 16809), (374, 16998), (376, 17010), (377, 17019), (386, 17082), (393, 17121), (394, 17127), (401, 17169), (412, 17247), (432, 17436), (435, 17454), (436, 17457), (441, 17502), (453, 17586), (460, 17634),

Gene: Applejack_24 Start: 16335, Stop: 18815, Start Num: 57

Candidate Starts for Applejack_24:

(Start: 57 @16335 has 60 MA's), (65, 16374), (75, 16437), (Start: 79 @16467 has 1 MA's), (88, 16509), (145, 16716), (149, 16734), (160, 16824), (169, 16887), (174, 16911), (175, 16923), (182, 16974), (236, 17358), (261, 17460), (267, 17499), (271, 17526), (276, 17550), (300, 17679), (318, 17778), (337, 17880), (340, 17901), (343, 17913), (348, 17943), (366, 18042), (375, 18105), (408, 18324), (412, 18357), (441, 18639), (453, 18726), (457, 18765), (459, 18780),

Gene: Aragog_22 Start: 15349, Stop: 18690, Start Num: 1

Candidate Starts for Aragog_22:

(Start: 1 @15349 has 49 MA's), (27, 15787), (74, 16099), (82, 16177), (84, 16207), (90, 16264), (110, 16411), (112, 16417), (114, 16423), (133, 16549), (137, 16561), (160, 16711), (164, 16747), (169, 16777), (172, 16792), (176, 16822), (177, 16834), (181, 16858), (188, 16927), (199, 16993), (217, 17149), (231, 17218), (232, 17221), (236, 17248), (243, 17272), (269, 17410), (274, 17431), (281, 17476), (289, 17518), (327, 17710), (333, 17740), (336, 17764), (337, 17776), (340, 17797), (348, 17839), (364, 17926), (368, 17962), (372, 17983), (375, 18004), (387, 18082), (390, 18103), (394, 18124), (397, 18145), (401, 18166), (403, 18190), (411, 18253), (419, 18346), (422, 18364), (430, 18445), (433, 18457), (435, 18469), (438, 18478), (443, 18532), (454, 18616), (455, 18625),

Gene: Archetta_22 Start: 15062, Stop: 18403, Start Num: 1

Candidate Starts for Archetta_22:

(Start: 1 @15062 has 49 MA's), (27, 15500), (74, 15812), (82, 15890), (84, 15920), (90, 15977), (110, 16124), (112, 16130), (114, 16136), (133, 16262), (137, 16274), (160, 16424), (164, 16460), (169,

16490), (172, 16505), (176, 16535), (177, 16547), (181, 16571), (188, 16640), (199, 16706), (217, 16862), (231, 16931), (232, 16934), (236, 16961), (243, 16985), (269, 17123), (274, 17144), (281, 17189), (289, 17231), (327, 17423), (333, 17453), (336, 17477), (337, 17489), (340, 17510), (348, 17552), (364, 17639), (368, 17675), (372, 17696), (375, 17717), (387, 17795), (390, 17816), (394, 17837), (397, 17858), (401, 17879), (403, 17903), (411, 17966), (419, 18059), (422, 18077), (430, 18158), (433, 18170), (435, 18182), (438, 18191), (443, 18245), (454, 18329), (455, 18338),

Gene: Artemis2UCLA_29 Start: 16617, Stop: 18833, Start Num: 55

Candidate Starts for Artemis2UCLA_29:

(47, 16572), (Start: 55 @16617 has 41 MA's), (75, 16728), (108, 16884), (133, 17031), (137, 17043), (159, 17190), (160, 17193), (163, 17226), (178, 17316), (185, 17385), (196, 17460), (217, 17628), (325, 17886), (336, 17931), (356, 18039), (368, 18102), (375, 18144), (390, 18243), (394, 18264), (401, 18306), (406, 18357), (410, 18384), (416, 18465), (425, 18555),

Gene: Astro_22 Start: 14549, Stop: 17626, Start Num: 1

Candidate Starts for Astro_22:

(Start: 1 @14549 has 49 MA's), (4, 14633), (15, 14801), (17, 14825), (20, 14873), (31, 14993), (46, 15065), (73, 15215), (74, 15218), (Start: 76 @15224 has 2 MA's), (122, 15410), (132, 15470), (133, 15476), (147, 15542), (153, 15569), (155, 15584), (159, 15635), (160, 15638), (163, 15671), (169, 15704), (190, 15872), (214, 16055), (217, 16079), (226, 16127), (231, 16148), (232, 16151), (264, 16295), (270, 16352), (277, 16382), (283, 16421), (298, 16493), (302, 16523), (321, 16622), (329, 16652), (336, 16697), (368, 16895), (372, 16916), (374, 16928), (390, 17036), (401, 17099), (403, 17123), (407, 17153), (411, 17186), (415, 17219), (419, 17279), (423, 17306), (436, 17405), (438, 17411), (447, 17501), (450, 17522), (455, 17561), (461, 17609),

Gene: BABullseye_29 Start: 16728, Stop: 18932, Start Num: 55

Candidate Starts for BABullseye_29:

(38, 16569), (47, 16683), (Start: 55 @16728 has 41 MA's), (75, 16839), (77, 16845), (95, 16953), (108, 16995), (119, 17061), (137, 17154), (143, 17181), (160, 17304), (163, 17337), (178, 17427), (185, 17496), (217, 17739), (273, 17877), (325, 17997), (356, 18150), (368, 18213), (375, 18255), (390, 18354), (394, 18375), (397, 18396), (401, 18417), (406, 18468), (409, 18480), (410, 18495), (416, 18576), (425, 18654),

Gene: Bachome_26 Start: 17172, Stop: 19700, Start Num: 76

Candidate Starts for Bachome_26:

(Start: 72 @17154 has 22 MA's), (Start: 76 @17172 has 2 MA's), (98, 17346), (100, 17355), (110, 17430), (122, 17484), (130, 17538), (134, 17553), (135, 17556), (142, 17574), (151, 17637), (154, 17649), (160, 17712), (169, 17775), (172, 17790), (174, 17799), (176, 17820), (180, 17844), (182, 17859), (190, 17946), (191, 17949), (194, 17964), (198, 17985), (200, 17997), (205, 18063), (210, 18105), (213, 18126), (214, 18135), (217, 18159), (231, 18240), (233, 18249), (235, 18261), (245, 18303), (259, 18360), (266, 18414), (288, 18522), (294, 18561), (328, 18702), (342, 18798), (345, 18819), (352, 18852), (358, 18885), (359, 18888), (367, 18972), (375, 19017), (376, 19020), (392, 19134), (397, 19167), (406, 19239), (411, 19275), (416, 19347), (425, 19425), (431, 19479), (436, 19503), (452, 19614),

Gene: Bactobuster_27 Start: 18366, Stop: 20744, Start Num: 58

Candidate Starts for Bactobuster_27:

(Start: 52 @18348 has 7 MA's), (Start: 58 @18366 has 5 MA's), (64, 18399), (65, 18405), (Start: 79 @18501 has 1 MA's), (88, 18543), (136, 18699), (139, 18711), (140, 18714), (144, 18744), (145, 18753), (152, 18789), (154, 18798), (160, 18861), (163, 18894), (172, 18939), (175, 18960), (176, 18969), (188, 19074), (206, 19215), (232, 19383), (234, 19395), (260, 19461), (261, 19467), (268, 19518), (292, 19629), (297, 19647), (332, 19803), (338, 19857), (344, 19893), (356, 19944), (365, 20004), (371, 20037), (374, 20049), (378, 20082), (379, 20085), (399, 20223), (401, 20235), (405,

20277), (410, 20313), (412, 20325), (413, 20331), (436, 20541),

Gene: Battleship_29 Start: 15870, Stop: 18224, Start Num: 62

Candidate Starts for Battleship_29:

(Start: 60 @15861 has 1 MA's), (Start: 62 @15870 has 4 MA's), (Start: 91 @16038 has 15 MA's), (132, 16278), (133, 16284), (148, 16353), (156, 16410), (176, 16554), (182, 16596), (186, 16644), (187, 16647), (201, 16758), (203, 16776), (217, 16881), (226, 16929), (257, 17034), (272, 17094), (283, 17148), (290, 17184), (293, 17208), (295, 17217), (308, 17280), (309, 17301), (313, 17316), (320, 17340), (324, 17352), (337, 17406), (340, 17427), (347, 17457), (383, 17628), (384, 17649), (400, 17733), (438, 18036), (455, 18159), (456, 18171),

Gene: BeesKnees_25 Start: 16392, Stop: 18869, Start Num: 57

Candidate Starts for BeesKnees_25:

(Start: 57 @16392 has 60 MA's), (Start: 62 @16407 has 4 MA's), (Start: 79 @16521 has 1 MA's), (88, 16563), (145, 16770), (149, 16788), (160, 16878), (169, 16941), (174, 16965), (175, 16977), (182, 17028), (236, 17412), (261, 17514), (267, 17553), (271, 17580), (276, 17604), (300, 17733), (318, 17832), (337, 17934), (340, 17955), (348, 17997), (366, 18096), (375, 18159), (388, 18249), (408, 18378), (412, 18411), (427, 18582), (441, 18693), (449, 18759), (453, 18780), (457, 18819), (461, 18849),

Gene: Benedict_22 Start: 15091, Stop: 17904, Start Num: 1

Candidate Starts for Benedict_22:

(Start: 1 @15091 has 49 MA's), (8, 15280), (49, 15628), (74, 15763), (Start: 76 @15769 has 2 MA's), (103, 15862), (114, 15913), (119, 15949), (136, 16039), (147, 16105), (151, 16126), (160, 16201), (163, 16234), (174, 16288), (177, 16321), (178, 16324), (180, 16333), (189, 16432), (192, 16441), (196, 16465), (210, 16594), (229, 16708), (254, 16759), (281, 16825), (307, 16918), (312, 16951), (335, 17038), (339, 17071), (341, 17083), (348, 17113), (368, 17176), (375, 17218), (385, 17290), (386, 17293), (390, 17317), (393, 17332), (397, 17359), (401, 17380), (411, 17467), (414, 17497), (415, 17500), (419, 17560), (430, 17659), (433, 17671), (435, 17683), (438, 17692), (455, 17839),

Gene: Bircsak_24 Start: 16849, Stop: 19329, Start Num: 57

Candidate Starts for Bircsak_24:

(Start: 57 @16849 has 60 MA's), (65, 16888), (75, 16951), (Start: 79 @16981 has 1 MA's), (88, 17023), (145, 17230), (149, 17248), (160, 17338), (169, 17401), (174, 17425), (175, 17437), (182, 17488), (236, 17872), (261, 17974), (267, 18013), (268, 18028), (271, 18040), (276, 18064), (318, 18292), (337, 18394), (340, 18415), (343, 18427), (348, 18457), (366, 18556), (375, 18619), (408, 18838), (412, 18871), (441, 19153), (453, 19240), (457, 19279), (461, 19309),

Gene: BlessJoy_29 Start: 16715, Stop: 18931, Start Num: 55

Candidate Starts for BlessJoy_29:

(47, 16670), (Start: 55 @16715 has 41 MA's), (75, 16826), (108, 16982), (133, 17129), (137, 17141), (159, 17288), (160, 17291), (163, 17324), (178, 17414), (185, 17483), (196, 17558), (217, 17726), (325, 17984), (336, 18029), (356, 18137), (368, 18200), (375, 18242), (390, 18341), (394, 18362), (401, 18404), (406, 18455), (410, 18482), (416, 18563), (425, 18653),

Gene: Blinn1_29 Start: 16777, Stop: 19005, Start Num: 55

Candidate Starts for Blinn1_29:

(38, 16618), (47, 16732), (Start: 55 @16777 has 41 MA's), (75, 16888), (77, 16894), (108, 17044), (137, 17203), (143, 17230), (159, 17350), (160, 17353), (163, 17386), (178, 17476), (185, 17545), (212, 17743), (217, 17788), (306, 17992), (325, 18046), (349, 18169), (368, 18268), (369, 18277), (373, 18298), (381, 18343), (382, 18355), (410, 18562), (413, 18580), (420, 18682), (422, 18691), (425, 18721),

Gene: Blue7_29 Start: 16707, Stop: 18923, Start Num: 55

Candidate Starts for Blue7_29:

(47, 16662), (Start: 55 @16707 has 41 MA's), (75, 16818), (108, 16974), (133, 17121), (137, 17133), (159, 17280), (160, 17283), (163, 17316), (178, 17406), (185, 17475), (196, 17550), (217, 17718), (325, 17976), (336, 18021), (356, 18129), (368, 18192), (375, 18234), (390, 18333), (394, 18354), (401, 18396), (406, 18447), (410, 18474), (416, 18555), (425, 18645),

Gene: Bluefalcon_21 Start: 15319, Stop: 18660, Start Num: 1

Candidate Starts for Bluefalcon_21:

(Start: 1 @15319 has 49 MA's), (27, 15757), (74, 16069), (82, 16147), (84, 16177), (90, 16234), (110, 16381), (112, 16387), (114, 16393), (133, 16519), (137, 16531), (160, 16681), (164, 16717), (169, 16747), (172, 16762), (176, 16792), (177, 16804), (181, 16828), (188, 16897), (199, 16963), (217, 17119), (231, 17188), (232, 17191), (236, 17218), (243, 17242), (269, 17380), (274, 17401), (281, 17446), (289, 17488), (327, 17680), (333, 17710), (336, 17734), (337, 17746), (340, 17767), (348, 17809), (364, 17896), (368, 17932), (372, 17953), (375, 17974), (387, 18052), (390, 18073), (394, 18094), (397, 18115), (401, 18136), (403, 18160), (411, 18223), (419, 18316), (422, 18334), (430, 18415), (433, 18427), (435, 18439), (438, 18448), (443, 18502), (454, 18586), (455, 18595),

Gene: Bob3_23 Start: 15911, Stop: 18391, Start Num: 57

Candidate Starts for Bob3_23:

(Start: 57 @15911 has 60 MA's), (65, 15950), (75, 16013), (Start: 79 @16043 has 1 MA's), (88, 16085), (145, 16292), (149, 16310), (160, 16400), (169, 16463), (174, 16487), (175, 16499), (182, 16550), (236, 16934), (261, 17036), (267, 17075), (268, 17090), (271, 17102), (276, 17126), (300, 17255), (318, 17354), (337, 17456), (340, 17477), (348, 17519), (366, 17618), (375, 17681), (388, 17771), (408, 17900), (412, 17933), (441, 18215), (449, 18281), (453, 18302), (457, 18341), (459, 18356),

Gene: Bonamassa_22 Start: 15244, Stop: 18582, Start Num: 1

Candidate Starts for Bonamassa_22:

(Start: 1 @15244 has 49 MA's), (27, 15682), (74, 15994), (82, 16072), (84, 16102), (90, 16159), (102, 16243), (110, 16306), (112, 16312), (132, 16432), (150, 16522), (151, 16525), (160, 16600), (166, 16645), (169, 16663), (176, 16708), (179, 16729), (202, 16921), (220, 17059), (232, 17107), (249, 17185), (270, 17311), (274, 17323), (278, 17347), (289, 17410), (327, 17602), (333, 17632), (336, 17656), (337, 17668), (348, 17731), (368, 17854), (372, 17875), (375, 17896), (387, 17974), (390, 17995), (397, 18037), (401, 18058), (411, 18145), (414, 18175), (419, 18238), (422, 18256), (430, 18337), (433, 18349), (435, 18361), (438, 18370), (443, 18424), (454, 18508), (458, 18547),

Gene: Boohoo_28 Start: 15923, Stop: 18112, Start Num: 91

Candidate Starts for Boohoo_28:

(Start: 60 @15746 has 1 MA's), (Start: 62 @15755 has 4 MA's), (Start: 91 @15923 has 15 MA's), (132, 16166), (133, 16172), (148, 16241), (156, 16298), (176, 16442), (182, 16484), (186, 16532), (187, 16535), (201, 16646), (203, 16664), (217, 16769), (226, 16817), (257, 16922), (272, 16982), (283, 17036), (290, 17072), (293, 17096), (295, 17105), (308, 17168), (309, 17189), (313, 17204), (320, 17228), (324, 17240), (337, 17294), (340, 17315), (347, 17345), (383, 17516), (384, 17537), (400, 17621), (438, 17924), (455, 18047), (456, 18059),

Gene: Bowtie_26 Start: 17163, Stop: 19709, Start Num: 72

Candidate Starts for Bowtie_26:

(Start: 72 @17163 has 22 MA's), (Start: 76 @17181 has 2 MA's), (98, 17355), (100, 17364), (110, 17439), (122, 17493), (130, 17547), (134, 17562), (135, 17565), (142, 17583), (151, 17646), (154, 17658), (160, 17721), (169, 17784), (172, 17799), (174, 17808), (176, 17829), (180, 17853), (182, 17868), (190, 17955), (191, 17958), (194, 17973), (198, 17994), (200, 18006), (205, 18072), (214, 18144), (217, 18168), (231, 18249), (233, 18258), (235, 18270), (245, 18312), (259, 18369), (266, 18423), (288, 18531), (294, 18570), (328, 18711), (342, 18807), (345, 18828), (352, 18861), (358,

18894), (359, 18897), (367, 18981), (375, 19026), (376, 19029), (392, 19143), (397, 19176), (406, 19248), (411, 19284), (416, 19356), (425, 19434), (431, 19488), (436, 19512), (452, 19623),

Gene: Briton15_26 Start: 16649, Stop: 19126, Start Num: 57

Candidate Starts for Briton15_26:

(Start: 57 @16649 has 60 MA's), (Start: 62 @16664 has 4 MA's), (Start: 79 @16778 has 1 MA's), (88, 16820), (145, 17027), (149, 17045), (160, 17135), (169, 17198), (174, 17222), (175, 17234), (182, 17285), (236, 17669), (261, 17771), (267, 17810), (271, 17837), (276, 17861), (300, 17990), (318, 18089), (337, 18191), (340, 18212), (348, 18254), (366, 18353), (375, 18416), (388, 18506), (408, 18635), (412, 18668), (427, 18839), (441, 18950), (449, 19016), (453, 19037), (457, 19076), (459, 19091),

Gene: Bud_26 Start: 17169, Stop: 19715, Start Num: 72

Candidate Starts for Bud_26:

(Start: 72 @17169 has 22 MA's), (Start: 76 @17187 has 2 MA's), (98, 17361), (100, 17370), (110, 17445), (122, 17499), (130, 17553), (134, 17568), (135, 17571), (142, 17589), (151, 17652), (154, 17664), (160, 17727), (169, 17790), (172, 17805), (174, 17814), (176, 17835), (180, 17859), (182, 17874), (190, 17961), (191, 17964), (194, 17979), (198, 18000), (200, 18012), (205, 18078), (213, 18141), (214, 18150), (217, 18174), (231, 18255), (233, 18264), (235, 18276), (245, 18318), (259, 18375), (266, 18429), (288, 18537), (294, 18576), (328, 18717), (342, 18813), (345, 18834), (352, 18867), (358, 18900), (359, 18903), (367, 18987), (375, 19032), (376, 19035), (392, 19149), (397, 19182), (406, 19254), (411, 19290), (416, 19362), (425, 19440), (431, 19494), (436, 19518), (452, 19629),

Gene: Candra_29 Start: 16771, Stop: 18975, Start Num: 55

Candidate Starts for Candra_29:

(38, 16612), (47, 16726), (Start: 55 @16771 has 41 MA's), (75, 16882), (77, 16888), (95, 16996), (108, 17038), (119, 17104), (137, 17197), (143, 17224), (160, 17347), (163, 17380), (178, 17470), (185, 17539), (217, 17782), (273, 17920), (325, 18040), (356, 18193), (368, 18256), (375, 18298), (390, 18397), (394, 18418), (397, 18439), (401, 18460), (406, 18511), (409, 18523), (410, 18538), (416, 18619), (425, 18697),

Gene: Chadwick_23 Start: 15059, Stop: 17872, Start Num: 1

Candidate Starts for Chadwick_23:

(Start: 1 @15059 has 49 MA's), (8, 15248), (49, 15596), (74, 15731), (Start: 76 @15737 has 2 MA's), (103, 15830), (114, 15881), (136, 16007), (147, 16073), (151, 16094), (160, 16169), (163, 16202), (174, 16256), (177, 16289), (178, 16292), (180, 16301), (189, 16400), (196, 16433), (210, 16562), (229, 16676), (254, 16727), (281, 16793), (307, 16886), (312, 16919), (335, 17006), (339, 17039), (341, 17051), (348, 17081), (368, 17144), (375, 17186), (385, 17258), (386, 17261), (390, 17285), (393, 17300), (397, 17327), (401, 17348), (411, 17435), (414, 17465), (415, 17468), (419, 17528), (430, 17627), (433, 17639), (435, 17651), (438, 17660), (452, 17789), (455, 17807),

Gene: Chanagan_23 Start: 15937, Stop: 18417, Start Num: 57

Candidate Starts for Chanagan_23:

(Start: 57 @15937 has 60 MA's), (65, 15976), (75, 16039), (Start: 79 @16069 has 1 MA's), (88, 16111), (145, 16318), (149, 16336), (160, 16426), (169, 16489), (174, 16513), (175, 16525), (182, 16576), (236, 16960), (261, 17062), (267, 17101), (271, 17128), (276, 17152), (318, 17380), (337, 17482), (340, 17503), (348, 17545), (366, 17644), (375, 17707), (408, 17926), (412, 17959), (441, 18241), (453, 18328), (457, 18367), (459, 18382),

Gene: Chargerpower_26 Start: 15837, Stop: 18245, Start Num: 52

Candidate Starts for Chargerpower_26:

(Start: 52 @15837 has 7 MA's), (Start: 58 @15855 has 5 MA's), (Start: 62 @15873 has 4 MA's), (65, 15894), (Start: 79 @15990 has 1 MA's), (88, 16032), (120, 16119), (126, 16161), (140, 16215), (154, 16299), (157, 16329), (160, 16362), (163, 16395), (172, 16440), (176, 16470), (179, 16491), (206, 16716), (208, 16731), (209, 16737), (218, 16830), (235, 16902), (263, 16977), (297, 17151), (299, 17163), (303, 17184), (308, 17211), (319, 17262), (323, 17271), (341, 17382), (360, 17469), (371, 17541), (374, 17553), (376, 17565), (379, 17589), (399, 17727), (401, 17739), (403, 17763), (410, 17817), (412, 17829), (426, 17976), (436, 18045), (447, 18135), (456, 18186), (461, 18222),

Gene: Chartreuse_29 Start: 16682, Stop: 18886, Start Num: 55

Candidate Starts for Chartreuse_29:

(38, 16523), (47, 16637), (Start: 55 @16682 has 41 MA's), (75, 16793), (77, 16799), (95, 16907), (108, 16949), (119, 17015), (137, 17108), (143, 17135), (160, 17258), (163, 17291), (178, 17381), (185, 17450), (217, 17693), (273, 17831), (325, 17951), (356, 18104), (368, 18167), (375, 18209), (390, 18308), (394, 18329), (397, 18350), (401, 18371), (406, 18422), (409, 18434), (410, 18449), (416, 18530), (425, 18608),

Gene: CloudWang3_29 Start: 16717, Stop: 18933, Start Num: 55

Candidate Starts for CloudWang3_29:

(47, 16672), (Start: 55 @16717 has 41 MA's), (75, 16828), (108, 16984), (133, 17131), (137, 17143), (159, 17290), (160, 17293), (163, 17326), (178, 17416), (185, 17485), (196, 17560), (217, 17728), (325, 17986), (336, 18031), (356, 18139), (368, 18202), (375, 18244), (390, 18343), (394, 18364), (401, 18406), (406, 18457), (410, 18484), (416, 18565), (425, 18655),

Gene: Conceptll_25 Start: 16819, Stop: 19299, Start Num: 57

Candidate Starts for Conceptll_25:

(Start: 57 @16819 has 60 MA's), (65, 16858), (75, 16921), (77, 16927), (Start: 79 @16951 has 1 MA's), (88, 16993), (145, 17200), (149, 17218), (160, 17308), (169, 17371), (174, 17395), (175, 17407), (182, 17458), (236, 17842), (261, 17944), (267, 17983), (271, 18010), (276, 18034), (300, 18163), (318, 18262), (337, 18364), (340, 18385), (366, 18526), (375, 18589), (408, 18808), (412, 18841), (427, 19012), (441, 19123), (449, 19189), (453, 19210), (457, 19249),

Gene: Conspiracy_22 Start: 15069, Stop: 18410, Start Num: 1

Candidate Starts for Conspiracy_22:

(Start: 1 @15069 has 49 MA's), (27, 15507), (74, 15819), (82, 15897), (84, 15927), (90, 15984), (110, 16131), (112, 16137), (114, 16143), (133, 16269), (137, 16281), (160, 16431), (164, 16467), (169, 16497), (172, 16512), (176, 16542), (177, 16554), (181, 16578), (188, 16647), (199, 16713), (217, 16869), (231, 16938), (232, 16941), (236, 16968), (243, 16992), (269, 17130), (274, 17151), (281, 17196), (289, 17238), (327, 17430), (333, 17460), (336, 17484), (337, 17496), (340, 17517), (348, 17559), (364, 17646), (368, 17682), (372, 17703), (375, 17724), (387, 17802), (390, 17823), (394, 17844), (397, 17865), (401, 17886), (403, 17910), (411, 17973), (419, 18066), (422, 18084), (430, 18165), (433, 18177), (435, 18189), (438, 18198), (443, 18252), (454, 18336), (455, 18345),

Gene: Coog_22 Start: 15213, Stop: 18551, Start Num: 1

Candidate Starts for Coog_22:

(Start: 1 @15213 has 49 MA's), (27, 15651), (74, 15963), (82, 16041), (84, 16071), (90, 16128), (110, 16275), (112, 16281), (132, 16401), (134, 16410), (150, 16491), (151, 16494), (160, 16569), (166, 16614), (169, 16632), (176, 16677), (179, 16698), (202, 16890), (220, 17028), (232, 17076), (249, 17154), (270, 17280), (274, 17292), (278, 17316), (289, 17379), (327, 17571), (333, 17601), (336, 17625), (337, 17637), (348, 17700), (368, 17823), (372, 17844), (375, 17865), (387, 17943), (390, 17964), (397, 18006), (401, 18027), (411, 18114), (414, 18144), (419, 18207), (422, 18225), (430, 18306), (433, 18318), (435, 18330), (438, 18339), (443, 18393), (454, 18477), (458, 18516),

Gene: Cookiedough_29 Start: 16728, Stop: 18932, Start Num: 55

Candidate Starts for Cookiedough_29:

(38, 16569), (47, 16683), (Start: 55 @16728 has 41 MA's), (75, 16839), (77, 16845), (95, 16953), (108, 16995), (119, 17061), (137, 17154), (143, 17181), (160, 17304), (163, 17337), (178, 17427), (185, 17496), (217, 17739), (273, 17877), (325, 17997), (356, 18150), (368, 18213), (375, 18255), (390, 18354), (394, 18375), (397, 18396), (401, 18417), (406, 18468), (409, 18480), (410, 18495), (416, 18576), (425, 18654),

Gene: Crispicous1_23 Start: 15808, Stop: 18288, Start Num: 57

Candidate Starts for Crispicous1_23:

(Start: 57 @15808 has 60 MA's), (65, 15847), (75, 15910), (Start: 79 @15940 has 1 MA's), (88, 15982), (145, 16189), (149, 16207), (160, 16297), (169, 16360), (174, 16384), (175, 16396), (182, 16447), (236, 16831), (261, 16933), (267, 16972), (271, 16999), (276, 17023), (300, 17152), (318, 17251), (337, 17353), (340, 17374), (348, 17416), (366, 17515), (375, 17578), (408, 17797), (412, 17830), (441, 18112), (453, 18199), (457, 18238), (459, 18253),

Gene: Cuco_22 Start: 15243, Stop: 18581, Start Num: 1

Candidate Starts for Cuco_22:

(Start: 1 @15243 has 49 MA's), (27, 15681), (74, 15993), (82, 16071), (84, 16101), (90, 16158), (110, 16305), (112, 16311), (132, 16431), (134, 16440), (150, 16521), (151, 16524), (160, 16599), (166, 16644), (169, 16662), (176, 16707), (179, 16728), (202, 16920), (220, 17058), (232, 17106), (249, 17184), (270, 17310), (274, 17322), (278, 17346), (289, 17409), (327, 17601), (333, 17631), (336, 17655), (337, 17667), (348, 17730), (368, 17853), (372, 17874), (375, 17895), (387, 17973), (390, 17994), (397, 18036), (401, 18057), (411, 18144), (414, 18174), (419, 18237), (422, 18255), (430, 18336), (433, 18348), (435, 18360), (438, 18369), (443, 18423), (454, 18507), (458, 18546),

Gene: Cueyllyss_24 Start: 16510, Stop: 18990, Start Num: 57

Candidate Starts for Cueyllyss_24:

(Start: 57 @16510 has 60 MA's), (65, 16549), (75, 16612), (77, 16618), (Start: 79 @16642 has 1 MA's), (88, 16684), (145, 16891), (149, 16909), (160, 16999), (169, 17062), (174, 17086), (175, 17098), (182, 17149), (236, 17533), (261, 17635), (267, 17674), (271, 17701), (276, 17725), (300, 17854), (318, 17953), (337, 18055), (340, 18076), (343, 18088), (348, 18118), (366, 18217), (375, 18280), (408, 18499), (412, 18532), (441, 18814), (449, 18880), (453, 18901), (457, 18940), (459, 18955),

Gene: DD5_25 Start: 17058, Stop: 19538, Start Num: 57

Candidate Starts for DD5_25:

(Start: 57 @17058 has 60 MA's), (65, 17097), (75, 17160), (Start: 79 @17190 has 1 MA's), (88, 17232), (145, 17439), (149, 17457), (160, 17547), (169, 17610), (174, 17634), (175, 17646), (182, 17697), (236, 18081), (261, 18183), (267, 18222), (271, 18249), (276, 18273), (300, 18402), (318, 18501), (337, 18603), (340, 18624), (348, 18666), (366, 18765), (375, 18828), (408, 19047), (412, 19080), (427, 19251), (441, 19362), (453, 19449), (457, 19488), (459, 19503),

Gene: DaVinci_29 Start: 16736, Stop: 18940, Start Num: 55

Candidate Starts for DaVinci_29:

(38, 16577), (47, 16691), (Start: 55 @16736 has 41 MA's), (75, 16847), (77, 16853), (95, 16961), (108, 17003), (119, 17069), (137, 17162), (143, 17189), (160, 17312), (163, 17345), (178, 17435), (185, 17504), (217, 17747), (273, 17885), (325, 18005), (356, 18158), (368, 18221), (375, 18263), (390, 18362), (394, 18383), (397, 18404), (401, 18425), (406, 18476), (409, 18488), (410, 18503), (416, 18584), (425, 18662),

Gene: Danforth_21 Start: 14528, Stop: 17605, Start Num: 1

Candidate Starts for Danforth_21:

(Start: 1 @14528 has 49 MA's), (4, 14612), (15, 14780), (17, 14804), (20, 14852), (31, 14972), (46, 15044), (73, 15194), (74, 15197), (Start: 76 @15203 has 2 MA's), (122, 15389), (132, 15449), (133,

15455), (147, 15521), (153, 15548), (155, 15563), (159, 15614), (160, 15617), (163, 15650), (169, 15683), (190, 15851), (214, 16034), (217, 16058), (226, 16106), (231, 16127), (232, 16130), (264, 16274), (270, 16331), (277, 16361), (283, 16400), (298, 16472), (302, 16502), (321, 16601), (329, 16631), (336, 16676), (340, 16709), (368, 16874), (372, 16895), (374, 16907), (385, 16988), (390, 17015), (401, 17078), (403, 17102), (407, 17132), (411, 17165), (415, 17198), (419, 17258), (423, 17285), (436, 17384), (438, 17390), (447, 17480), (450, 17501), (455, 17540), (461, 17588),

Gene: DekHockey33_28 Start: 16045, Stop: 18231, Start Num: 91

Candidate Starts for DekHockey33_28:

(Start: 60 @15868 has 1 MA's), (Start: 62 @15877 has 4 MA's), (Start: 91 @16045 has 15 MA's), (132, 16285), (133, 16291), (148, 16360), (156, 16417), (175, 16552), (176, 16561), (182, 16603), (186, 16651), (187, 16654), (201, 16765), (203, 16783), (217, 16888), (226, 16936), (257, 17041), (272, 17101), (283, 17155), (290, 17191), (293, 17215), (295, 17224), (308, 17287), (309, 17308), (313, 17323), (320, 17347), (324, 17359), (337, 17413), (340, 17434), (347, 17464), (383, 17635), (384, 17656), (400, 17740), (438, 18043), (455, 18166), (456, 18178),

Gene: Discoknowium_22 Start: 15358, Stop: 18699, Start Num: 1

Candidate Starts for Discoknowium_22:

(Start: 1 @15358 has 49 MA's), (27, 15796), (74, 16108), (82, 16186), (84, 16216), (90, 16273), (110, 16420), (112, 16426), (114, 16432), (133, 16558), (137, 16570), (160, 16720), (164, 16756), (169, 16786), (172, 16801), (176, 16831), (177, 16843), (181, 16867), (188, 16936), (199, 17002), (217, 17158), (231, 17227), (232, 17230), (236, 17257), (243, 17281), (269, 17419), (274, 17440), (281, 17485), (289, 17527), (327, 17719), (333, 17749), (336, 17773), (337, 17785), (340, 17806), (348, 17848), (364, 17935), (368, 17971), (372, 17992), (375, 18013), (387, 18091), (390, 18112), (394, 18133), (397, 18154), (401, 18175), (403, 18199), (411, 18262), (419, 18355), (422, 18373), (430, 18454), (433, 18466), (435, 18478), (438, 18487), (443, 18541), (454, 18625), (455, 18634),

Gene: Dixon_22 Start: 14547, Stop: 17624, Start Num: 1

Candidate Starts for Dixon_22:

(Start: 1 @14547 has 49 MA's), (4, 14631), (15, 14799), (17, 14823), (20, 14871), (31, 14991), (46, 15063), (73, 15213), (74, 15216), (Start: 76 @15222 has 2 MA's), (122, 15408), (132, 15468), (133, 15474), (147, 15540), (153, 15567), (155, 15582), (159, 15633), (160, 15636), (163, 15669), (169, 15702), (190, 15870), (214, 16053), (217, 16077), (226, 16125), (231, 16146), (232, 16149), (264, 16293), (270, 16350), (277, 16380), (283, 16419), (298, 16491), (302, 16521), (321, 16620), (329, 16650), (336, 16695), (340, 16728), (368, 16893), (372, 16914), (374, 16926), (385, 17007), (390, 17034), (397, 17076), (401, 17097), (403, 17121), (407, 17151), (411, 17184), (415, 17217), (419, 17277), (423, 17304), (436, 17403), (447, 17499), (450, 17520), (455, 17559), (461, 17607),

Gene: Doom_25 Start: 17148, Stop: 19628, Start Num: 57

Candidate Starts for Doom_25:

(Start: 57 @17148 has 60 MA's), (65, 17187), (75, 17250), (Start: 79 @17280 has 1 MA's), (88, 17322), (145, 17529), (149, 17547), (160, 17637), (169, 17700), (174, 17724), (175, 17736), (182, 17787), (236, 18171), (261, 18273), (267, 18312), (276, 18363), (300, 18492), (318, 18591), (337, 18693), (340, 18714), (343, 18726), (348, 18756), (365, 18852), (366, 18855), (375, 18918), (408, 19137), (412, 19170), (427, 19341), (441, 19452), (449, 19518), (453, 19539), (457, 19578), (459, 19593),

Gene: Dorothea_29 Start: 16736, Stop: 18940, Start Num: 55

Candidate Starts for Dorothea_29:

(38, 16577), (47, 16691), (Start: 55 @16736 has 41 MA's), (75, 16847), (95, 16961), (108, 17003), (128, 17126), (137, 17162), (143, 17189), (160, 17312), (163, 17345), (178, 17435), (185, 17504), (217, 17747), (273, 17885), (325, 18005), (356, 18158), (368, 18221), (375, 18263), (390, 18362), (394, 18383), (397, 18404), (401, 18425), (406, 18476), (409, 18488), (410, 18503), (416, 18584), (425, 18662),

Gene: Dublin_21 Start: 15212, Stop: 18550, Start Num: 1

Candidate Starts for Dublin_21:

(Start: 1 @15212 has 49 MA's), (27, 15650), (74, 15962), (80, 16004), (82, 16040), (84, 16070), (90, 16127), (102, 16211), (110, 16274), (112, 16280), (128, 16382), (132, 16400), (151, 16493), (160, 16568), (166, 16613), (169, 16631), (176, 16676), (179, 16697), (202, 16889), (210, 16949), (220, 17027), (232, 17075), (249, 17153), (270, 17279), (274, 17291), (278, 17315), (289, 17378), (327, 17570), (333, 17600), (336, 17624), (337, 17636), (348, 17699), (368, 17822), (372, 17843), (375, 17864), (387, 17942), (390, 17963), (397, 18005), (401, 18026), (404, 18062), (411, 18113), (414, 18143), (419, 18206), (422, 18224), (430, 18305), (433, 18317), (435, 18329), (438, 18338), (443, 18392), (454, 18476), (458, 18515),

Gene: Dynamix_25 Start: 16399, Stop: 18876, Start Num: 57

Candidate Starts for Dynamix_25:

(Start: 57 @16399 has 60 MA's), (Start: 62 @16414 has 4 MA's), (Start: 79 @16528 has 1 MA's), (88, 16570), (145, 16777), (149, 16795), (160, 16885), (169, 16948), (174, 16972), (175, 16984), (182, 17035), (236, 17419), (261, 17521), (267, 17560), (271, 17587), (276, 17611), (300, 17740), (318, 17839), (337, 17941), (340, 17962), (348, 18004), (366, 18103), (375, 18166), (388, 18256), (408, 18385), (412, 18418), (427, 18589), (441, 18700), (449, 18766), (453, 18787), (457, 18826), (459, 18841),

Gene: EagleEye_28 Start: 16836, Stop: 19898, Start Num: 6

Candidate Starts for EagleEye_28:

(Start: 6 @16836 has 3 MA's), (16, 17010), (26, 17127), (41, 17304), (69, 17460), (71, 17466), (84, 17568), (97, 17664), (110, 17772), (112, 17778), (133, 17892), (147, 17958), (153, 17985), (160, 18054), (163, 18087), (164, 18090), (177, 18177), (178, 18180), (187, 18258), (195, 18318), (202, 18378), (245, 18612), (255, 18642), (256, 18645), (262, 18669), (287, 18798), (328, 18975), (332, 18987), (368, 19182), (372, 19203), (385, 19296), (390, 19323), (394, 19344), (397, 19365), (424, 19605), (425, 19623), (432, 19680), (447, 19791),

Gene: Ebony_26 Start: 17224, Stop: 19752, Start Num: 76

Candidate Starts for Ebony_26:

(Start: 72 @17206 has 22 MA's), (Start: 76 @17224 has 2 MA's), (98, 17398), (100, 17407), (110, 17482), (122, 17536), (130, 17590), (134, 17605), (135, 17608), (142, 17626), (151, 17689), (154, 17701), (160, 17764), (169, 17827), (172, 17842), (174, 17851), (176, 17872), (180, 17896), (182, 17911), (190, 17998), (191, 18001), (194, 18016), (198, 18037), (200, 18049), (205, 18115), (210, 18157), (213, 18178), (214, 18187), (217, 18211), (231, 18292), (233, 18301), (235, 18313), (245, 18355), (259, 18412), (266, 18466), (288, 18574), (294, 18613), (328, 18754), (342, 18850), (345, 18871), (352, 18904), (358, 18937), (359, 18940), (367, 19024), (375, 19069), (376, 19072), (392, 19186), (397, 19219), (406, 19291), (411, 19327), (416, 19399), (425, 19477), (431, 19531), (436, 19555), (452, 19666),

Gene: EITiger69_22 Start: 15089, Stop: 17902, Start Num: 1

Candidate Starts for EITiger69_22:

(Start: 1 @15089 has 49 MA's), (8, 15278), (74, 15761), (Start: 76 @15767 has 2 MA's), (103, 15860), (114, 15911), (119, 15947), (136, 16037), (147, 16103), (151, 16124), (160, 16199), (163, 16232), (174, 16286), (177, 16319), (178, 16322), (180, 16331), (189, 16430), (196, 16463), (210, 16592), (254, 16757), (267, 16790), (281, 16823), (304, 16904), (307, 16916), (312, 16949), (335, 17036), (339, 17069), (341, 17081), (348, 17111), (368, 17174), (375, 17216), (385, 17288), (390, 17315), (393, 17330), (397, 17357), (401, 17378), (411, 17465), (414, 17495), (419, 17558), (430, 17657), (433, 17669), (435, 17681), (438, 17690), (455, 17837),

Gene: Epsocamisio_28 Start: 15923, Stop: 18109, Start Num: 91

Candidate Starts for Epsocamisio_28:

(Start: 60 @15746 has 1 MA's), (Start: 62 @15755 has 4 MA's), (Start: 91 @15923 has 15 MA's), (132, 16163), (133, 16169), (148, 16238), (156, 16295), (176, 16439), (182, 16481), (186, 16529), (187, 16532), (201, 16643), (203, 16661), (217, 16766), (226, 16814), (257, 16919), (272, 16979), (283, 17033), (290, 17069), (293, 17093), (295, 17102), (308, 17165), (309, 17186), (313, 17201), (320, 17225), (324, 17237), (337, 17291), (340, 17312), (347, 17342), (383, 17513), (384, 17534), (400, 17618), (438, 17921), (455, 18044), (456, 18056),

Gene: EricB_29 Start: 16728, Stop: 18932, Start Num: 55

Candidate Starts for EricB_29:

(38, 16569), (47, 16683), (Start: 55 @16728 has 41 MA's), (75, 16839), (77, 16845), (95, 16953), (108, 16995), (119, 17061), (137, 17154), (143, 17181), (160, 17304), (163, 17337), (178, 17427), (185, 17496), (217, 17739), (273, 17877), (325, 17997), (356, 18150), (368, 18213), (375, 18255), (390, 18354), (394, 18375), (397, 18396), (401, 18417), (406, 18468), (409, 18480), (410, 18495), (416, 18576), (425, 18654),

Gene: Et2Brutus_25 Start: 17166, Stop: 19712, Start Num: 72

Candidate Starts for Et2Brutus_25:

(Start: 72 @17166 has 22 MA's), (Start: 76 @17184 has 2 MA's), (98, 17358), (100, 17367), (110, 17442), (122, 17496), (130, 17550), (134, 17565), (135, 17568), (142, 17586), (151, 17649), (154, 17661), (160, 17724), (169, 17787), (172, 17802), (174, 17811), (176, 17832), (180, 17856), (182, 17871), (190, 17958), (191, 17961), (194, 17976), (198, 17997), (200, 18009), (205, 18075), (213, 18138), (214, 18147), (217, 18171), (231, 18252), (233, 18261), (235, 18273), (245, 18315), (259, 18372), (266, 18426), (288, 18534), (294, 18573), (328, 18714), (342, 18810), (345, 18831), (352, 18864), (358, 18897), (359, 18900), (367, 18984), (375, 19029), (376, 19032), (392, 19146), (397, 19179), (406, 19251), (411, 19287), (416, 19359), (425, 19437), (431, 19491), (436, 19515), (452, 19626),

Gene: Expelliarmus_21 Start: 14514, Stop: 17591, Start Num: 1

Candidate Starts for Expelliarmus_21:

(Start: 1 @14514 has 49 MA's), (4, 14598), (15, 14766), (17, 14790), (20, 14838), (31, 14958), (46, 15030), (73, 15180), (74, 15183), (Start: 76 @15189 has 2 MA's), (122, 15375), (132, 15435), (133, 15441), (147, 15507), (153, 15534), (155, 15549), (159, 15600), (160, 15603), (163, 15636), (169, 15669), (190, 15837), (214, 16020), (217, 16044), (226, 16092), (231, 16113), (232, 16116), (264, 16260), (270, 16317), (277, 16347), (283, 16386), (298, 16458), (302, 16488), (321, 16587), (329, 16617), (336, 16662), (368, 16860), (372, 16881), (374, 16893), (390, 17001), (401, 17064), (403, 17088), (407, 17118), (411, 17151), (415, 17184), (419, 17244), (423, 17271), (436, 17370), (438, 17376), (447, 17466), (450, 17487), (455, 17526), (461, 17574),

Gene: Eyeball_24 Start: 16155, Stop: 18635, Start Num: 57

Candidate Starts for Eyeball_24:

(Start: 57 @16155 has 60 MA's), (65, 16194), (75, 16257), (Start: 79 @16287 has 1 MA's), (88, 16329), (145, 16536), (149, 16554), (160, 16644), (169, 16707), (174, 16731), (175, 16743), (182, 16794), (236, 17178), (261, 17280), (267, 17319), (271, 17346), (276, 17370), (300, 17499), (318, 17598), (337, 17700), (340, 17721), (343, 17733), (348, 17763), (366, 17862), (375, 17925), (388, 18015), (408, 18144), (412, 18177), (441, 18459), (453, 18546), (457, 18585), (459, 18600),

Gene: FatCactus_24 Start: 14668, Stop: 17589, Start Num: 1

Candidate Starts for FatCactus_24:

(Start: 1 @14668 has 49 MA's), (Start: 2 @14707 has 1 MA's), (8, 14866), (14, 14911), (18, 14956), (19, 14977), (23, 15004), (25, 15049), (29, 15088), (30, 15097), (33, 15118), (56, 15220), (Start: 76 @15313 has 2 MA's), (85, 15346), (104, 15400), (117, 15445), (137, 15535), (143, 15562), (151, 15610), (153, 15616), (160, 15685), (164, 15721), (169, 15751), (174, 15775), (185, 15874), (188,

15895), (192, 15925), (219, 16138), (220, 16141), (232, 16189), (248, 16258), (270, 16381), (280, 16435), (282, 16447), (298, 16528), (304, 16570), (333, 16708), (345, 16762), (374, 16930), (386, 17014), (390, 17038), (393, 17053), (394, 17059), (401, 17101), (435, 17386), (436, 17389), (441, 17434), (446, 17479), (453, 17518), (460, 17566),

Gene: Fibonacci_26 Start: 17160, Stop: 19706, Start Num: 72

Candidate Starts for Fibonacci_26:

(Start: 72 @17160 has 22 MA's), (Start: 76 @17178 has 2 MA's), (98, 17352), (100, 17361), (110, 17436), (130, 17544), (134, 17559), (135, 17562), (142, 17580), (151, 17643), (154, 17655), (160, 17718), (169, 17781), (172, 17796), (174, 17805), (176, 17826), (180, 17850), (182, 17865), (190, 17952), (191, 17955), (194, 17970), (198, 17991), (200, 18003), (205, 18069), (210, 18111), (213, 18132), (214, 18141), (217, 18165), (231, 18246), (233, 18255), (235, 18267), (245, 18309), (259, 18366), (266, 18420), (288, 18528), (294, 18567), (328, 18708), (342, 18804), (345, 18825), (352, 18858), (358, 18891), (359, 18894), (367, 18978), (375, 19023), (376, 19026), (392, 19140), (397, 19173), (406, 19245), (411, 19281), (416, 19353), (425, 19431), (431, 19485), (436, 19509), (452, 19620),

Gene: Flaverint_26 Start: 17157, Stop: 19703, Start Num: 72

Candidate Starts for Flaverint_26:

(Start: 72 @17157 has 22 MA's), (Start: 76 @17175 has 2 MA's), (98, 17349), (100, 17358), (110, 17433), (122, 17487), (130, 17541), (134, 17556), (135, 17559), (142, 17577), (151, 17640), (154, 17652), (160, 17715), (169, 17778), (172, 17793), (174, 17802), (176, 17823), (180, 17847), (182, 17862), (190, 17949), (191, 17952), (194, 17967), (198, 17988), (200, 18000), (205, 18066), (214, 18138), (217, 18162), (231, 18243), (233, 18252), (235, 18264), (245, 18306), (259, 18363), (266, 18417), (288, 18525), (294, 18564), (328, 18705), (342, 18801), (345, 18822), (352, 18855), (358, 18888), (359, 18891), (367, 18975), (375, 19020), (376, 19023), (392, 19137), (397, 19170), (406, 19242), (411, 19278), (416, 19350), (425, 19428), (431, 19482), (436, 19506), (452, 19617),

Gene: ForGetIt_22 Start: 15094, Stop: 18435, Start Num: 1

Candidate Starts for ForGetIt_22:

(Start: 1 @15094 has 49 MA's), (27, 15532), (74, 15844), (82, 15922), (84, 15952), (90, 16009), (110, 16156), (112, 16162), (114, 16168), (133, 16294), (137, 16306), (160, 16456), (164, 16492), (169, 16522), (172, 16537), (176, 16567), (177, 16579), (181, 16603), (188, 16672), (199, 16738), (217, 16894), (231, 16963), (232, 16966), (236, 16993), (243, 17017), (269, 17155), (274, 17176), (281, 17221), (289, 17263), (327, 17455), (333, 17485), (336, 17509), (337, 17521), (340, 17542), (348, 17584), (364, 17671), (368, 17707), (372, 17728), (375, 17749), (387, 17827), (390, 17848), (394, 17869), (397, 17890), (401, 17911), (403, 17935), (411, 17998), (419, 18091), (422, 18109), (430, 18190), (433, 18202), (435, 18214), (438, 18223), (443, 18277), (454, 18361), (455, 18370),

Gene: Francis47_24 Start: 16902, Stop: 19382, Start Num: 57

Candidate Starts for Francis47_24:

(Start: 57 @16902 has 60 MA's), (65, 16941), (75, 17004), (Start: 79 @17034 has 1 MA's), (88, 17076), (145, 17283), (149, 17301), (160, 17391), (169, 17454), (174, 17478), (175, 17490), (182, 17541), (236, 17925), (261, 18027), (267, 18066), (271, 18093), (276, 18117), (318, 18345), (337, 18447), (340, 18468), (343, 18480), (348, 18510), (366, 18609), (375, 18672), (408, 18891), (412, 18924), (441, 19206), (453, 19293), (457, 19332), (461, 19362),

Gene: Fushigi_25 Start: 16774, Stop: 19254, Start Num: 57

Candidate Starts for Fushigi_25:

(Start: 57 @16774 has 60 MA's), (65, 16813), (75, 16876), (Start: 79 @16906 has 1 MA's), (88, 16948), (145, 17155), (149, 17173), (160, 17263), (169, 17326), (174, 17350), (175, 17362), (182, 17413), (236, 17797), (261, 17899), (267, 17938), (268, 17953), (271, 17965), (276, 17989), (300, 18118), (318, 18217), (337, 18319), (340, 18340), (343, 18352), (348, 18382), (366, 18481), (375, 18544),

(408, 18763), (412, 18796), (441, 19078), (449, 19144), (453, 19165), (457, 19204), (461, 19234),

Gene: Gail_25 Start: 15723, Stop: 18137, Start Num: 52

Candidate Starts for Gail_25:

(Start: 52 @15723 has 7 MA's), (Start: 58 @15741 has 5 MA's), (64, 15774), (Start: 79 @15876 has 1 MA's), (88, 15918), (115, 15960), (116, 15972), (136, 16086), (145, 16140), (154, 16185), (160, 16248), (163, 16281), (179, 16377), (188, 16461), (206, 16602), (226, 16746), (240, 16800), (247, 16815), (258, 16842), (260, 16854), (297, 17040), (332, 17196), (344, 17286), (356, 17337), (365, 17397), (371, 17430), (374, 17442), (378, 17475), (380, 17484), (399, 17616), (401, 17628), (403, 17652), (410, 17706), (420, 17823), (436, 17934), (444, 18009), (456, 18075), (461, 18111),

Gene: Garak_30 Start: 16733, Stop: 18937, Start Num: 55

Candidate Starts for Garak_30:

(38, 16574), (47, 16688), (Start: 55 @16733 has 41 MA's), (75, 16844), (108, 17000), (133, 17147), (137, 17159), (160, 17309), (163, 17342), (178, 17432), (185, 17501), (217, 17744), (273, 17882), (325, 18002), (356, 18155), (368, 18218), (375, 18260), (390, 18359), (394, 18380), (397, 18401), (401, 18422), (406, 18473), (409, 18485), (410, 18500), (416, 18581), (425, 18659),

Gene: George_21 Start: 15244, Stop: 18582, Start Num: 1

Candidate Starts for George_21:

(Start: 1 @15244 has 49 MA's), (27, 15682), (74, 15994), (82, 16072), (84, 16102), (90, 16159), (102, 16243), (110, 16306), (112, 16312), (132, 16432), (150, 16522), (151, 16525), (160, 16600), (166, 16645), (169, 16663), (176, 16708), (179, 16729), (202, 16921), (220, 17059), (232, 17107), (249, 17185), (270, 17311), (274, 17323), (278, 17347), (289, 17410), (327, 17602), (333, 17632), (336, 17656), (337, 17668), (348, 17731), (368, 17854), (372, 17875), (375, 17896), (387, 17974), (390, 17995), (397, 18037), (401, 18058), (411, 18145), (414, 18175), (419, 18238), (422, 18256), (430, 18337), (433, 18349), (435, 18361), (438, 18370), (443, 18424), (458, 18547),

Gene: Ghouboy_22 Start: 15349, Stop: 18750, Start Num: 1

Candidate Starts for Ghouboy_22:

(Start: 1 @15349 has 49 MA's), (3, 15409), (10, 15562), (13, 15601), (27, 15787), (45, 16015), (48, 16027), (50, 16039), (74, 16171), (82, 16249), (84, 16279), (90, 16336), (110, 16483), (112, 16489), (114, 16495), (133, 16621), (137, 16633), (160, 16783), (164, 16819), (169, 16849), (172, 16864), (176, 16894), (177, 16906), (181, 16930), (188, 16999), (199, 17065), (217, 17221), (231, 17290), (232, 17293), (236, 17320), (243, 17344), (269, 17482), (274, 17503), (281, 17536), (289, 17578), (327, 17770), (333, 17800), (336, 17824), (337, 17836), (340, 17857), (348, 17899), (364, 17986), (368, 18022), (372, 18043), (375, 18064), (387, 18142), (390, 18163), (394, 18184), (397, 18205), (401, 18226), (403, 18250), (411, 18313), (419, 18406), (422, 18424), (430, 18505), (433, 18517), (435, 18529), (438, 18538), (443, 18592), (454, 18676), (455, 18685),

Gene: Gilberta_26 Start: 17154, Stop: 19700, Start Num: 72

Candidate Starts for Gilberta_26:

(Start: 72 @17154 has 22 MA's), (Start: 76 @17172 has 2 MA's), (98, 17346), (100, 17355), (110, 17430), (122, 17484), (130, 17538), (134, 17553), (135, 17556), (142, 17574), (151, 17637), (154, 17649), (160, 17712), (169, 17775), (172, 17790), (174, 17799), (176, 17820), (180, 17844), (182, 17859), (190, 17946), (191, 17949), (194, 17964), (198, 17985), (200, 17997), (205, 18063), (214, 18135), (217, 18159), (231, 18240), (233, 18249), (235, 18261), (245, 18303), (259, 18360), (266, 18414), (288, 18522), (294, 18561), (328, 18702), (342, 18798), (345, 18819), (352, 18852), (358, 18885), (359, 18888), (367, 18972), (375, 19017), (376, 19020), (392, 19134), (397, 19167), (406, 19239), (411, 19275), (416, 19347), (425, 19425), (431, 19479), (436, 19503), (452, 19614),

Gene: Gladiator_29 Start: 16707, Stop: 18923, Start Num: 55

Candidate Starts for Gladiator_29:

(47, 16662), (Start: 55 @16707 has 41 MA's), (75, 16818), (108, 16974), (133, 17121), (137, 17133), (159, 17280), (160, 17283), (163, 17316), (178, 17406), (185, 17475), (196, 17550), (217, 17718), (325, 17976), (336, 18021), (356, 18129), (368, 18192), (375, 18234), (390, 18333), (394, 18354), (401, 18396), (406, 18447), (410, 18474), (416, 18555), (425, 18645),

Gene: Gompeii16_24 Start: 16850, Stop: 19330, Start Num: 57

Candidate Starts for Gompeii16_24:

(Start: 57 @16850 has 60 MA's), (65, 16889), (75, 16952), (Start: 79 @16982 has 1 MA's), (88, 17024), (145, 17231), (149, 17249), (160, 17339), (169, 17402), (174, 17426), (175, 17438), (182, 17489), (236, 17873), (261, 17975), (267, 18014), (268, 18029), (271, 18041), (276, 18065), (318, 18293), (337, 18395), (340, 18416), (343, 18428), (348, 18458), (366, 18557), (375, 18620), (408, 18839), (412, 18872), (441, 19154), (453, 19241), (457, 19280), (461, 19310),

Gene: GreedyLawyer_29 Start: 16735, Stop: 18939, Start Num: 55

Candidate Starts for GreedyLawyer_29:

(38, 16576), (47, 16690), (Start: 55 @16735 has 41 MA's), (75, 16846), (77, 16852), (95, 16960), (108, 17002), (119, 17068), (137, 17161), (143, 17188), (160, 17311), (163, 17344), (178, 17434), (185, 17503), (217, 17746), (273, 17884), (325, 18004), (356, 18157), (368, 18220), (375, 18262), (390, 18361), (394, 18382), (397, 18403), (401, 18424), (406, 18475), (409, 18487), (410, 18502), (416, 18583), (425, 18661),

Gene: Groundhog_21 Start: 14515, Stop: 17592, Start Num: 1

Candidate Starts for Groundhog_21:

(Start: 1 @14515 has 49 MA's), (4, 14599), (15, 14767), (17, 14791), (20, 14839), (31, 14959), (46, 15031), (73, 15181), (74, 15184), (Start: 76 @15190 has 2 MA's), (122, 15376), (132, 15436), (133, 15442), (147, 15508), (153, 15535), (155, 15550), (159, 15601), (160, 15604), (163, 15637), (169, 15670), (190, 15838), (214, 16021), (217, 16045), (226, 16093), (231, 16114), (232, 16117), (264, 16261), (270, 16318), (277, 16348), (283, 16387), (298, 16459), (302, 16489), (321, 16588), (329, 16618), (336, 16663), (340, 16696), (368, 16861), (372, 16882), (374, 16894), (385, 16975), (390, 17002), (401, 17065), (403, 17089), (407, 17119), (411, 17152), (415, 17185), (419, 17245), (423, 17272), (436, 17371), (438, 17377), (447, 17467), (450, 17488), (455, 17527), (461, 17575),

Gene: Gruunaga_29 Start: 16707, Stop: 18923, Start Num: 55

Candidate Starts for Gruunaga_29:

(47, 16662), (Start: 55 @16707 has 41 MA's), (75, 16818), (108, 16974), (133, 17121), (137, 17133), (159, 17280), (160, 17283), (163, 17316), (178, 17406), (185, 17475), (196, 17550), (217, 17718), (325, 17976), (336, 18021), (356, 18129), (368, 18192), (375, 18234), (390, 18333), (394, 18354), (401, 18396), (406, 18447), (410, 18474), (416, 18555), (425, 18645),

Gene: Hammer_29 Start: 16722, Stop: 18938, Start Num: 55

Candidate Starts for Hammer_29:

(47, 16677), (Start: 55 @16722 has 41 MA's), (75, 16833), (108, 16989), (133, 17136), (137, 17148), (159, 17295), (160, 17298), (163, 17331), (178, 17421), (185, 17490), (196, 17565), (217, 17733), (325, 17991), (336, 18036), (356, 18144), (368, 18207), (375, 18249), (390, 18348), (394, 18369), (401, 18411), (406, 18462), (410, 18489), (416, 18570), (425, 18660),

Gene: HarryOW_25 Start: 16725, Stop: 19205, Start Num: 57

Candidate Starts for HarryOW_25:

(Start: 57 @16725 has 60 MA's), (65, 16764), (75, 16827), (77, 16833), (Start: 79 @16857 has 1 MA's), (88, 16899), (145, 17106), (149, 17124), (160, 17214), (169, 17277), (174, 17301), (175, 17313), (182, 17364), (236, 17748), (261, 17850), (267, 17889), (271, 17916), (276, 17940), (318, 18168), (337, 18270), (340, 18291), (343, 18303), (348, 18333), (365, 18429), (366, 18432), (375, 18495), (408, 18714), (412, 18747), (441, 19029), (453, 19116), (457, 19155), (459, 19170),

Gene: Helmet_30 Start: 16733, Stop: 18937, Start Num: 55

Candidate Starts for Helmet_30:

(38, 16574), (47, 16688), (Start: 55 @16733 has 41 MA's), (75, 16844), (108, 17000), (133, 17147), (137, 17159), (160, 17309), (163, 17342), (178, 17432), (185, 17501), (217, 17744), (273, 17882), (325, 18002), (356, 18155), (368, 18218), (375, 18260), (390, 18359), (394, 18380), (397, 18401), (401, 18422), (406, 18473), (409, 18485), (410, 18500), (416, 18581), (425, 18659),

Gene: Herbertwm_23 Start: 15323, Stop: 17746, Start Num: 52

Candidate Starts for Herbertwm_23:

(Start: 52 @15323 has 7 MA's), (Start: 58 @15341 has 5 MA's), (61, 15353), (64, 15374), (65, 15380), (77, 15452), (88, 15518), (92, 15530), (120, 15593), (128, 15641), (131, 15656), (142, 15689), (143, 15704), (147, 15731), (153, 15758), (157, 15794), (159, 15824), (160, 15827), (161, 15836), (174, 15914), (176, 15935), (177, 15947), (182, 15977), (193, 16073), (199, 16109), (203, 16160), (212, 16238), (229, 16343), (238, 16388), (268, 16526), (287, 16616), (314, 16766), (335, 16859), (340, 16901), (356, 16976), (366, 17039), (386, 17156), (390, 17180), (394, 17201), (397, 17222), (403, 17267), (406, 17294), (411, 17330), (432, 17528), (436, 17549), (456, 17690),

Gene: HermioneGrange_24 Start: 16299, Stop: 18779, Start Num: 57

Candidate Starts for HermioneGrange_24:

(Start: 57 @16299 has 60 MA's), (65, 16338), (75, 16401), (Start: 79 @16431 has 1 MA's), (88, 16473), (145, 16680), (149, 16698), (160, 16788), (169, 16851), (174, 16875), (175, 16887), (182, 16938), (236, 17322), (261, 17424), (267, 17463), (271, 17490), (276, 17514), (300, 17643), (318, 17742), (337, 17844), (340, 17865), (343, 17877), (348, 17907), (366, 18006), (375, 18069), (388, 18159), (408, 18288), (412, 18321), (427, 18492), (441, 18603), (449, 18669), (453, 18690), (457, 18729), (461, 18759),

Gene: Hexamo_29 Start: 16689, Stop: 18905, Start Num: 55

Candidate Starts for Hexamo_29:

(47, 16644), (Start: 55 @16689 has 41 MA's), (75, 16800), (108, 16956), (133, 17103), (137, 17115), (159, 17262), (160, 17265), (163, 17298), (178, 17388), (185, 17457), (196, 17532), (217, 17700), (325, 17958), (336, 18003), (356, 18111), (368, 18174), (375, 18216), (390, 18315), (394, 18336), (401, 18378), (406, 18429), (410, 18456), (416, 18537), (425, 18627),

Gene: Hoot_29 Start: 16714, Stop: 18918, Start Num: 55

Candidate Starts for Hoot_29:

(38, 16555), (47, 16669), (Start: 55 @16714 has 41 MA's), (75, 16825), (77, 16831), (95, 16939), (108, 16981), (119, 17047), (137, 17140), (143, 17167), (160, 17290), (163, 17323), (178, 17413), (185, 17482), (217, 17725), (273, 17863), (325, 17983), (356, 18136), (368, 18199), (375, 18241), (390, 18340), (394, 18361), (397, 18382), (401, 18403), (406, 18454), (409, 18466), (410, 18481), (416, 18562), (425, 18640),

Gene: Hope4ever_24 Start: 16765, Stop: 19242, Start Num: 57

Candidate Starts for Hope4ever_24:

(Start: 57 @16765 has 60 MA's), (Start: 62 @16780 has 4 MA's), (Start: 79 @16894 has 1 MA's), (88, 16936), (145, 17143), (149, 17161), (160, 17251), (169, 17314), (174, 17338), (175, 17350), (182, 17401), (197, 17527), (236, 17785), (261, 17887), (267, 17926), (268, 17941), (271, 17953), (276, 17977), (300, 18106), (318, 18205), (337, 18307), (340, 18328), (348, 18370), (366, 18469), (375, 18532), (408, 18751), (412, 18784), (441, 19066), (449, 19132), (453, 19153), (457, 19192), (459, 19207),

Gene: HuhtaEnerson15_22 Start: 15244, Stop: 18582, Start Num: 1

Candidate Starts for HuhtaEnerson15_22:

(Start: 1 @15244 has 49 MA's), (27, 15682), (74, 15994), (82, 16072), (84, 16102), (90, 16159), (102, 16243), (110, 16306), (112, 16312), (132, 16432), (150, 16522), (151, 16525), (160, 16600), (166, 16645), (169, 16663), (171, 16675), (176, 16708), (179, 16729), (202, 16921), (220, 17059), (232, 17107), (270, 17311), (274, 17323), (278, 17347), (289, 17410), (327, 17602), (333, 17632), (336, 17656), (337, 17668), (348, 17731), (368, 17854), (372, 17875), (375, 17896), (387, 17974), (390, 17995), (397, 18037), (401, 18058), (411, 18145), (414, 18175), (419, 18238), (422, 18256), (430, 18337), (433, 18349), (435, 18361), (438, 18370), (443, 18424), (454, 18508), (455, 18517), (458, 18547),

Gene: Hutc2_26 Start: 17160, Stop: 19706, Start Num: 72

Candidate Starts for Hutc2_26:

(Start: 72 @17160 has 22 MA's), (Start: 76 @17178 has 2 MA's), (98, 17352), (100, 17361), (110, 17436), (122, 17490), (130, 17544), (134, 17559), (135, 17562), (142, 17580), (151, 17643), (154, 17655), (160, 17718), (169, 17781), (172, 17796), (174, 17805), (176, 17826), (180, 17850), (182, 17865), (190, 17952), (191, 17955), (194, 17970), (198, 17991), (200, 18003), (205, 18069), (214, 18141), (217, 18165), (231, 18246), (233, 18255), (235, 18267), (245, 18309), (259, 18366), (266, 18420), (288, 18528), (294, 18567), (328, 18708), (342, 18804), (345, 18825), (352, 18858), (358, 18891), (359, 18894), (367, 18978), (375, 19023), (376, 19026), (392, 19140), (397, 19173), (406, 19245), (411, 19281), (416, 19353), (425, 19431), (431, 19485), (436, 19509), (452, 19620),

Gene: ILeeKay_26 Start: 16526, Stop: 19006, Start Num: 57

Candidate Starts for ILeeKay_26:

(Start: 57 @16526 has 60 MA's), (65, 16565), (75, 16628), (Start: 79 @16658 has 1 MA's), (88, 16700), (145, 16907), (149, 16925), (160, 17015), (169, 17078), (174, 17102), (175, 17114), (182, 17165), (236, 17549), (261, 17651), (267, 17690), (271, 17717), (276, 17741), (318, 17969), (337, 18071), (340, 18092), (343, 18104), (348, 18134), (366, 18233), (375, 18296), (408, 18515), (412, 18548), (441, 18830), (453, 18917), (457, 18956), (459, 18971),

Gene: Indra_29 Start: 16734, Stop: 18938, Start Num: 55

Candidate Starts for Indra_29:

(47, 16689), (Start: 55 @16734 has 41 MA's), (75, 16845), (108, 17001), (133, 17148), (137, 17160), (159, 17307), (160, 17310), (163, 17343), (178, 17433), (185, 17502), (196, 17577), (217, 17745), (325, 18003), (336, 18048), (356, 18156), (368, 18219), (375, 18261), (390, 18360), (394, 18381), (397, 18402), (401, 18423), (406, 18474), (409, 18486), (410, 18501), (416, 18582), (425, 18660),

Gene: Insomnia_26 Start: 17215, Stop: 19761, Start Num: 72

Candidate Starts for Insomnia_26:

(Start: 72 @17215 has 22 MA's), (Start: 76 @17233 has 2 MA's), (98, 17407), (100, 17416), (110, 17491), (122, 17545), (130, 17599), (134, 17614), (135, 17617), (142, 17635), (151, 17698), (154, 17710), (160, 17773), (169, 17836), (172, 17851), (174, 17860), (176, 17881), (180, 17905), (182, 17920), (190, 18007), (191, 18010), (194, 18025), (198, 18046), (200, 18058), (205, 18124), (214, 18196), (217, 18220), (231, 18301), (233, 18310), (235, 18322), (245, 18364), (259, 18421), (266, 18475), (288, 18583), (294, 18622), (328, 18763), (342, 18859), (345, 18880), (352, 18913), (358, 18946), (359, 18949), (367, 19033), (375, 19078), (376, 19081), (392, 19195), (397, 19228), (406, 19300), (411, 19336), (416, 19408), (425, 19486), (431, 19540), (436, 19564), (452, 19675),

Gene: IronMan_28 Start: 18329, Stop: 20707, Start Num: 58

Candidate Starts for IronMan_28:

(Start: 52 @18311 has 7 MA's), (Start: 58 @18329 has 5 MA's), (64, 18362), (65, 18368), (Start: 79 @18464 has 1 MA's), (88, 18506), (118, 18569), (119, 18572), (124, 18614), (136, 18662), (138, 18668), (140, 18677), (145, 18716), (152, 18752), (154, 18761), (160, 18824), (163, 18857), (172, 18902), (175, 18923), (176, 18932), (188, 19037), (206, 19178), (232, 19346), (233, 19352), (239, 19373), (240, 19376), (260, 19424), (261, 19430), (297, 19610), (338, 19820), (344, 19856), (356,

19907), (365, 19967), (371, 20000), (374, 20012), (378, 20045), (379, 20048), (399, 20186), (401, 20198), (405, 20240), (412, 20288), (413, 20294), (436, 20504),

Gene: Isiphiwo_29 Start: 16726, Stop: 18930, Start Num: 55

Candidate Starts for Isiphiwo_29:

(Start: 55 @16726 has 41 MA's), (75, 16837), (77, 16843), (95, 16951), (108, 16993), (119, 17059), (137, 17152), (143, 17179), (160, 17302), (163, 17335), (178, 17425), (185, 17494), (217, 17737), (273, 17875), (325, 17995), (356, 18148), (368, 18211), (375, 18253), (390, 18352), (394, 18373), (397, 18394), (401, 18415), (406, 18466), (409, 18478), (410, 18493), (416, 18574), (425, 18652),

Gene: Iwokeuplikedis_27 Start: 16605, Stop: 18896, Start Num: 52

Candidate Starts for Iwokeuplikedis_27:

(44, 16563), (Start: 52 @16605 has 7 MA's), (Start: 58 @16623 has 5 MA's), (61, 16635), (64, 16656), (65, 16662), (Start: 79 @16758 has 1 MA's), (88, 16800), (118, 16863), (125, 16911), (129, 16932), (139, 16959), (154, 17046), (156, 17073), (160, 17109), (163, 17142), (167, 17166), (172, 17187), (174, 17196), (176, 17217), (180, 17241), (182, 17259), (207, 17457), (215, 17529), (216, 17535), (217, 17544), (226, 17592), (228, 17601), (249, 17667), (265, 17724), (315, 17913), (317, 17925), (326, 17958), (335, 18003), (341, 18054), (355, 18114), (356, 18120), (366, 18183), (390, 18324), (394, 18345), (397, 18366), (399, 18375), (401, 18387), (403, 18411), (411, 18474), (436, 18693),

Gene: JC27_26 Start: 17262, Stop: 19742, Start Num: 57

Candidate Starts for JC27_26:

(Start: 57 @17262 has 60 MA's), (65, 17301), (70, 17346), (75, 17364), (77, 17370), (Start: 79 @17394 has 1 MA's), (88, 17436), (145, 17643), (149, 17661), (160, 17751), (169, 17814), (175, 17850), (182, 17901), (236, 18285), (261, 18387), (267, 18426), (268, 18441), (271, 18453), (276, 18477), (318, 18705), (337, 18807), (340, 18828), (348, 18870), (366, 18969), (375, 19032), (408, 19251), (412, 19284), (441, 19566), (449, 19632), (453, 19653), (457, 19692), (459, 19707),

Gene: JSwag_28 Start: 15741, Stop: 18095, Start Num: 62

Candidate Starts for JSwag_28:

(Start: 60 @15732 has 1 MA's), (Start: 62 @15741 has 4 MA's), (Start: 91 @15909 has 15 MA's), (132, 16149), (133, 16155), (148, 16224), (156, 16281), (176, 16425), (182, 16467), (186, 16515), (187, 16518), (201, 16629), (203, 16647), (217, 16752), (226, 16800), (257, 16905), (272, 16965), (283, 17019), (290, 17055), (293, 17079), (295, 17088), (308, 17151), (309, 17172), (313, 17187), (320, 17211), (324, 17223), (337, 17277), (340, 17298), (347, 17328), (383, 17499), (384, 17520), (400, 17604), (438, 17907), (455, 18030), (456, 18042),

Gene: Jaan_29 Start: 18718, Stop: 21096, Start Num: 58

Candidate Starts for Jaan_29:

(Start: 52 @18700 has 7 MA's), (Start: 58 @18718 has 5 MA's), (64, 18751), (65, 18757), (Start: 79 @18853 has 1 MA's), (88, 18895), (136, 19051), (140, 19066), (144, 19096), (145, 19105), (152, 19141), (154, 19150), (160, 19213), (163, 19246), (172, 19291), (175, 19312), (176, 19321), (188, 19426), (206, 19567), (232, 19735), (233, 19741), (260, 19813), (292, 19981), (297, 19999), (332, 20155), (338, 20209), (344, 20245), (356, 20296), (365, 20356), (371, 20389), (374, 20401), (378, 20434), (379, 20437), (399, 20575), (401, 20587), (405, 20629), (410, 20665), (412, 20677), (413, 20683), (436, 20893),

Gene: Jabiru_22 Start: 15139, Stop: 17952, Start Num: 1

Candidate Starts for Jabiru_22:

(Start: 1 @15139 has 49 MA's), (8, 15328), (49, 15676), (74, 15811), (Start: 76 @15817 has 2 MA's), (103, 15910), (114, 15961), (119, 15997), (136, 16087), (147, 16153), (151, 16174), (160, 16249), (163, 16282), (174, 16336), (177, 16369), (178, 16372), (180, 16381), (189, 16480), (196, 16513), (210, 16642), (254, 16807), (267, 16840), (281, 16873), (304, 16954), (307, 16966), (312, 16999),

(334, 17077), (335, 17086), (346, 17152), (348, 17161), (368, 17224), (375, 17266), (385, 17338), (390, 17365), (393, 17380), (397, 17407), (401, 17428), (411, 17515), (414, 17545), (419, 17608), (430, 17707), (433, 17719), (435, 17731), (438, 17740), (455, 17887),

Gene: Jabith_26 Start: 17215, Stop: 19761, Start Num: 72

Candidate Starts for Jabith_26:

(Start: 72 @17215 has 22 MA's), (Start: 76 @17233 has 2 MA's), (98, 17407), (100, 17416), (110, 17491), (122, 17545), (130, 17599), (134, 17614), (135, 17617), (142, 17635), (151, 17698), (154, 17710), (160, 17773), (169, 17836), (172, 17851), (174, 17860), (176, 17881), (180, 17905), (182, 17920), (190, 18007), (191, 18010), (194, 18025), (198, 18046), (200, 18058), (205, 18124), (214, 18196), (217, 18220), (231, 18301), (233, 18310), (235, 18322), (245, 18364), (259, 18421), (266, 18475), (288, 18583), (294, 18622), (328, 18763), (342, 18859), (345, 18880), (352, 18913), (358, 18946), (359, 18949), (367, 19033), (375, 19078), (376, 19081), (392, 19195), (397, 19228), (406, 19300), (411, 19336), (416, 19408), (425, 19486), (431, 19540), (436, 19564), (452, 19675),

Gene: JackSparrow_25 Start: 16702, Stop: 19182, Start Num: 57

Candidate Starts for JackSparrow_25:

(Start: 57 @16702 has 60 MA's), (65, 16741), (75, 16804), (Start: 79 @16834 has 1 MA's), (88, 16876), (145, 17083), (149, 17101), (160, 17191), (169, 17254), (174, 17278), (175, 17290), (182, 17341), (236, 17725), (261, 17827), (267, 17866), (271, 17893), (276, 17917), (300, 18046), (318, 18145), (337, 18247), (340, 18268), (343, 18280), (348, 18310), (366, 18409), (375, 18472), (408, 18691), (412, 18724), (427, 18895), (441, 19006), (449, 19072), (453, 19093), (457, 19132), (461, 19162),

Gene: Jasper_25 Start: 16203, Stop: 18683, Start Num: 57

Candidate Starts for Jasper_25:

(Start: 57 @16203 has 60 MA's), (65, 16242), (75, 16305), (Start: 79 @16335 has 1 MA's), (88, 16377), (145, 16584), (149, 16602), (160, 16692), (169, 16755), (174, 16779), (175, 16791), (182, 16842), (236, 17226), (261, 17328), (267, 17367), (271, 17394), (276, 17418), (300, 17547), (318, 17646), (337, 17748), (340, 17769), (343, 17781), (348, 17811), (365, 17907), (366, 17910), (375, 17973), (408, 18192), (412, 18225), (441, 18507), (453, 18594), (457, 18633),

Gene: Jeeves_25 Start: 15770, Stop: 18166, Start Num: 58

Candidate Starts for Jeeves_25:

(Start: 51 @15749 has 1 MA's), (Start: 58 @15770 has 5 MA's), (Start: 79 @15905 has 1 MA's), (88, 15947), (115, 15989), (116, 16001), (136, 16115), (145, 16169), (154, 16214), (160, 16277), (163, 16310), (179, 16406), (206, 16631), (230, 16790), (240, 16829), (247, 16844), (260, 16883), (297, 17069), (344, 17315), (356, 17366), (365, 17426), (371, 17459), (374, 17471), (378, 17504), (396, 17627), (399, 17645), (401, 17657), (403, 17681), (410, 17735), (412, 17747), (420, 17852), (426, 17894), (436, 17963), (444, 18038), (456, 18104), (461, 18140),

Gene: Jeffabunny_29 Start: 16741, Stop: 18957, Start Num: 55

Candidate Starts for Jeffabunny_29:

(47, 16696), (Start: 55 @16741 has 41 MA's), (75, 16852), (108, 17008), (133, 17155), (137, 17167), (159, 17314), (160, 17317), (163, 17350), (178, 17440), (185, 17509), (196, 17584), (217, 17752), (325, 18010), (336, 18055), (356, 18163), (368, 18226), (375, 18268), (390, 18367), (394, 18388), (401, 18430), (406, 18481), (410, 18508), (416, 18589), (425, 18679),

Gene: JewelBug_29 Start: 16740, Stop: 18944, Start Num: 55

Candidate Starts for JewelBug_29:

(38, 16581), (47, 16695), (Start: 55 @16740 has 41 MA's), (75, 16851), (77, 16857), (95, 16965), (108, 17007), (119, 17073), (137, 17166), (143, 17193), (160, 17316), (163, 17349), (178, 17439), (185, 17508), (217, 17751), (273, 17889), (325, 18009), (356, 18162), (368, 18225), (375, 18267), (390, 18366), (394, 18387), (397, 18408), (401, 18429), (406, 18480), (409, 18492), (410, 18507), (416,

18588), (425, 18666),

Gene: Jordennis_29 Start: 16725, Stop: 18929, Start Num: 55

Candidate Starts for Jordennis_29:

(38, 16566), (47, 16680), (Start: 55 @16725 has 41 MA's), (75, 16836), (95, 16950), (108, 16992), (128, 17115), (137, 17151), (143, 17178), (160, 17301), (163, 17334), (178, 17424), (185, 17493), (217, 17736), (273, 17874), (325, 17994), (356, 18147), (368, 18210), (375, 18252), (390, 18351), (394, 18372), (397, 18393), (401, 18414), (406, 18465), (409, 18477), (410, 18492), (416, 18573), (425, 18651),

Gene: Joselito_26 Start: 17163, Stop: 19709, Start Num: 72

Candidate Starts for Joselito_26:

(Start: 72 @17163 has 22 MA's), (Start: 76 @17181 has 2 MA's), (98, 17355), (100, 17364), (110, 17439), (122, 17493), (130, 17547), (134, 17562), (135, 17565), (142, 17583), (151, 17646), (154, 17658), (160, 17721), (169, 17784), (172, 17799), (174, 17808), (176, 17829), (180, 17853), (182, 17868), (190, 17955), (191, 17958), (194, 17973), (198, 17994), (200, 18006), (205, 18072), (213, 18135), (214, 18144), (217, 18168), (231, 18249), (233, 18258), (235, 18270), (245, 18312), (259, 18369), (266, 18423), (288, 18531), (294, 18570), (328, 18711), (342, 18807), (345, 18828), (352, 18861), (358, 18894), (359, 18897), (367, 18981), (375, 19026), (376, 19029), (392, 19143), (397, 19176), (411, 19284), (416, 19356), (425, 19434), (431, 19488), (436, 19512), (452, 19623),

Gene: Jovo_22 Start: 15350, Stop: 18691, Start Num: 1

Candidate Starts for Jovo_22:

(Start: 1 @15350 has 49 MA's), (27, 15788), (74, 16100), (82, 16178), (84, 16208), (90, 16265), (110, 16412), (112, 16418), (114, 16424), (133, 16550), (137, 16562), (160, 16712), (164, 16748), (169, 16778), (172, 16793), (176, 16823), (177, 16835), (181, 16859), (188, 16928), (199, 16994), (217, 17150), (231, 17219), (232, 17222), (236, 17249), (243, 17273), (269, 17411), (274, 17432), (281, 17477), (289, 17519), (327, 17711), (333, 17741), (336, 17765), (337, 17777), (340, 17798), (348, 17840), (364, 17927), (368, 17963), (372, 17984), (375, 18005), (387, 18083), (390, 18104), (394, 18125), (397, 18146), (401, 18167), (403, 18191), (411, 18254), (419, 18347), (422, 18365), (430, 18446), (433, 18458), (435, 18470), (438, 18479), (443, 18533), (454, 18617), (455, 18626),

Gene: Kanely_25 Start: 16938, Stop: 19418, Start Num: 57

Candidate Starts for Kanely_25:

(Start: 57 @16938 has 60 MA's), (65, 16977), (75, 17040), (77, 17046), (Start: 79 @17070 has 1 MA's), (88, 17112), (145, 17319), (149, 17337), (160, 17427), (169, 17490), (174, 17514), (175, 17526), (182, 17577), (236, 17961), (261, 18063), (267, 18102), (271, 18129), (276, 18153), (300, 18282), (318, 18381), (337, 18483), (340, 18504), (343, 18516), (348, 18546), (366, 18645), (375, 18708), (408, 18927), (412, 18960), (441, 19242), (449, 19308), (453, 19329), (457, 19368), (459, 19383),

Gene: KatherineG_28 Start: 16045, Stop: 18231, Start Num: 91

Candidate Starts for KatherineG_28:

(Start: 60 @15868 has 1 MA's), (Start: 62 @15877 has 4 MA's), (Start: 91 @16045 has 15 MA's), (132, 16285), (133, 16291), (148, 16360), (156, 16417), (175, 16552), (176, 16561), (182, 16603), (186, 16651), (187, 16654), (201, 16765), (203, 16783), (217, 16888), (226, 16936), (257, 17041), (272, 17101), (283, 17155), (290, 17191), (293, 17215), (295, 17224), (308, 17287), (309, 17308), (313, 17323), (320, 17347), (324, 17359), (337, 17413), (340, 17434), (347, 17464), (383, 17635), (384, 17656), (400, 17740), (438, 18043), (455, 18166), (456, 18178),

Gene: Kazan_29 Start: 16741, Stop: 18945, Start Num: 55

Candidate Starts for Kazan_29:

(38, 16582), (47, 16696), (Start: 55 @16741 has 41 MA's), (75, 16852), (77, 16858), (95, 16966), (108, 17008), (119, 17074), (137, 17167), (143, 17194), (160, 17317), (163, 17350), (178, 17440), (185,

17509), (217, 17752), (273, 17890), (325, 18010), (356, 18163), (368, 18226), (375, 18268), (390, 18367), (394, 18388), (397, 18409), (401, 18430), (406, 18481), (409, 18493), (410, 18508), (416, 18589), (425, 18667),

Gene: Killigrew_22 Start: 15859, Stop: 18330, Start Num: 59

Candidate Starts for Killigrew_22:

(Start: 59 @15859 has 1 MA's), (Start: 62 @15874 has 4 MA's), (Start: 79 @15988 has 1 MA's), (88, 16030), (145, 16231), (149, 16249), (160, 16339), (169, 16402), (174, 16426), (175, 16438), (182, 16489), (197, 16615), (236, 16873), (261, 16975), (267, 17014), (268, 17029), (271, 17041), (276, 17065), (290, 17140), (318, 17293), (337, 17395), (340, 17416), (348, 17458), (365, 17554), (366, 17557), (375, 17620), (408, 17839), (412, 17872), (441, 18154), (449, 18220), (453, 18241), (457, 18280), (461, 18310),

Gene: Kinmap_26 Start: 16407, Stop: 18590, Start Num: 52

Candidate Starts for Kinmap_26:

(Start: 52 @16407 has 7 MA's), (Start: 58 @16425 has 5 MA's), (Start: 79 @16560 has 1 MA's), (128, 16725), (132, 16743), (160, 16911), (163, 16944), (174, 16998), (175, 17010), (178, 17034), (189, 17145), (218, 17328), (275, 17502), (284, 17520), (301, 17583), (340, 17760), (354, 17826), (356, 17835), (366, 17898), (385, 18012), (386, 18015), (390, 18039), (394, 18060), (399, 18090), (401, 18102), (432, 18369), (436, 18390), (441, 18435), (455, 18519),

Gene: Kipper29_29 Start: 16735, Stop: 18939, Start Num: 55

Candidate Starts for Kipper29_29:

(38, 16576), (47, 16690), (Start: 55 @16735 has 41 MA's), (75, 16846), (77, 16852), (95, 16960), (108, 17002), (119, 17068), (137, 17161), (143, 17188), (160, 17311), (163, 17344), (178, 17434), (185, 17503), (217, 17746), (273, 17884), (325, 18004), (356, 18157), (368, 18220), (375, 18262), (390, 18361), (394, 18382), (397, 18403), (401, 18424), (406, 18475), (409, 18487), (410, 18502), (416, 18583), (425, 18661),

Gene: Kugel_25 Start: 16511, Stop: 18991, Start Num: 57

Candidate Starts for Kugel_25:

(Start: 57 @16511 has 60 MA's), (65, 16550), (75, 16613), (Start: 79 @16643 has 1 MA's), (88, 16685), (145, 16892), (149, 16910), (160, 17000), (169, 17063), (174, 17087), (175, 17099), (182, 17150), (236, 17534), (261, 17636), (267, 17675), (271, 17702), (276, 17726), (300, 17855), (318, 17954), (337, 18056), (340, 18077), (343, 18089), (348, 18119), (366, 18218), (375, 18281), (408, 18500), (412, 18533), (441, 18815), (453, 18902), (457, 18941), (459, 18956),

Gene: KyMonks1A_26 Start: 16677, Stop: 19157, Start Num: 57

Candidate Starts for KyMonks1A_26:

(Start: 57 @16677 has 60 MA's), (65, 16716), (75, 16779), (Start: 79 @16809 has 1 MA's), (88, 16851), (145, 17058), (149, 17076), (160, 17166), (169, 17229), (174, 17253), (175, 17265), (182, 17316), (236, 17700), (261, 17802), (267, 17841), (271, 17868), (276, 17892), (300, 18021), (318, 18120), (337, 18222), (340, 18243), (343, 18255), (348, 18285), (366, 18384), (375, 18447), (408, 18666), (412, 18699), (441, 18981), (453, 19068), (457, 19107), (459, 19122),

Gene: Landor_27 Start: 18370, Stop: 20748, Start Num: 58

Candidate Starts for Landor_27:

(Start: 52 @18352 has 7 MA's), (Start: 58 @18370 has 5 MA's), (64, 18403), (65, 18409), (Start: 79 @18505 has 1 MA's), (88, 18547), (118, 18610), (119, 18613), (136, 18703), (139, 18715), (140, 18718), (144, 18748), (145, 18757), (152, 18793), (154, 18802), (160, 18865), (163, 18898), (172, 18943), (175, 18964), (176, 18973), (188, 19078), (206, 19219), (232, 19387), (233, 19393), (260, 19465), (292, 19633), (297, 19651), (332, 19807), (338, 19861), (344, 19897), (356, 19948), (365, 20008), (371, 20041), (374, 20053), (378, 20086), (379, 20089), (399, 20227), (401, 20239), (405,

20281), (410, 20317), (412, 20329), (413, 20335), (436, 20545),

Gene: LastResort_28 Start: 15923, Stop: 18112, Start Num: 91

Candidate Starts for LastResort_28:

(Start: 60 @15746 has 1 MA's), (Start: 62 @15755 has 4 MA's), (Start: 91 @15923 has 15 MA's), (132, 16166), (133, 16172), (148, 16241), (156, 16298), (176, 16442), (182, 16484), (186, 16532), (187, 16535), (201, 16646), (203, 16664), (217, 16769), (226, 16817), (257, 16922), (272, 16982), (283, 17036), (290, 17072), (293, 17096), (295, 17105), (308, 17168), (309, 17189), (313, 17204), (320, 17228), (324, 17240), (337, 17294), (340, 17315), (347, 17345), (383, 17516), (384, 17537), (400, 17621), (438, 17924), (455, 18047), (456, 18059),

Gene: Lev2_22 Start: 15062, Stop: 18403, Start Num: 1

Candidate Starts for Lev2_22:

(Start: 1 @15062 has 49 MA's), (27, 15500), (74, 15812), (82, 15890), (84, 15920), (90, 15977), (110, 16124), (112, 16130), (114, 16136), (133, 16262), (137, 16274), (160, 16424), (164, 16460), (169, 16490), (172, 16505), (176, 16535), (177, 16547), (181, 16571), (188, 16640), (199, 16706), (217, 16862), (231, 16931), (232, 16934), (236, 16961), (243, 16985), (269, 17123), (274, 17144), (281, 17189), (289, 17231), (327, 17423), (333, 17453), (336, 17477), (337, 17489), (340, 17510), (348, 17552), (364, 17639), (368, 17675), (372, 17696), (375, 17717), (387, 17795), (390, 17816), (394, 17837), (397, 17858), (401, 17879), (403, 17903), (411, 17966), (419, 18059), (422, 18077), (430, 18158), (433, 18170), (435, 18182), (438, 18191), (443, 18245), (454, 18329), (455, 18338),

Gene: Lilbunny_29 Start: 16715, Stop: 18931, Start Num: 55

Candidate Starts for Lilbunny_29:

(47, 16670), (Start: 55 @16715 has 41 MA's), (75, 16826), (108, 16982), (133, 17129), (137, 17141), (159, 17288), (160, 17291), (163, 17324), (178, 17414), (185, 17483), (196, 17558), (217, 17726), (325, 17984), (336, 18029), (356, 18137), (368, 18200), (375, 18242), (390, 18341), (394, 18362), (401, 18404), (406, 18455), (410, 18482), (416, 18563), (425, 18653),

Gene: LittleCherry_22 Start: 15245, Stop: 18583, Start Num: 1

Candidate Starts for LittleCherry_22:

(Start: 1 @15245 has 49 MA's), (27, 15683), (74, 15995), (82, 16073), (84, 16103), (90, 16160), (102, 16244), (110, 16307), (112, 16313), (132, 16433), (150, 16523), (151, 16526), (160, 16601), (166, 16646), (169, 16664), (176, 16709), (179, 16730), (202, 16922), (220, 17060), (232, 17108), (249, 17186), (270, 17312), (274, 17324), (278, 17348), (289, 17411), (327, 17603), (333, 17633), (336, 17657), (337, 17669), (348, 17732), (368, 17855), (372, 17876), (375, 17897), (387, 17975), (390, 17996), (397, 18038), (401, 18059), (411, 18146), (414, 18176), (419, 18239), (422, 18257), (430, 18338), (433, 18350), (435, 18362), (438, 18371), (443, 18425), (454, 18509), (458, 18548),

Gene: Lockley_24 Start: 16291, Stop: 18771, Start Num: 57

Candidate Starts for Lockley_24:

(Start: 57 @16291 has 60 MA's), (65, 16330), (75, 16393), (Start: 79 @16423 has 1 MA's), (88, 16465), (145, 16672), (149, 16690), (160, 16780), (169, 16843), (174, 16867), (175, 16879), (182, 16930), (236, 17314), (261, 17416), (267, 17455), (271, 17482), (276, 17506), (300, 17635), (318, 17734), (337, 17836), (340, 17857), (348, 17899), (366, 17998), (375, 18061), (408, 18280), (412, 18313), (427, 18484), (441, 18595), (453, 18682), (457, 18721), (459, 18736),

Gene: Looper_29 Start: 15923, Stop: 18109, Start Num: 91

Candidate Starts for Looper_29:

(Start: 60 @15746 has 1 MA's), (Start: 62 @15755 has 4 MA's), (Start: 91 @15923 has 15 MA's), (132, 16163), (133, 16169), (148, 16238), (156, 16295), (176, 16439), (182, 16481), (186, 16529), (187, 16532), (201, 16643), (203, 16661), (217, 16766), (226, 16814), (257, 16919), (272, 16979), (283, 17033), (290, 17069), (293, 17093), (295, 17102), (308, 17165), (309, 17186), (313, 17201), (320,

17225), (324, 17237), (337, 17291), (340, 17312), (347, 17342), (383, 17513), (384, 17534), (400, 17618), (438, 17921), (455, 18044), (456, 18056),

Gene: Lopton_25 Start: 17715, Stop: 20195, Start Num: 57

Candidate Starts for Lopton_25:

(Start: 57 @17715 has 60 MA's), (65, 17754), (75, 17817), (Start: 79 @17847 has 1 MA's), (88, 17889), (145, 18096), (149, 18114), (160, 18204), (169, 18267), (174, 18291), (175, 18303), (182, 18354), (236, 18738), (261, 18840), (267, 18879), (268, 18894), (271, 18906), (276, 18930), (300, 19059), (318, 19158), (337, 19260), (340, 19281), (348, 19323), (366, 19422), (375, 19485), (388, 19575), (408, 19704), (412, 19737), (441, 20019), (449, 20085), (453, 20106), (457, 20145), (459, 20160),

Gene: Luchador_27 Start: 16953, Stop: 19361, Start Num: 52

Candidate Starts for Luchador_27:

(Start: 52 @16953 has 7 MA's), (Start: 58 @16971 has 5 MA's), (64, 17004), (Start: 79 @17106 has 1 MA's), (88, 17148), (115, 17190), (116, 17202), (136, 17316), (145, 17370), (154, 17415), (160, 17478), (163, 17511), (175, 17577), (179, 17607), (206, 17832), (240, 18030), (247, 18045), (260, 18078), (297, 18264), (332, 18420), (356, 18561), (365, 18621), (371, 18654), (374, 18666), (378, 18699), (380, 18708), (396, 18822), (399, 18840), (401, 18852), (403, 18876), (410, 18930), (412, 18942), (420, 19047), (436, 19158), (444, 19233), (456, 19299), (461, 19335),

Gene: Lucivia_26 Start: 17212, Stop: 19758, Start Num: 72

Candidate Starts for Lucivia_26:

(Start: 72 @17212 has 22 MA's), (Start: 76 @17230 has 2 MA's), (98, 17404), (100, 17413), (110, 17488), (122, 17542), (130, 17596), (134, 17611), (135, 17614), (142, 17632), (151, 17695), (154, 17707), (160, 17770), (169, 17833), (172, 17848), (174, 17857), (176, 17878), (180, 17902), (182, 17917), (190, 18004), (191, 18007), (194, 18022), (198, 18043), (200, 18055), (205, 18121), (214, 18193), (217, 18217), (231, 18298), (233, 18307), (235, 18319), (245, 18361), (259, 18418), (266, 18472), (288, 18580), (294, 18619), (328, 18760), (342, 18856), (345, 18877), (352, 18910), (358, 18943), (359, 18946), (367, 19030), (375, 19075), (376, 19078), (392, 19192), (397, 19225), (406, 19297), (411, 19333), (416, 19405), (425, 19483), (431, 19537), (436, 19561), (452, 19672),

Gene: Lucyedi_27 Start: 16773, Stop: 19835, Start Num: 6

Candidate Starts for Lucyedi_27:

(Start: 6 @16773 has 3 MA's), (16, 16947), (26, 17064), (41, 17241), (69, 17397), (71, 17403), (84, 17505), (97, 17601), (110, 17709), (112, 17715), (133, 17829), (147, 17895), (153, 17922), (160, 17991), (163, 18024), (164, 18027), (177, 18114), (178, 18117), (187, 18195), (195, 18255), (245, 18549), (255, 18579), (256, 18582), (287, 18735), (328, 18912), (332, 18924), (368, 19119), (372, 19140), (385, 19233), (390, 19260), (394, 19281), (397, 19302), (425, 19560), (432, 19617), (447, 19728),

Gene: MPlant7149_23 Start: 15925, Stop: 18405, Start Num: 57

Candidate Starts for MPlant7149_23:

(Start: 57 @15925 has 60 MA's), (65, 15964), (75, 16027), (Start: 79 @16057 has 1 MA's), (88, 16099), (145, 16306), (149, 16324), (160, 16414), (169, 16477), (174, 16501), (175, 16513), (182, 16564), (236, 16948), (261, 17050), (267, 17089), (268, 17104), (271, 17116), (276, 17140), (300, 17269), (318, 17368), (337, 17470), (340, 17491), (348, 17533), (366, 17632), (375, 17695), (388, 17785), (408, 17914), (412, 17947), (441, 18229), (449, 18295), (453, 18316), (457, 18355), (459, 18370),

Gene: MaCh_26 Start: 17154, Stop: 19700, Start Num: 72

Candidate Starts for MaCh_26:

(Start: 72 @17154 has 22 MA's), (Start: 76 @17172 has 2 MA's), (98, 17346), (100, 17355), (110, 17430), (122, 17484), (130, 17538), (134, 17553), (135, 17556), (142, 17574), (151, 17637), (154, 17649), (160, 17712), (169, 17775), (172, 17790), (174, 17799), (176, 17820), (180, 17844), (182,

17859), (190, 17946), (191, 17949), (194, 17964), (198, 17985), (200, 17997), (205, 18063), (214, 18135), (217, 18159), (231, 18240), (233, 18249), (235, 18261), (245, 18303), (259, 18360), (266, 18414), (288, 18522), (294, 18561), (328, 18702), (342, 18798), (345, 18819), (352, 18852), (358, 18885), (359, 18888), (367, 18972), (375, 19017), (376, 19020), (392, 19134), (397, 19167), (406, 19239), (411, 19275), (416, 19347), (425, 19425), (431, 19479), (436, 19503), (452, 19614),

Gene: Mabel_26 Start: 17215, Stop: 19761, Start Num: 72

Candidate Starts for Mabel_26:

(Start: 72 @17215 has 22 MA's), (Start: 76 @17233 has 2 MA's), (98, 17407), (100, 17416), (110, 17491), (122, 17545), (130, 17599), (134, 17614), (135, 17617), (142, 17635), (151, 17698), (154, 17710), (160, 17773), (169, 17836), (172, 17851), (174, 17860), (176, 17881), (180, 17905), (182, 17920), (190, 18007), (191, 18010), (194, 18025), (198, 18046), (200, 18058), (205, 18124), (214, 18196), (217, 18220), (231, 18301), (233, 18310), (235, 18322), (245, 18364), (259, 18421), (266, 18475), (288, 18583), (294, 18622), (328, 18763), (342, 18859), (345, 18880), (352, 18913), (358, 18946), (359, 18949), (367, 19033), (375, 19078), (376, 19081), (392, 19195), (397, 19228), (406, 19300), (411, 19336), (416, 19408), (425, 19486), (431, 19540), (436, 19564), (452, 19675),

Gene: Magnar_24 Start: 16072, Stop: 18555, Start Num: 57

Candidate Starts for Magnar_24:

(Start: 57 @16072 has 60 MA's), (65, 16111), (75, 16174), (Start: 79 @16204 has 1 MA's), (88, 16246), (145, 16453), (149, 16471), (160, 16561), (169, 16624), (174, 16648), (175, 16660), (182, 16711), (236, 17095), (261, 17197), (267, 17236), (271, 17263), (276, 17287), (316, 17491), (318, 17503), (320, 17518), (341, 17635), (351, 17680), (356, 17701), (357, 17704), (379, 17869), (388, 17935), (395, 17977), (419, 18187), (427, 18268), (441, 18379), (449, 18445), (453, 18466), (457, 18505), (459, 18520),

Gene: Marcell_24 Start: 16585, Stop: 19065, Start Num: 57

Candidate Starts for Marcell_24:

(Start: 57 @16585 has 60 MA's), (65, 16624), (75, 16687), (Start: 79 @16717 has 1 MA's), (88, 16759), (145, 16966), (149, 16984), (160, 17074), (169, 17137), (174, 17161), (175, 17173), (182, 17224), (236, 17608), (261, 17710), (267, 17749), (271, 17776), (276, 17800), (318, 18028), (337, 18130), (340, 18151), (348, 18193), (366, 18292), (375, 18355), (408, 18574), (412, 18607), (427, 18778), (441, 18889), (453, 18976), (457, 19015), (459, 19030),

Gene: MarysWell_21 Start: 15213, Stop: 18551, Start Num: 1

Candidate Starts for MarysWell_21:

(Start: 1 @15213 has 49 MA's), (27, 15651), (74, 15963), (80, 16005), (82, 16041), (84, 16071), (90, 16128), (102, 16212), (110, 16275), (112, 16281), (128, 16383), (132, 16401), (151, 16494), (160, 16569), (166, 16614), (169, 16632), (176, 16677), (179, 16698), (202, 16890), (210, 16950), (220, 17028), (232, 17076), (249, 17154), (270, 17280), (274, 17292), (278, 17316), (289, 17379), (327, 17571), (333, 17601), (336, 17625), (337, 17637), (348, 17700), (368, 17823), (372, 17844), (375, 17865), (387, 17943), (390, 17964), (397, 18006), (401, 18027), (404, 18063), (411, 18114), (414, 18144), (419, 18207), (422, 18225), (430, 18306), (433, 18318), (435, 18330), (438, 18339), (443, 18393), (454, 18477), (458, 18516),

Gene: McFly_29 Start: 16735, Stop: 18939, Start Num: 55

Candidate Starts for McFly_29:

(38, 16576), (47, 16690), (Start: 55 @16735 has 41 MA's), (75, 16846), (77, 16852), (95, 16960), (108, 17002), (119, 17068), (137, 17161), (143, 17188), (160, 17311), (163, 17344), (178, 17434), (185, 17503), (217, 17746), (273, 17884), (325, 18004), (356, 18157), (368, 18220), (375, 18262), (390, 18361), (394, 18382), (397, 18403), (401, 18424), (406, 18475), (409, 18487), (410, 18502), (416, 18583), (425, 18661),

Gene: McGuire_25 Start: 16390, Stop: 18867, Start Num: 57

Candidate Starts for McGuire_25:

(Start: 57 @16390 has 60 MA's), (Start: 62 @16405 has 4 MA's), (Start: 79 @16519 has 1 MA's), (88, 16561), (145, 16768), (149, 16786), (160, 16876), (169, 16939), (174, 16963), (175, 16975), (182, 17026), (236, 17410), (261, 17512), (267, 17551), (271, 17578), (276, 17602), (300, 17731), (318, 17830), (337, 17932), (340, 17953), (348, 17995), (366, 18094), (375, 18157), (388, 18247), (408, 18376), (412, 18409), (427, 18580), (441, 18691), (449, 18757), (453, 18778), (457, 18817), (459, 18832),

Gene: Micasa_22 Start: 15213, Stop: 18557, Start Num: 1

Candidate Starts for Micasa_22:

(Start: 1 @15213 has 49 MA's), (27, 15651), (74, 15963), (82, 16041), (84, 16071), (90, 16128), (102, 16212), (110, 16275), (112, 16281), (132, 16401), (151, 16494), (160, 16569), (166, 16614), (169, 16632), (176, 16677), (179, 16698), (202, 16890), (220, 17028), (232, 17076), (249, 17154), (250, 17157), (267, 17253), (270, 17280), (278, 17316), (279, 17328), (289, 17385), (327, 17577), (333, 17607), (336, 17631), (337, 17643), (348, 17706), (368, 17829), (372, 17850), (375, 17871), (387, 17949), (390, 17970), (397, 18012), (401, 18033), (411, 18120), (414, 18150), (419, 18213), (422, 18231), (430, 18312), (433, 18324), (435, 18336), (438, 18345), (443, 18399), (454, 18483), (458, 18522),

Gene: Midas2_22 Start: 15213, Stop: 18551, Start Num: 1

Candidate Starts for Midas2_22:

(Start: 1 @15213 has 49 MA's), (27, 15651), (74, 15963), (82, 16041), (84, 16071), (90, 16128), (110, 16275), (112, 16281), (132, 16401), (134, 16410), (150, 16491), (151, 16494), (160, 16569), (166, 16614), (169, 16632), (176, 16677), (179, 16698), (202, 16890), (220, 17028), (232, 17076), (249, 17154), (270, 17280), (274, 17292), (278, 17316), (289, 17379), (327, 17571), (333, 17601), (336, 17625), (337, 17637), (348, 17700), (368, 17823), (372, 17844), (375, 17865), (387, 17943), (390, 17964), (397, 18006), (401, 18027), (411, 18114), (414, 18144), (419, 18207), (422, 18225), (430, 18306), (433, 18318), (435, 18330), (438, 18339), (443, 18393), (454, 18477), (458, 18516),

Gene: Milcery_22 Start: 15249, Stop: 18587, Start Num: 1

Candidate Starts for Milcery_22:

(Start: 1 @15249 has 49 MA's), (27, 15687), (74, 15999), (82, 16077), (84, 16107), (90, 16164), (102, 16248), (110, 16311), (112, 16317), (132, 16437), (150, 16527), (151, 16530), (160, 16605), (166, 16650), (169, 16668), (176, 16713), (179, 16734), (202, 16926), (220, 17064), (232, 17112), (249, 17190), (270, 17316), (274, 17328), (278, 17352), (289, 17415), (327, 17607), (333, 17637), (336, 17661), (337, 17673), (348, 17736), (368, 17859), (372, 17880), (375, 17901), (387, 17979), (390, 18000), (397, 18042), (401, 18063), (411, 18150), (414, 18180), (419, 18243), (422, 18261), (430, 18342), (433, 18354), (435, 18366), (438, 18375), (443, 18429), (454, 18513), (455, 18522), (458, 18552),

Gene: MinecraftSteve_29 Start: 15877, Stop: 18231, Start Num: 62

Candidate Starts for MinecraftSteve_29:

(Start: 60 @15868 has 1 MA's), (Start: 62 @15877 has 4 MA's), (Start: 91 @16045 has 15 MA's), (132, 16285), (133, 16291), (148, 16360), (156, 16417), (176, 16561), (182, 16603), (186, 16651), (187, 16654), (201, 16765), (203, 16783), (217, 16888), (226, 16936), (257, 17041), (272, 17101), (283, 17155), (290, 17191), (293, 17215), (295, 17224), (308, 17287), (309, 17308), (313, 17323), (320, 17347), (324, 17359), (337, 17413), (340, 17434), (347, 17464), (383, 17635), (384, 17656), (400, 17740), (438, 18043), (455, 18166), (456, 18178),

Gene: Molly_25 Start: 16128, Stop: 18608, Start Num: 57

Candidate Starts for Molly_25:

(Start: 57 @16128 has 60 MA's), (65, 16167), (75, 16230), (Start: 79 @16260 has 1 MA's), (88, 16302), (145, 16509), (149, 16527), (160, 16617), (169, 16680), (174, 16704), (175, 16716), (182, 16767), (236, 17151), (261, 17253), (267, 17292), (268, 17307), (271, 17319), (276, 17343), (300, 17472), (318, 17571), (337, 17673), (340, 17694), (348, 17736), (366, 17835), (375, 17898), (388, 17988), (408, 18117), (412, 18150), (441, 18432), (449, 18498), (453, 18519), (457, 18558), (459, 18573),

Gene: Mryolo_23 Start: 16114, Stop: 18594, Start Num: 57

Candidate Starts for Mryolo_23:

(Start: 57 @16114 has 60 MA's), (65, 16153), (75, 16216), (Start: 79 @16246 has 1 MA's), (88, 16288), (145, 16495), (149, 16513), (160, 16603), (169, 16666), (174, 16690), (175, 16702), (182, 16753), (236, 17137), (261, 17239), (267, 17278), (271, 17305), (276, 17329), (300, 17458), (318, 17557), (337, 17659), (340, 17680), (343, 17692), (348, 17722), (366, 17821), (375, 17884), (408, 18103), (412, 18136), (427, 18307), (441, 18418), (445, 18460), (453, 18505), (457, 18544), (459, 18559),

Gene: Mulciber_26 Start: 17157, Stop: 19703, Start Num: 72

Candidate Starts for Mulciber_26:

(Start: 72 @17157 has 22 MA's), (Start: 76 @17175 has 2 MA's), (98, 17349), (100, 17358), (110, 17433), (122, 17487), (130, 17541), (134, 17556), (135, 17559), (142, 17577), (151, 17640), (154, 17652), (160, 17715), (169, 17778), (172, 17793), (174, 17802), (176, 17823), (180, 17847), (182, 17862), (190, 17949), (191, 17952), (194, 17967), (198, 17988), (200, 18000), (205, 18066), (214, 18138), (217, 18162), (231, 18243), (233, 18252), (235, 18264), (245, 18306), (259, 18363), (266, 18417), (288, 18525), (294, 18564), (328, 18705), (342, 18801), (345, 18822), (352, 18855), (358, 18888), (359, 18891), (367, 18975), (375, 19020), (376, 19023), (392, 19137), (397, 19170), (406, 19242), (411, 19278), (416, 19350), (425, 19428), (431, 19482), (436, 19506), (452, 19617),

Gene: Mule_24 Start: 16401, Stop: 18881, Start Num: 57

Candidate Starts for Mule_24:

(Start: 57 @16401 has 60 MA's), (65, 16440), (75, 16503), (Start: 79 @16533 has 1 MA's), (88, 16575), (145, 16782), (149, 16800), (160, 16890), (169, 16953), (174, 16977), (175, 16989), (182, 17040), (236, 17424), (261, 17526), (267, 17565), (271, 17592), (276, 17616), (300, 17745), (318, 17844), (337, 17946), (340, 17967), (348, 18009), (366, 18108), (375, 18171), (408, 18390), (412, 18423), (441, 18705), (453, 18792), (457, 18831), (459, 18846),

Gene: Munch_26 Start: 17163, Stop: 19709, Start Num: 72

Candidate Starts for Munch_26:

(Start: 72 @17163 has 22 MA's), (Start: 76 @17181 has 2 MA's), (98, 17355), (100, 17364), (110, 17439), (122, 17493), (130, 17547), (134, 17562), (135, 17565), (142, 17583), (151, 17646), (154, 17658), (160, 17721), (169, 17784), (172, 17799), (174, 17808), (176, 17829), (180, 17853), (182, 17868), (190, 17955), (191, 17958), (194, 17973), (198, 17994), (200, 18006), (205, 18072), (213, 18135), (214, 18144), (217, 18168), (231, 18249), (233, 18258), (235, 18270), (245, 18312), (259, 18369), (266, 18423), (288, 18531), (294, 18570), (328, 18711), (342, 18807), (345, 18828), (352, 18861), (358, 18894), (359, 18897), (367, 18981), (375, 19026), (376, 19029), (392, 19143), (397, 19176), (406, 19248), (411, 19284), (416, 19356), (425, 19434), (431, 19488), (436, 19512), (452, 19623),

Gene: MyraDee_23 Start: 14094, Stop: 16709, Start Num: 54

Candidate Starts for MyraDee_23:

(Start: 54 @14094 has 1 MA's), (66, 14151), (68, 14175), (86, 14274), (89, 14292), (111, 14394), (113, 14400), (119, 14445), (120, 14454), (147, 14592), (154, 14625), (160, 14688), (169, 14751), (172, 14766), (176, 14796), (178, 14811), (182, 14838), (190, 14925), (196, 14955), (203, 15018), (214, 15099), (216, 15114), (217, 15123), (218, 15141), (291, 15507), (296, 15528), (348, 15813), (350, 15825), (356, 15858), (368, 15963), (375, 16005), (386, 16080), (389, 16095), (390, 16104), (398, 16146), (412, 16245), (419, 16335), (428, 16434), (429, 16437), (434, 16458), (437, 16485), (447,

16581), (448, 16593), (451, 16608), (455, 16638),

Gene: NEHalo_24 Start: 16149, Stop: 18629, Start Num: 57

Candidate Starts for NEHalo_24:

(Start: 57 @16149 has 60 MA's), (65, 16188), (75, 16251), (Start: 79 @16281 has 1 MA's), (88, 16323), (145, 16530), (149, 16548), (160, 16638), (169, 16701), (174, 16725), (175, 16737), (182, 16788), (236, 17172), (261, 17274), (267, 17313), (268, 17328), (271, 17340), (276, 17364), (300, 17493), (318, 17592), (337, 17694), (340, 17715), (348, 17757), (366, 17856), (375, 17919), (388, 18009), (408, 18138), (412, 18171), (441, 18453), (449, 18519), (453, 18540), (457, 18579), (459, 18594),

Gene: Naca_22 Start: 15172, Stop: 18438, Start Num: 1

Candidate Starts for Naca_22:

(Start: 1 @15172 has 49 MA's), (12, 15409), (20, 15511), (21, 15520), (28, 15613), (32, 15640), (49, 15715), (74, 15850), (81, 15904), (84, 15958), (102, 16099), (106, 16123), (110, 16162), (120, 16225), (121, 16228), (132, 16288), (141, 16315), (151, 16381), (162, 16480), (169, 16519), (176, 16564), (180, 16588), (188, 16669), (217, 16891), (220, 16915), (232, 16963), (244, 17020), (246, 17026), (261, 17098), (270, 17167), (281, 17224), (285, 17242), (289, 17266), (302, 17338), (336, 17512), (337, 17524), (348, 17587), (364, 17674), (368, 17710), (372, 17731), (375, 17752), (390, 17851), (397, 17893), (401, 17914), (411, 18001), (414, 18031), (415, 18034), (419, 18094), (430, 18193), (433, 18205), (435, 18217), (438, 18226), (455, 18373),

Gene: NearlyHeadless_22 Start: 14564, Stop: 17641, Start Num: 1

Candidate Starts for NearlyHeadless_22:

(Start: 1 @14564 has 49 MA's), (4, 14648), (15, 14816), (17, 14840), (20, 14888), (31, 15008), (46, 15080), (73, 15230), (74, 15233), (Start: 76 @15239 has 2 MA's), (122, 15425), (123, 15446), (132, 15485), (147, 15557), (153, 15584), (155, 15599), (159, 15650), (160, 15653), (169, 15719), (190, 15887), (217, 16094), (226, 16142), (231, 16163), (232, 16166), (264, 16310), (270, 16367), (277, 16397), (283, 16436), (298, 16508), (302, 16538), (321, 16637), (329, 16667), (336, 16712), (368, 16910), (372, 16931), (374, 16943), (385, 17024), (390, 17051), (397, 17093), (401, 17114), (403, 17138), (407, 17168), (411, 17201), (415, 17234), (419, 17294), (423, 17321), (436, 17420), (447, 17516), (450, 17537), (455, 17576), (461, 17624),

Gene: Nebulosus_28 Start: 15746, Stop: 18109, Start Num: 60

Candidate Starts for Nebulosus_28:

(Start: 60 @15746 has 1 MA's), (Start: 62 @15755 has 4 MA's), (Start: 91 @15923 has 15 MA's), (132, 16163), (133, 16169), (148, 16238), (156, 16295), (176, 16439), (182, 16481), (186, 16529), (187, 16532), (201, 16643), (203, 16661), (217, 16766), (226, 16814), (257, 16919), (272, 16979), (283, 17033), (290, 17069), (293, 17093), (295, 17102), (308, 17165), (309, 17186), (313, 17201), (320, 17225), (324, 17237), (337, 17291), (340, 17312), (347, 17342), (383, 17513), (384, 17534), (400, 17618), (438, 17921), (455, 18044), (456, 18056),

Gene: Nedarya_27 Start: 16578, Stop: 18761, Start Num: 91

Candidate Starts for Nedarya_27:

(Start: 60 @16404 has 1 MA's), (Start: 62 @16413 has 4 MA's), (67, 16467), (Start: 91 @16578 has 15 MA's), (123, 16782), (126, 16797), (132, 16821), (133, 16827), (151, 16914), (152, 16917), (156, 16953), (160, 16989), (163, 17022), (169, 17052), (172, 17067), (175, 17088), (180, 17121), (187, 17190), (201, 17301), (202, 17310), (221, 17442), (224, 17451), (257, 17565), (283, 17679), (308, 17811), (311, 17838), (313, 17847), (330, 17904), (340, 17958), (347, 17988), (359, 18033), (383, 18159), (455, 18693), (456, 18705),

Gene: Neeharika16_29 Start: 16728, Stop: 18932, Start Num: 55

Candidate Starts for Neeharika16_29:

(38, 16569), (47, 16683), (Start: 55 @16728 has 41 MA's), (75, 16839), (77, 16845), (95, 16953), (108, 16995), (119, 17061), (137, 17154), (143, 17181), (160, 17304), (163, 17337), (178, 17427), (185, 17496), (217, 17739), (273, 17877), (325, 17997), (356, 18150), (368, 18213), (375, 18255), (390, 18354), (394, 18375), (397, 18396), (401, 18417), (406, 18468), (409, 18480), (410, 18495), (416, 18576), (425, 18654),

Gene: Nerujay_25 Start: 16817, Stop: 19297, Start Num: 57

Candidate Starts for Nerujay_25:

(Start: 57 @16817 has 60 MA's), (65, 16856), (75, 16919), (Start: 79 @16949 has 1 MA's), (88, 16991), (145, 17198), (149, 17216), (160, 17306), (169, 17369), (174, 17393), (175, 17405), (182, 17456), (236, 17840), (261, 17942), (267, 17981), (271, 18008), (276, 18032), (300, 18161), (318, 18260), (337, 18362), (340, 18383), (343, 18395), (348, 18425), (366, 18524), (375, 18587), (408, 18806), (412, 18839), (441, 19121), (453, 19208), (457, 19247), (459, 19262),

Gene: Newrala_29 Start: 16728, Stop: 18932, Start Num: 55

Candidate Starts for Newrala_29:

(38, 16569), (47, 16683), (Start: 55 @16728 has 41 MA's), (75, 16839), (77, 16845), (95, 16953), (108, 16995), (119, 17061), (137, 17154), (143, 17181), (160, 17304), (163, 17337), (178, 17427), (185, 17496), (217, 17739), (273, 17877), (325, 17997), (356, 18150), (368, 18213), (375, 18255), (390, 18354), (394, 18375), (397, 18396), (401, 18417), (406, 18468), (409, 18480), (410, 18495), (416, 18576), (425, 18654),

Gene: Nhonho_24 Start: 16571, Stop: 19048, Start Num: 57

Candidate Starts for Nhonho_24:

(Start: 57 @16571 has 60 MA's), (65, 16610), (70, 16655), (75, 16673), (77, 16679), (Start: 79 @16703 has 1 MA's), (145, 16949), (149, 16967), (160, 17057), (169, 17120), (174, 17144), (175, 17156), (182, 17207), (192, 17300), (261, 17693), (267, 17732), (268, 17747), (271, 17759), (276, 17783), (290, 17858), (300, 17912), (318, 18011), (337, 18113), (340, 18134), (343, 18146), (348, 18176), (366, 18275), (375, 18338), (388, 18428), (408, 18557), (412, 18590), (441, 18872), (453, 18959), (457, 18998), (461, 19028),

Gene: Oofda_29 Start: 15894, Stop: 18083, Start Num: 91

Candidate Starts for Oofda_29:

(Start: 60 @15717 has 1 MA's), (Start: 62 @15726 has 4 MA's), (Start: 91 @15894 has 15 MA's), (132, 16137), (133, 16143), (148, 16212), (156, 16269), (176, 16413), (182, 16455), (186, 16503), (187, 16506), (201, 16617), (203, 16635), (217, 16740), (226, 16788), (257, 16893), (272, 16953), (283, 17007), (290, 17043), (293, 17067), (295, 17076), (308, 17139), (309, 17160), (313, 17175), (320, 17199), (324, 17211), (337, 17265), (340, 17286), (347, 17316), (383, 17487), (384, 17508), (400, 17592), (438, 17895), (455, 18018), (456, 18030),

Gene: Oogway_23 Start: 16332, Stop: 18812, Start Num: 57

Candidate Starts for Oogway_23:

(Start: 57 @16332 has 60 MA's), (65, 16371), (75, 16434), (Start: 79 @16464 has 1 MA's), (88, 16506), (145, 16713), (149, 16731), (160, 16821), (169, 16884), (174, 16908), (175, 16920), (182, 16971), (236, 17355), (261, 17457), (267, 17496), (271, 17523), (276, 17547), (318, 17775), (337, 17877), (340, 17898), (348, 17940), (366, 18039), (375, 18102), (408, 18321), (412, 18354), (441, 18636), (453, 18723), (457, 18762),

Gene: Orange_26 Start: 17163, Stop: 19709, Start Num: 72

Candidate Starts for Orange_26:

(Start: 72 @17163 has 22 MA's), (Start: 76 @17181 has 2 MA's), (98, 17355), (100, 17364), (110, 17439), (122, 17493), (130, 17547), (134, 17562), (135, 17565), (142, 17583), (151, 17646), (154, 17658), (160, 17721), (169, 17784), (172, 17799), (174, 17808), (176, 17829), (180, 17853), (182,

17868), (190, 17955), (191, 17958), (194, 17973), (198, 17994), (200, 18006), (205, 18072), (214, 18144), (217, 18168), (231, 18249), (233, 18258), (235, 18270), (245, 18312), (259, 18369), (266, 18423), (288, 18531), (294, 18570), (328, 18711), (342, 18807), (345, 18828), (352, 18861), (358, 18894), (359, 18897), (367, 18981), (375, 19026), (376, 19029), (392, 19143), (397, 19176), (406, 19248), (411, 19284), (416, 19356), (425, 19434), (431, 19488), (436, 19512), (452, 19623),

Gene: PainterBoy_27 Start: 16773, Stop: 19835, Start Num: 6

Candidate Starts for PainterBoy_27:

(Start: 6 @16773 has 3 MA's), (16, 16947), (26, 17064), (41, 17241), (69, 17397), (71, 17403), (84, 17505), (97, 17601), (110, 17709), (112, 17715), (133, 17829), (147, 17895), (153, 17922), (160, 17991), (163, 18024), (164, 18027), (177, 18114), (178, 18117), (187, 18195), (195, 18255), (202, 18315), (245, 18549), (255, 18579), (256, 18582), (287, 18735), (328, 18912), (332, 18924), (368, 19119), (372, 19140), (385, 19233), (390, 19260), (394, 19281), (397, 19302), (424, 19542), (425, 19560), (432, 19617), (447, 19728),

Gene: Papez_26 Start: 18048, Stop: 20528, Start Num: 57

Candidate Starts for Papez_26:

(Start: 57 @18048 has 60 MA's), (65, 18087), (75, 18150), (Start: 79 @18180 has 1 MA's), (88, 18222), (145, 18429), (149, 18447), (160, 18537), (169, 18600), (174, 18624), (175, 18636), (182, 18687), (236, 19071), (261, 19173), (267, 19212), (271, 19239), (276, 19263), (318, 19491), (337, 19593), (340, 19614), (343, 19626), (348, 19656), (366, 19755), (375, 19818), (408, 20037), (412, 20070), (441, 20352), (453, 20439), (457, 20478), (461, 20508),

Gene: Perseus_25 Start: 16486, Stop: 18966, Start Num: 57

Candidate Starts for Perseus_25:

(Start: 57 @16486 has 60 MA's), (65, 16525), (75, 16588), (Start: 79 @16618 has 1 MA's), (88, 16660), (145, 16867), (149, 16885), (160, 16975), (169, 17038), (174, 17062), (175, 17074), (182, 17125), (236, 17509), (261, 17611), (267, 17650), (268, 17665), (276, 17701), (300, 17830), (318, 17929), (337, 18031), (340, 18052), (343, 18064), (348, 18094), (366, 18193), (375, 18256), (408, 18475), (412, 18508), (441, 18790), (453, 18877), (457, 18916),

Gene: Petersenfast_25 Start: 17178, Stop: 19706, Start Num: 76

Candidate Starts for Petersenfast_25:

(Start: 72 @17160 has 22 MA's), (Start: 76 @17178 has 2 MA's), (98, 17352), (100, 17361), (110, 17436), (122, 17490), (130, 17544), (134, 17559), (135, 17562), (142, 17580), (151, 17643), (154, 17655), (160, 17718), (169, 17781), (172, 17796), (174, 17805), (176, 17826), (180, 17850), (182, 17865), (190, 17952), (191, 17955), (194, 17970), (198, 17991), (200, 18003), (205, 18069), (214, 18141), (217, 18165), (231, 18246), (233, 18255), (235, 18267), (245, 18309), (259, 18366), (266, 18420), (288, 18528), (294, 18567), (328, 18708), (342, 18804), (345, 18825), (352, 18858), (358, 18891), (359, 18894), (367, 18978), (375, 19023), (376, 19026), (392, 19140), (397, 19173), (406, 19245), (411, 19281), (416, 19353), (425, 19431), (431, 19485), (436, 19509), (452, 19620),

Gene: PetterN_23 Start: 15059, Stop: 17872, Start Num: 1

Candidate Starts for PetterN_23:

(Start: 1 @15059 has 49 MA's), (8, 15248), (74, 15731), (Start: 76 @15737 has 2 MA's), (103, 15830), (114, 15881), (119, 15917), (136, 16007), (147, 16073), (151, 16094), (160, 16169), (163, 16202), (174, 16256), (177, 16289), (178, 16292), (180, 16301), (189, 16400), (192, 16409), (196, 16433), (210, 16562), (229, 16676), (252, 16718), (254, 16727), (281, 16793), (307, 16886), (312, 16919), (335, 17006), (339, 17039), (341, 17051), (348, 17081), (368, 17144), (375, 17186), (385, 17258), (390, 17285), (393, 17300), (397, 17327), (401, 17348), (411, 17435), (414, 17465), (415, 17468), (419, 17528), (430, 17627), (433, 17639), (435, 17651), (438, 17660), (455, 17807),

Gene: Phaded_29 Start: 18699, Stop: 21095, Start Num: 52

Candidate Starts for Phaded_29:

(Start: 52 @18699 has 7 MA's), (Start: 58 @18717 has 5 MA's), (64, 18750), (65, 18756), (Start: 79 @18852 has 1 MA's), (88, 18894), (118, 18957), (119, 18960), (136, 19050), (140, 19065), (144, 19095), (145, 19104), (152, 19140), (154, 19149), (160, 19212), (163, 19245), (172, 19290), (175, 19311), (176, 19320), (188, 19425), (206, 19566), (232, 19734), (233, 19740), (260, 19812), (292, 19980), (297, 19998), (332, 20154), (338, 20208), (344, 20244), (356, 20295), (365, 20355), (371, 20388), (374, 20400), (378, 20433), (379, 20436), (399, 20574), (401, 20586), (405, 20628), (410, 20664), (412, 20676), (413, 20682), (436, 20892),

Gene: Phillis_22 Start: 14522, Stop: 17599, Start Num: 1

Candidate Starts for Phillis_22:

(Start: 1 @14522 has 49 MA's), (4, 14606), (15, 14774), (17, 14798), (20, 14846), (31, 14966), (34, 14993), (46, 15038), (73, 15188), (74, 15191), (Start: 76 @15197 has 2 MA's), (122, 15383), (132, 15443), (153, 15542), (155, 15557), (159, 15608), (160, 15611), (163, 15644), (169, 15677), (190, 15845), (214, 16028), (217, 16052), (226, 16100), (231, 16121), (232, 16124), (264, 16268), (270, 16325), (277, 16355), (283, 16394), (298, 16466), (302, 16496), (321, 16595), (329, 16625), (336, 16670), (340, 16703), (368, 16868), (372, 16889), (374, 16901), (385, 16982), (390, 17009), (401, 17072), (403, 17096), (407, 17126), (411, 17159), (415, 17192), (419, 17252), (423, 17279), (436, 17378), (438, 17384), (447, 17474), (450, 17495), (455, 17534), (461, 17582),

Gene: Phlei_21 Start: 17431, Stop: 20733, Start Num: 5

Candidate Starts for Phlei_21:

(5, 17431), (7, 17455), (11, 17557), (24, 17701), (26, 17746), (35, 17836), (42, 17962), (43, 17968), (63, 18067), (78, 18178), (96, 18352), (97, 18364), (101, 18403), (107, 18439), (122, 18547), (132, 18607), (141, 18634), (143, 18652), (145, 18667), (160, 18775), (165, 18820), (168, 18832), (172, 18853), (176, 18883), (190, 19009), (203, 19102), (216, 19198), (225, 19252), (226, 19255), (227, 19258), (233, 19285), (237, 19309), (241, 19321), (269, 19468), (310, 19711), (328, 19786), (333, 19810), (361, 19927), (363, 19957), (368, 19993), (370, 20005), (372, 20014), (373, 20023), (385, 20107), (390, 20134), (397, 20176), (401, 20197), (418, 20386), (421, 20413), (432, 20512), (435, 20530), (436, 20533), (444, 20608),

Gene: Phlorence_22 Start: 15349, Stop: 18690, Start Num: 1

Candidate Starts for Phlorence_22:

(Start: 1 @15349 has 49 MA's), (27, 15787), (74, 16099), (82, 16177), (84, 16207), (90, 16264), (110, 16411), (112, 16417), (114, 16423), (133, 16549), (137, 16561), (160, 16711), (164, 16747), (169, 16777), (172, 16792), (176, 16822), (177, 16834), (181, 16858), (188, 16927), (199, 16993), (217, 17149), (231, 17218), (232, 17221), (236, 17248), (243, 17272), (269, 17410), (274, 17431), (281, 17476), (289, 17518), (327, 17710), (333, 17740), (336, 17764), (337, 17776), (340, 17797), (348, 17839), (364, 17926), (368, 17962), (372, 17983), (375, 18004), (387, 18082), (390, 18103), (394, 18124), (397, 18145), (401, 18166), (403, 18190), (411, 18253), (419, 18346), (422, 18364), (430, 18445), (433, 18457), (435, 18469), (438, 18478), (443, 18532), (454, 18616), (455, 18625),

Gene: PhrostyMug_24 Start: 16398, Stop: 18878, Start Num: 57

Candidate Starts for PhrostyMug_24:

(Start: 57 @16398 has 60 MA's), (65, 16437), (75, 16500), (Start: 79 @16530 has 1 MA's), (88, 16572), (145, 16779), (149, 16797), (160, 16887), (169, 16950), (174, 16974), (175, 16986), (182, 17037), (236, 17421), (261, 17523), (267, 17562), (271, 17589), (276, 17613), (300, 17742), (318, 17841), (337, 17943), (340, 17964), (348, 18006), (366, 18105), (375, 18168), (408, 18387), (412, 18420), (441, 18702), (453, 18789), (457, 18828), (459, 18843),

Gene: PickleBack_22 Start: 15063, Stop: 18404, Start Num: 1

Candidate Starts for PickleBack_22:

(Start: 1 @15063 has 49 MA's), (27, 15501), (74, 15813), (82, 15891), (84, 15921), (90, 15978), (110, 16125), (112, 16131), (114, 16137), (133, 16263), (137, 16275), (160, 16425), (164, 16461), (169, 16491), (172, 16506), (176, 16536), (177, 16548), (181, 16572), (188, 16641), (199, 16707), (217, 16863), (231, 16932), (232, 16935), (236, 16962), (243, 16986), (269, 17124), (274, 17145), (281, 17190), (289, 17232), (327, 17424), (333, 17454), (336, 17478), (337, 17490), (340, 17511), (348, 17553), (364, 17640), (368, 17676), (372, 17697), (375, 17718), (387, 17796), (390, 17817), (394, 17838), (397, 17859), (401, 17880), (403, 17904), (411, 17967), (419, 18060), (422, 18078), (430, 18159), (433, 18171), (435, 18183), (438, 18192), (443, 18246), (454, 18330), (455, 18339),

Gene: Pmask_29 Start: 16729, Stop: 18933, Start Num: 55

Candidate Starts for Pmask_29:

(38, 16570), (47, 16684), (Start: 55 @16729 has 41 MA's), (75, 16840), (77, 16846), (95, 16954), (108, 16996), (128, 17119), (137, 17155), (143, 17182), (160, 17305), (163, 17338), (178, 17428), (185, 17497), (217, 17740), (273, 17878), (325, 17998), (356, 18151), (368, 18214), (375, 18256), (390, 18355), (394, 18376), (397, 18397), (401, 18418), (406, 18469), (409, 18481), (410, 18496), (416, 18577), (425, 18655),

Gene: Polyphemus_28 Start: 16727, Stop: 18931, Start Num: 55

Candidate Starts for Polyphemus_28:

(38, 16568), (47, 16682), (Start: 55 @16727 has 41 MA's), (75, 16838), (95, 16952), (108, 16994), (128, 17117), (137, 17153), (143, 17180), (160, 17303), (163, 17336), (178, 17426), (185, 17495), (217, 17738), (273, 17876), (325, 17996), (356, 18149), (368, 18212), (375, 18254), (390, 18353), (394, 18374), (397, 18395), (401, 18416), (406, 18467), (409, 18479), (410, 18494), (416, 18575), (425, 18653),

Gene: Priamo_29 Start: 16751, Stop: 18982, Start Num: 55

Candidate Starts for Priamo_29:

(38, 16595), (47, 16706), (Start: 55 @16751 has 41 MA's), (75, 16862), (77, 16868), (108, 17018), (137, 17177), (143, 17204), (159, 17324), (160, 17327), (163, 17360), (178, 17450), (185, 17519), (212, 17720), (217, 17765), (306, 17969), (325, 18023), (349, 18146), (368, 18245), (369, 18254), (373, 18275), (381, 18320), (382, 18332), (410, 18539), (413, 18557), (420, 18659), (422, 18668), (425, 18698),

Gene: Prin Ashe11_23 Start: 15212, Stop: 18550, Start Num: 1

Candidate Starts for Prin Ashe11_23:

(Start: 1 @15212 has 49 MA's), (27, 15650), (74, 15962), (82, 16040), (84, 16070), (90, 16127), (102, 16211), (110, 16274), (112, 16280), (132, 16400), (150, 16490), (151, 16493), (160, 16568), (166, 16613), (169, 16631), (176, 16676), (179, 16697), (220, 17027), (232, 17075), (249, 17153), (270, 17279), (274, 17291), (278, 17315), (289, 17378), (327, 17570), (333, 17600), (336, 17624), (337, 17636), (348, 17699), (368, 17822), (372, 17843), (375, 17864), (387, 17942), (390, 17963), (397, 18005), (401, 18026), (411, 18113), (414, 18143), (419, 18206), (422, 18224), (430, 18305), (433, 18317), (435, 18329), (438, 18338), (443, 18392), (454, 18476), (458, 18515),

Gene: Pukovnik_28 Start: 18254, Stop: 20650, Start Num: 52

Candidate Starts for Pukovnik_28:

(Start: 52 @18254 has 7 MA's), (Start: 58 @18272 has 5 MA's), (64, 18305), (65, 18311), (Start: 79 @18407 has 1 MA's), (88, 18449), (136, 18605), (139, 18617), (140, 18620), (144, 18650), (145, 18659), (152, 18695), (154, 18704), (160, 18767), (163, 18800), (172, 18845), (175, 18866), (176, 18875), (188, 18980), (206, 19121), (232, 19289), (234, 19301), (260, 19367), (261, 19373), (268, 19424), (292, 19535), (297, 19553), (332, 19709), (338, 19763), (344, 19799), (356, 19850), (365, 19910), (371, 19943), (374, 19955), (378, 19988), (379, 19991), (399, 20129), (401, 20141), (405, 20183), (410, 20219), (412, 20231), (413, 20237), (436, 20447),

Gene: ReMo_28 Start: 15923, Stop: 18109, Start Num: 91

Candidate Starts for ReMo_28:

(Start: 60 @15746 has 1 MA's), (Start: 62 @15755 has 4 MA's), (Start: 91 @15923 has 15 MA's), (132, 16163), (133, 16169), (148, 16238), (156, 16295), (176, 16439), (182, 16481), (186, 16529), (187, 16532), (201, 16643), (203, 16661), (217, 16766), (226, 16814), (257, 16919), (272, 16979), (283, 17033), (290, 17069), (293, 17093), (295, 17102), (308, 17165), (309, 17186), (313, 17201), (320, 17225), (324, 17237), (337, 17291), (340, 17312), (347, 17342), (383, 17513), (384, 17534), (400, 17618), (438, 17921), (455, 18044), (456, 18056),

Gene: Remus_28 Start: 15884, Stop: 18073, Start Num: 91

Candidate Starts for Remus_28:

(Start: 60 @15707 has 1 MA's), (Start: 62 @15716 has 4 MA's), (Start: 91 @15884 has 15 MA's), (132, 16127), (133, 16133), (148, 16202), (156, 16259), (176, 16403), (182, 16445), (186, 16493), (187, 16496), (201, 16607), (203, 16625), (217, 16730), (226, 16778), (257, 16883), (272, 16943), (283, 16997), (290, 17033), (293, 17057), (295, 17066), (308, 17129), (309, 17150), (313, 17165), (320, 17189), (324, 17201), (337, 17255), (340, 17276), (347, 17306), (383, 17477), (384, 17498), (400, 17582), (438, 17885), (455, 18008), (456, 18020),

Gene: Rhynn_24 Start: 16407, Stop: 18887, Start Num: 57

Candidate Starts for Rhynn_24:

(Start: 57 @16407 has 60 MA's), (65, 16446), (75, 16509), (Start: 79 @16539 has 1 MA's), (88, 16581), (145, 16788), (149, 16806), (160, 16896), (169, 16959), (174, 16983), (175, 16995), (182, 17046), (236, 17430), (261, 17532), (267, 17571), (271, 17598), (276, 17622), (318, 17850), (337, 17952), (339, 17970), (340, 17973), (348, 18015), (366, 18114), (375, 18177), (408, 18396), (412, 18429), (441, 18711), (449, 18777), (453, 18798), (457, 18837), (459, 18852),

Gene: RidgeCB_24 Start: 16182, Stop: 18662, Start Num: 57

Candidate Starts for RidgeCB_24:

(Start: 57 @16182 has 60 MA's), (65, 16221), (75, 16284), (Start: 79 @16314 has 1 MA's), (88, 16356), (145, 16563), (149, 16581), (160, 16671), (169, 16734), (174, 16758), (175, 16770), (182, 16821), (236, 17205), (261, 17307), (267, 17346), (271, 17373), (276, 17397), (300, 17526), (318, 17625), (337, 17727), (340, 17748), (343, 17760), (348, 17790), (366, 17889), (375, 17952), (408, 18171), (412, 18204), (441, 18486), (445, 18528), (453, 18573), (457, 18612), (459, 18627),

Gene: Rifter_29 Start: 16706, Stop: 18922, Start Num: 55

Candidate Starts for Rifter_29:

(47, 16661), (Start: 55 @16706 has 41 MA's), (75, 16817), (77, 16823), (108, 16973), (133, 17120), (137, 17132), (159, 17279), (160, 17282), (163, 17315), (178, 17405), (185, 17474), (196, 17549), (217, 17717), (325, 17975), (336, 18020), (356, 18128), (368, 18191), (375, 18233), (390, 18332), (394, 18353), (401, 18395), (406, 18446), (410, 18473), (416, 18554), (425, 18644),

Gene: Roary_22 Start: 14513, Stop: 17590, Start Num: 1

Candidate Starts for Roary_22:

(Start: 1 @14513 has 49 MA's), (4, 14597), (15, 14765), (17, 14789), (20, 14837), (31, 14957), (46, 15029), (73, 15179), (74, 15182), (Start: 76 @15188 has 2 MA's), (122, 15374), (132, 15434), (133, 15440), (147, 15506), (153, 15533), (155, 15548), (159, 15599), (160, 15602), (163, 15635), (169, 15668), (190, 15836), (214, 16019), (217, 16043), (226, 16091), (231, 16112), (232, 16115), (264, 16259), (270, 16316), (277, 16346), (283, 16385), (298, 16457), (302, 16487), (321, 16586), (329, 16616), (336, 16661), (368, 16859), (372, 16880), (374, 16892), (385, 16973), (390, 17000), (401, 17063), (403, 17087), (407, 17117), (411, 17150), (415, 17183), (419, 17243), (423, 17270), (436, 17369), (438, 17375), (447, 17465), (450, 17486), (455, 17525), (461, 17573),

Gene: Roksolana_29 Start: 16734, Stop: 18950, Start Num: 55

Candidate Starts for Roksolana_29:

(47, 16689), (Start: 55 @16734 has 41 MA's), (75, 16845), (108, 17001), (133, 17148), (137, 17160), (159, 17307), (160, 17310), (163, 17343), (178, 17433), (185, 17502), (196, 17577), (217, 17745), (325, 18003), (336, 18048), (356, 18156), (368, 18219), (375, 18261), (390, 18360), (394, 18381), (401, 18423), (406, 18474), (410, 18501), (416, 18582), (425, 18672),

Gene: Rosalind_28 Start: 16045, Stop: 18231, Start Num: 91

Candidate Starts for Rosalind_28:

(Start: 60 @15868 has 1 MA's), (Start: 62 @15877 has 4 MA's), (Start: 91 @16045 has 15 MA's), (132, 16285), (133, 16291), (148, 16360), (156, 16417), (176, 16561), (182, 16603), (186, 16651), (187, 16654), (201, 16765), (203, 16783), (217, 16888), (226, 16936), (257, 17041), (272, 17101), (283, 17155), (290, 17191), (293, 17215), (295, 17224), (308, 17287), (309, 17308), (313, 17323), (320, 17347), (324, 17359), (337, 17413), (340, 17434), (347, 17464), (383, 17635), (384, 17656), (400, 17740), (438, 18043), (455, 18166), (456, 18178),

Gene: Rutherferd_26 Start: 17013, Stop: 19493, Start Num: 57

Candidate Starts for Rutherferd_26:

(Start: 57 @17013 has 60 MA's), (65, 17052), (75, 17115), (Start: 79 @17145 has 1 MA's), (88, 17187), (145, 17394), (149, 17412), (160, 17502), (169, 17565), (174, 17589), (175, 17601), (182, 17652), (236, 18036), (261, 18138), (267, 18177), (271, 18204), (276, 18228), (318, 18456), (337, 18558), (340, 18579), (343, 18591), (348, 18621), (365, 18717), (366, 18720), (375, 18783), (408, 19002), (412, 19035), (441, 19317), (453, 19404), (457, 19443), (459, 19458),

Gene: Saintus_22 Start: 14528, Stop: 17605, Start Num: 1

Candidate Starts for Saintus_22:

(Start: 1 @14528 has 49 MA's), (4, 14612), (15, 14780), (17, 14804), (20, 14852), (31, 14972), (46, 15044), (73, 15194), (74, 15197), (Start: 76 @15203 has 2 MA's), (122, 15389), (132, 15449), (133, 15455), (147, 15521), (153, 15548), (155, 15563), (159, 15614), (160, 15617), (169, 15683), (190, 15851), (211, 16010), (214, 16034), (217, 16058), (226, 16106), (231, 16127), (232, 16130), (264, 16274), (270, 16331), (277, 16361), (283, 16400), (298, 16472), (302, 16502), (321, 16601), (329, 16631), (336, 16676), (368, 16874), (372, 16895), (374, 16907), (385, 16988), (390, 17015), (397, 17057), (401, 17078), (403, 17102), (407, 17132), (411, 17165), (415, 17198), (419, 17258), (423, 17285), (436, 17384), (447, 17480), (450, 17501), (455, 17540), (461, 17588),

Gene: Salz_26 Start: 17154, Stop: 19700, Start Num: 72

Candidate Starts for Salz_26:

(Start: 72 @17154 has 22 MA's), (Start: 76 @17172 has 2 MA's), (98, 17346), (100, 17355), (110, 17430), (122, 17484), (130, 17538), (134, 17553), (135, 17556), (142, 17574), (151, 17637), (154, 17649), (160, 17712), (169, 17775), (172, 17790), (174, 17799), (176, 17820), (180, 17844), (182, 17859), (190, 17946), (191, 17949), (194, 17964), (198, 17985), (200, 17997), (205, 18063), (214, 18135), (217, 18159), (231, 18240), (233, 18249), (235, 18261), (245, 18303), (259, 18360), (266, 18414), (288, 18522), (294, 18561), (328, 18702), (342, 18798), (345, 18819), (352, 18852), (358, 18885), (359, 18888), (367, 18972), (375, 19017), (376, 19020), (392, 19134), (397, 19167), (406, 19239), (411, 19275), (416, 19347), (425, 19425), (431, 19479), (436, 19503), (452, 19614),

Gene: Scorpia_23 Start: 15062, Stop: 17875, Start Num: 1

Candidate Starts for Scorpia_23:

(Start: 1 @15062 has 49 MA's), (8, 15251), (49, 15599), (74, 15734), (Start: 76 @15740 has 2 MA's), (103, 15833), (114, 15884), (119, 15920), (136, 16010), (147, 16076), (151, 16097), (160, 16172), (163, 16205), (174, 16259), (177, 16292), (178, 16295), (180, 16304), (189, 16403), (196, 16436), (210, 16565), (229, 16679), (254, 16730), (281, 16796), (307, 16889), (312, 16922), (335, 17009), (339, 17042), (341, 17054), (348, 17084), (368, 17147), (375, 17189), (385, 17261), (390, 17288), (393, 17303), (397, 17330), (401, 17351), (411, 17438), (414, 17468), (415, 17471), (419, 17531),

(430, 17630), (433, 17642), (435, 17654), (438, 17663), (452, 17792), (455, 17810),

Gene: Sham4_26 Start: 17160, Stop: 19706, Start Num: 72

Candidate Starts for Sham4_26:

(Start: 72 @17160 has 22 MA's), (Start: 76 @17178 has 2 MA's), (98, 17352), (100, 17361), (110, 17436), (122, 17490), (130, 17544), (134, 17559), (135, 17562), (142, 17580), (151, 17643), (154, 17655), (160, 17718), (169, 17781), (172, 17796), (174, 17805), (176, 17826), (180, 17850), (182, 17865), (190, 17952), (191, 17955), (194, 17970), (198, 17991), (200, 18003), (205, 18069), (214, 18141), (217, 18165), (231, 18246), (233, 18255), (235, 18267), (245, 18309), (259, 18366), (266, 18420), (288, 18528), (294, 18567), (328, 18708), (342, 18804), (345, 18825), (352, 18858), (358, 18891), (359, 18894), (367, 18978), (375, 19023), (376, 19026), (392, 19140), (397, 19173), (406, 19245), (411, 19281), (416, 19353), (425, 19431), (431, 19485), (436, 19509), (452, 19620),

Gene: ShayRa_29 Start: 16045, Stop: 18231, Start Num: 91

Candidate Starts for ShayRa_29:

(Start: 60 @15868 has 1 MA's), (Start: 62 @15877 has 4 MA's), (Start: 91 @16045 has 15 MA's), (132, 16285), (133, 16291), (148, 16360), (156, 16417), (176, 16561), (182, 16603), (186, 16651), (187, 16654), (201, 16765), (203, 16783), (217, 16888), (226, 16936), (257, 17041), (272, 17101), (283, 17155), (290, 17191), (293, 17215), (295, 17224), (308, 17287), (309, 17308), (313, 17323), (320, 17347), (324, 17359), (337, 17413), (340, 17434), (347, 17464), (383, 17635), (384, 17656), (400, 17740), (438, 18043), (455, 18166), (456, 18178),

Gene: Sibs6_26 Start: 16924, Stop: 19404, Start Num: 57

Candidate Starts for Sibs6_26:

(Start: 57 @16924 has 60 MA's), (65, 16963), (75, 17026), (Start: 79 @17056 has 1 MA's), (88, 17098), (145, 17305), (149, 17323), (160, 17413), (169, 17476), (174, 17500), (175, 17512), (182, 17563), (236, 17947), (261, 18049), (267, 18088), (268, 18103), (271, 18115), (276, 18139), (300, 18268), (318, 18367), (337, 18469), (340, 18490), (348, 18532), (366, 18631), (375, 18694), (388, 18784), (408, 18913), (412, 18946), (441, 19228), (449, 19294), (453, 19315), (457, 19354), (461, 19384),

Gene: SkiPole_26 Start: 16553, Stop: 19165, Start Num: 57

Candidate Starts for SkiPole_26:

(Start: 57 @16553 has 60 MA's), (65, 16592), (75, 16655), (77, 16661), (Start: 79 @16685 has 1 MA's), (88, 16727), (99, 16778), (145, 17066), (149, 17084), (160, 17174), (169, 17237), (174, 17261), (175, 17273), (182, 17324), (236, 17708), (261, 17810), (267, 17849), (268, 17864), (271, 17876), (276, 17900), (290, 17975), (300, 18029), (318, 18128), (337, 18230), (340, 18251), (341, 18260), (348, 18293), (362, 18368), (366, 18392), (375, 18455), (391, 18566), (399, 18608), (408, 18674), (412, 18707), (441, 18989), (453, 19076), (457, 19115), (459, 19130),

Gene: Smeadley_22 Start: 14546, Stop: 17623, Start Num: 1

Candidate Starts for Smeadley_22:

(Start: 1 @14546 has 49 MA's), (4, 14630), (15, 14798), (17, 14822), (20, 14870), (31, 14990), (46, 15062), (73, 15212), (74, 15215), (Start: 76 @15221 has 2 MA's), (122, 15407), (132, 15467), (133, 15473), (147, 15539), (153, 15566), (155, 15581), (159, 15632), (160, 15635), (163, 15668), (169, 15701), (190, 15869), (214, 16052), (217, 16076), (226, 16124), (231, 16145), (232, 16148), (264, 16292), (270, 16349), (277, 16379), (283, 16418), (298, 16490), (302, 16520), (321, 16619), (329, 16649), (336, 16694), (368, 16892), (372, 16913), (374, 16925), (390, 17033), (401, 17096), (403, 17120), (407, 17150), (411, 17183), (415, 17216), (419, 17276), (423, 17303), (436, 17402), (438, 17408), (447, 17498), (450, 17519), (455, 17558), (461, 17606),

Gene: Smeagol_26 Start: 17697, Stop: 20180, Start Num: 57

Candidate Starts for Smeagol_26:

(Start: 57 @17697 has 60 MA's), (65, 17736), (75, 17799), (Start: 79 @17829 has 1 MA's), (88, 17871), (145, 18078), (160, 18186), (169, 18249), (174, 18273), (175, 18285), (182, 18336), (236, 18720), (261, 18822), (267, 18861), (271, 18888), (276, 18912), (316, 19116), (318, 19128), (320, 19143), (341, 19260), (351, 19305), (356, 19326), (357, 19329), (379, 19494), (388, 19560), (395, 19602), (408, 19689), (412, 19722), (441, 20004), (453, 20091), (457, 20130), (459, 20145),

Gene: SmellyB_29 Start: 16735, Stop: 18939, Start Num: 55

Candidate Starts for SmellyB_29:

(38, 16576), (47, 16690), (Start: 55 @16735 has 41 MA's), (75, 16846), (77, 16852), (95, 16960), (108, 17002), (119, 17068), (137, 17161), (143, 17188), (160, 17311), (163, 17344), (178, 17434), (185, 17503), (217, 17746), (273, 17884), (325, 18004), (356, 18157), (368, 18220), (375, 18262), (390, 18361), (394, 18382), (397, 18403), (401, 18424), (406, 18475), (409, 18487), (410, 18502), (416, 18583), (425, 18661),

Gene: Snape_26 Start: 17160, Stop: 19706, Start Num: 72

Candidate Starts for Snape_26:

(Start: 72 @17160 has 22 MA's), (Start: 76 @17178 has 2 MA's), (98, 17352), (100, 17361), (110, 17436), (122, 17490), (130, 17544), (134, 17559), (135, 17562), (142, 17580), (151, 17643), (154, 17655), (160, 17718), (169, 17781), (172, 17796), (174, 17805), (176, 17826), (180, 17850), (182, 17865), (190, 17952), (191, 17955), (194, 17970), (198, 17991), (200, 18003), (205, 18069), (213, 18132), (214, 18141), (217, 18165), (231, 18246), (233, 18255), (235, 18267), (245, 18309), (259, 18366), (266, 18420), (288, 18528), (294, 18567), (328, 18708), (342, 18804), (345, 18825), (352, 18858), (358, 18891), (359, 18894), (367, 18978), (375, 19023), (376, 19026), (392, 19140), (397, 19173), (406, 19245), (411, 19281), (416, 19353), (425, 19431), (431, 19485), (436, 19509), (452, 19620),

Gene: SororFago_25 Start: 15738, Stop: 18149, Start Num: 51

Candidate Starts for SororFago_25:

(Start: 51 @15738 has 1 MA's), (Start: 58 @15759 has 5 MA's), (64, 15792), (Start: 79 @15894 has 1 MA's), (88, 15936), (115, 15978), (122, 16029), (140, 16119), (154, 16203), (160, 16266), (163, 16299), (170, 16332), (174, 16353), (176, 16374), (182, 16416), (188, 16479), (206, 16620), (232, 16788), (233, 16794), (240, 16818), (263, 16878), (297, 17052), (356, 17349), (365, 17409), (371, 17442), (374, 17454), (378, 17487), (380, 17496), (384, 17547), (399, 17628), (401, 17640), (403, 17664), (410, 17718), (412, 17730), (420, 17835), (436, 17946), (444, 18021), (456, 18087), (461, 18123),

Gene: Soups_28 Start: 16045, Stop: 18231, Start Num: 91

Candidate Starts for Soups_28:

(Start: 60 @15868 has 1 MA's), (Start: 62 @15877 has 4 MA's), (Start: 91 @16045 has 15 MA's), (132, 16285), (133, 16291), (148, 16360), (156, 16417), (176, 16561), (182, 16603), (186, 16651), (187, 16654), (201, 16765), (203, 16783), (217, 16888), (226, 16936), (257, 17041), (272, 17101), (283, 17155), (290, 17191), (293, 17215), (295, 17224), (308, 17287), (309, 17308), (313, 17323), (320, 17347), (324, 17359), (337, 17413), (340, 17434), (347, 17464), (383, 17635), (384, 17656), (400, 17740), (438, 18043), (455, 18166), (456, 18178),

Gene: Stephig9_22 Start: 14527, Stop: 17604, Start Num: 1

Candidate Starts for Stephig9_22:

(Start: 1 @14527 has 49 MA's), (4, 14611), (15, 14779), (17, 14803), (20, 14851), (31, 14971), (46, 15043), (73, 15193), (74, 15196), (Start: 76 @15202 has 2 MA's), (122, 15388), (132, 15448), (133, 15454), (147, 15520), (153, 15547), (155, 15562), (159, 15613), (160, 15616), (163, 15649), (169, 15682), (190, 15850), (214, 16033), (217, 16057), (226, 16105), (231, 16126), (232, 16129), (264, 16273), (270, 16330), (277, 16360), (283, 16399), (298, 16471), (302, 16501), (321, 16600), (329, 16630), (336, 16675), (340, 16708), (368, 16873), (372, 16894), (374, 16906), (385, 16987), (390,

17014), (401, 17077), (403, 17101), (407, 17131), (411, 17164), (415, 17197), (419, 17257), (423, 17284), (436, 17383), (438, 17389), (447, 17479), (450, 17500), (455, 17539), (461, 17587),

Gene: Strosahl_28 Start: 15884, Stop: 18073, Start Num: 91

Candidate Starts for Strosahl_28:

(Start: 60 @15707 has 1 MA's), (Start: 62 @15716 has 4 MA's), (Start: 91 @15884 has 15 MA's), (132, 16127), (133, 16133), (148, 16202), (156, 16259), (176, 16403), (182, 16445), (186, 16493), (187, 16496), (201, 16607), (203, 16625), (217, 16730), (226, 16778), (257, 16883), (272, 16943), (283, 16997), (290, 17033), (293, 17057), (295, 17066), (308, 17129), (309, 17150), (313, 17165), (320, 17189), (324, 17201), (337, 17255), (340, 17276), (347, 17306), (383, 17477), (384, 17498), (400, 17582), (438, 17885), (455, 18008), (456, 18020),

Gene: Sumter_23 Start: 15910, Stop: 18390, Start Num: 57

Candidate Starts for Sumter_23:

(Start: 57 @15910 has 60 MA's), (65, 15949), (75, 16012), (Start: 79 @16042 has 1 MA's), (88, 16084), (145, 16291), (149, 16309), (160, 16399), (169, 16462), (174, 16486), (175, 16498), (182, 16549), (236, 16933), (261, 17035), (267, 17074), (271, 17101), (276, 17125), (318, 17353), (337, 17455), (340, 17476), (343, 17488), (348, 17518), (366, 17617), (375, 17680), (408, 17899), (412, 17932), (441, 18214), (453, 18301), (457, 18340), (459, 18355),

Gene: Sunhee_24 Start: 15812, Stop: 18205, Start Num: 58

Candidate Starts for Sunhee_24:

(Start: 52 @15794 has 7 MA's), (Start: 58 @15812 has 5 MA's), (64, 15845), (Start: 79 @15947 has 1 MA's), (88, 15989), (116, 16043), (136, 16157), (145, 16211), (154, 16256), (160, 16319), (163, 16352), (179, 16448), (206, 16673), (230, 16832), (240, 16871), (247, 16886), (260, 16925), (286, 17051), (297, 17111), (332, 17267), (340, 17333), (344, 17357), (356, 17408), (365, 17468), (371, 17501), (378, 17546), (380, 17555), (386, 17612), (399, 17687), (401, 17699), (403, 17723), (410, 17777), (413, 17795), (426, 17936), (436, 18005), (456, 18146),

Gene: Sunshine924_23 Start: 15894, Stop: 18374, Start Num: 57

Candidate Starts for Sunshine924_23:

(Start: 57 @15894 has 60 MA's), (65, 15933), (75, 15996), (Start: 79 @16026 has 1 MA's), (88, 16068), (145, 16275), (149, 16293), (160, 16383), (169, 16446), (174, 16470), (175, 16482), (182, 16533), (236, 16917), (261, 17019), (267, 17058), (271, 17085), (276, 17109), (300, 17238), (318, 17337), (337, 17439), (340, 17460), (343, 17472), (348, 17502), (366, 17601), (375, 17664), (408, 17883), (412, 17916), (441, 18198), (453, 18285), (457, 18324), (459, 18339),

Gene: SuperAwesome_29 Start: 16728, Stop: 18932, Start Num: 55

Candidate Starts for SuperAwesome_29:

(38, 16569), (47, 16683), (Start: 55 @16728 has 41 MA's), (75, 16839), (77, 16845), (95, 16953), (108, 16995), (119, 17061), (137, 17154), (143, 17181), (160, 17304), (163, 17337), (178, 17427), (185, 17496), (217, 17739), (273, 17877), (325, 17997), (356, 18150), (368, 18213), (375, 18255), (390, 18354), (394, 18375), (397, 18396), (401, 18417), (406, 18468), (409, 18480), (410, 18495), (416, 18576), (425, 18654),

Gene: SuperCallie99_29 Start: 16727, Stop: 18931, Start Num: 55

Candidate Starts for SuperCallie99_29:

(38, 16568), (47, 16682), (Start: 55 @16727 has 41 MA's), (75, 16838), (77, 16844), (95, 16952), (108, 16994), (128, 17117), (137, 17153), (143, 17180), (160, 17303), (163, 17336), (178, 17426), (185, 17495), (217, 17738), (273, 17876), (325, 17996), (356, 18149), (368, 18212), (375, 18254), (390, 18353), (394, 18374), (397, 18395), (401, 18416), (406, 18467), (409, 18479), (410, 18494), (416, 18575), (425, 18653),

Gene: Swirley_22 Start: 15214, Stop: 18558, Start Num: 1

Candidate Starts for Swirley_22:

(Start: 1 @15214 has 49 MA's), (27, 15652), (74, 15964), (82, 16042), (84, 16072), (90, 16129), (102, 16213), (110, 16276), (112, 16282), (132, 16402), (150, 16492), (151, 16495), (160, 16570), (166, 16615), (169, 16633), (171, 16645), (176, 16678), (179, 16699), (202, 16891), (220, 17029), (232, 17077), (249, 17155), (250, 17158), (267, 17254), (270, 17281), (278, 17317), (279, 17329), (289, 17386), (327, 17578), (333, 17608), (336, 17632), (337, 17644), (348, 17707), (368, 17830), (372, 17851), (375, 17872), (387, 17950), (390, 17971), (397, 18013), (401, 18034), (411, 18121), (414, 18151), (419, 18214), (422, 18232), (430, 18313), (433, 18325), (435, 18337), (438, 18346), (443, 18400), (454, 18484), (458, 18523),

Gene: Switzerland_28 Start: 16038, Stop: 18224, Start Num: 91

Candidate Starts for Switzerland_28:

(Start: 60 @15861 has 1 MA's), (Start: 62 @15870 has 4 MA's), (Start: 91 @16038 has 15 MA's), (132, 16278), (133, 16284), (148, 16353), (156, 16410), (176, 16554), (182, 16596), (186, 16644), (187, 16647), (201, 16758), (203, 16776), (217, 16881), (226, 16929), (257, 17034), (272, 17094), (283, 17148), (290, 17184), (293, 17208), (295, 17217), (308, 17280), (309, 17301), (313, 17316), (320, 17340), (324, 17352), (337, 17406), (340, 17427), (347, 17457), (383, 17628), (384, 17649), (400, 17733), (438, 18036), (455, 18159), (456, 18171),

Gene: SydNat_22 Start: 15349, Stop: 18762, Start Num: 1

Candidate Starts for SydNat_22:

(Start: 1 @15349 has 49 MA's), (3, 15409), (10, 15562), (13, 15601), (27, 15787), (45, 16015), (48, 16027), (50, 16039), (74, 16171), (82, 16249), (84, 16279), (90, 16336), (110, 16483), (112, 16489), (114, 16495), (133, 16621), (137, 16633), (160, 16783), (164, 16819), (169, 16849), (172, 16864), (176, 16894), (177, 16906), (181, 16930), (188, 16999), (199, 17065), (217, 17221), (231, 17290), (232, 17293), (236, 17320), (243, 17344), (269, 17482), (274, 17503), (281, 17548), (289, 17590), (327, 17782), (333, 17812), (336, 17836), (337, 17848), (340, 17869), (348, 17911), (364, 17998), (368, 18034), (372, 18055), (375, 18076), (387, 18154), (390, 18175), (394, 18196), (397, 18217), (401, 18238), (403, 18262), (411, 18325), (419, 18418), (422, 18436), (430, 18517), (433, 18529), (435, 18541), (438, 18550), (443, 18604), (454, 18688), (455, 18697),

Gene: Target_26 Start: 17225, Stop: 19837, Start Num: 57

Candidate Starts for Target_26:

(53, 17213), (Start: 57 @17225 has 60 MA's), (65, 17264), (75, 17327), (77, 17333), (Start: 79 @17357 has 1 MA's), (88, 17399), (99, 17450), (145, 17738), (149, 17756), (160, 17846), (169, 17909), (174, 17933), (175, 17945), (182, 17996), (236, 18380), (261, 18482), (267, 18521), (268, 18536), (271, 18548), (276, 18572), (318, 18800), (337, 18902), (340, 18923), (348, 18965), (366, 19064), (375, 19127), (408, 19346), (412, 19379), (441, 19661), (453, 19748), (457, 19787),

Gene: Tarynearal_21 Start: 15242, Stop: 18580, Start Num: 1

Candidate Starts for Tarynearal_21:

(Start: 1 @15242 has 49 MA's), (27, 15680), (74, 15992), (82, 16070), (84, 16100), (90, 16157), (102, 16241), (110, 16304), (112, 16310), (132, 16430), (150, 16520), (151, 16523), (160, 16598), (166, 16643), (169, 16661), (176, 16706), (179, 16727), (202, 16919), (220, 17057), (232, 17105), (249, 17183), (270, 17309), (274, 17321), (278, 17345), (289, 17408), (327, 17600), (333, 17630), (336, 17654), (337, 17666), (348, 17729), (368, 17852), (372, 17873), (375, 17894), (387, 17972), (390, 17993), (397, 18035), (401, 18056), (411, 18143), (414, 18173), (419, 18236), (422, 18254), (430, 18335), (433, 18347), (435, 18359), (438, 18368), (443, 18422), (454, 18506), (458, 18545),

Gene: Temprado_30 Start: 16733, Stop: 18937, Start Num: 55

Candidate Starts for Temprado_30:

(38, 16574), (47, 16688), (Start: 55 @16733 has 41 MA's), (75, 16844), (108, 17000), (133, 17147), (137, 17159), (160, 17309), (163, 17342), (178, 17432), (185, 17501), (217, 17744), (273, 17882), (325, 18002), (356, 18155), (368, 18218), (375, 18260), (390, 18359), (394, 18380), (397, 18401), (401, 18422), (406, 18473), (409, 18485), (410, 18500), (416, 18581), (425, 18659),

Gene: Theia_20 Start: 15180, Stop: 18518, Start Num: 1

Candidate Starts for Theia_20:

(Start: 1 @15180 has 49 MA's), (27, 15618), (74, 15930), (80, 15972), (82, 16008), (84, 16038), (90, 16095), (102, 16179), (110, 16242), (112, 16248), (128, 16350), (132, 16368), (151, 16461), (160, 16536), (166, 16581), (169, 16599), (176, 16644), (179, 16665), (202, 16857), (210, 16917), (220, 16995), (232, 17043), (249, 17121), (270, 17247), (274, 17259), (278, 17283), (289, 17346), (327, 17538), (333, 17568), (336, 17592), (337, 17604), (348, 17667), (368, 17790), (372, 17811), (375, 17832), (387, 17910), (390, 17931), (397, 17973), (401, 17994), (404, 18030), (411, 18081), (414, 18111), (419, 18174), (422, 18192), (430, 18273), (433, 18285), (435, 18297), (438, 18306), (443, 18360), (454, 18444), (458, 18483),

Gene: Tiger_22 Start: 15067, Stop: 18402, Start Num: 1

Candidate Starts for Tiger_22:

(Start: 1 @15067 has 49 MA's), (27, 15505), (74, 15817), (82, 15895), (84, 15925), (90, 15982), (102, 16066), (110, 16129), (112, 16135), (132, 16255), (150, 16345), (151, 16348), (160, 16423), (169, 16486), (176, 16531), (179, 16552), (202, 16744), (216, 16849), (220, 16882), (232, 16930), (249, 17008), (250, 17011), (267, 17107), (270, 17134), (278, 17170), (289, 17230), (327, 17422), (333, 17452), (336, 17476), (337, 17488), (348, 17551), (368, 17674), (372, 17695), (375, 17716), (387, 17794), (390, 17815), (397, 17857), (401, 17878), (411, 17965), (414, 17995), (419, 18058), (422, 18076), (430, 18157), (433, 18169), (435, 18181), (438, 18190), (443, 18244), (454, 18328), (455, 18337), (458, 18367),

Gene: Timothy_26 Start: 17157, Stop: 19703, Start Num: 72

Candidate Starts for Timothy_26:

(Start: 72 @17157 has 22 MA's), (Start: 76 @17175 has 2 MA's), (98, 17349), (100, 17358), (110, 17433), (130, 17541), (134, 17556), (135, 17559), (142, 17577), (151, 17640), (154, 17652), (160, 17715), (169, 17778), (172, 17793), (174, 17802), (176, 17823), (180, 17847), (182, 17862), (190, 17949), (191, 17952), (194, 17967), (198, 17988), (200, 18000), (205, 18066), (210, 18108), (213, 18129), (214, 18138), (217, 18162), (231, 18243), (233, 18252), (235, 18264), (245, 18306), (259, 18363), (266, 18417), (288, 18525), (294, 18564), (328, 18705), (342, 18801), (345, 18822), (352, 18855), (358, 18888), (359, 18891), (367, 18975), (375, 19020), (376, 19023), (392, 19137), (397, 19170), (406, 19242), (411, 19278), (416, 19350), (425, 19428), (431, 19482), (436, 19506), (452, 19617),

Gene: TinyTimmy_26 Start: 17200, Stop: 19746, Start Num: 72

Candidate Starts for TinyTimmy_26:

(Start: 72 @17200 has 22 MA's), (Start: 76 @17218 has 2 MA's), (98, 17392), (100, 17401), (110, 17476), (122, 17530), (130, 17584), (134, 17599), (135, 17602), (142, 17620), (151, 17683), (154, 17695), (160, 17758), (169, 17821), (172, 17836), (174, 17845), (176, 17866), (180, 17890), (182, 17905), (190, 17992), (191, 17995), (194, 18010), (198, 18031), (200, 18043), (205, 18109), (210, 18151), (213, 18172), (214, 18181), (217, 18205), (231, 18286), (233, 18295), (235, 18307), (245, 18349), (259, 18406), (266, 18460), (288, 18568), (294, 18607), (328, 18748), (342, 18844), (345, 18865), (352, 18898), (358, 18931), (359, 18934), (367, 19018), (375, 19063), (376, 19066), (392, 19180), (397, 19213), (406, 19285), (411, 19321), (416, 19393), (425, 19471), (431, 19525), (436, 19549), (452, 19660),

Gene: ToneTone_27 Start: 16647, Stop: 18863, Start Num: 55

Candidate Starts for ToneTone_27:

(47, 16602), (Start: 55 @16647 has 41 MA's), (75, 16758), (108, 16914), (133, 17061), (137, 17073), (159, 17220), (160, 17223), (163, 17256), (178, 17346), (185, 17415), (196, 17490), (217, 17658), (325, 17916), (336, 17961), (356, 18069), (368, 18132), (375, 18174), (390, 18273), (394, 18294), (401, 18336), (406, 18387), (410, 18414), (416, 18495), (425, 18585),

Gene: Traft412_26 Start: 17302, Stop: 19782, Start Num: 57

Candidate Starts for Traft412_26:

(Start: 57 @17302 has 60 MA's), (65, 17341), (70, 17386), (75, 17404), (77, 17410), (Start: 79 @17434 has 1 MA's), (88, 17476), (145, 17683), (149, 17701), (160, 17791), (169, 17854), (175, 17890), (182, 17941), (236, 18325), (261, 18427), (267, 18466), (268, 18481), (271, 18493), (276, 18517), (318, 18745), (337, 18847), (340, 18868), (348, 18910), (366, 19009), (375, 19072), (408, 19291), (412, 19324), (441, 19606), (449, 19672), (453, 19693), (457, 19732), (459, 19747),

Gene: Tristan_27 Start: 18390, Stop: 20768, Start Num: 58

Candidate Starts for Tristan_27:

(Start: 52 @18372 has 7 MA's), (Start: 58 @18390 has 5 MA's), (64, 18423), (65, 18429), (Start: 79 @18525 has 1 MA's), (88, 18567), (118, 18630), (119, 18633), (136, 18723), (140, 18738), (144, 18768), (145, 18777), (152, 18813), (154, 18822), (160, 18885), (163, 18918), (172, 18963), (175, 18984), (176, 18993), (188, 19098), (206, 19239), (232, 19407), (233, 19413), (239, 19434), (240, 19437), (260, 19485), (261, 19491), (292, 19653), (297, 19671), (332, 19827), (338, 19881), (344, 19917), (356, 19968), (365, 20028), (371, 20061), (374, 20073), (378, 20106), (379, 20109), (399, 20247), (401, 20259), (405, 20301), (410, 20337), (412, 20349), (413, 20355), (436, 20565),

Gene: Tucker_29 Start: 16733, Stop: 18949, Start Num: 55

Candidate Starts for Tucker_29:

(47, 16688), (Start: 55 @16733 has 41 MA's), (75, 16844), (108, 17000), (133, 17147), (137, 17159), (159, 17306), (160, 17309), (163, 17342), (178, 17432), (185, 17501), (196, 17576), (217, 17744), (325, 18002), (336, 18047), (356, 18155), (368, 18218), (375, 18260), (390, 18359), (394, 18380), (401, 18422), (406, 18473), (410, 18500), (416, 18581), (425, 18671),

Gene: Twigg_22 Start: 15215, Stop: 18553, Start Num: 1

Candidate Starts for Twigg_22:

(Start: 1 @15215 has 49 MA's), (27, 15653), (74, 15965), (82, 16043), (84, 16073), (90, 16130), (102, 16214), (110, 16277), (112, 16283), (132, 16403), (150, 16493), (151, 16496), (160, 16571), (166, 16616), (169, 16634), (176, 16679), (179, 16700), (202, 16892), (220, 17030), (232, 17078), (249, 17156), (270, 17282), (274, 17294), (278, 17318), (289, 17381), (327, 17573), (333, 17603), (336, 17627), (337, 17639), (348, 17702), (368, 17825), (372, 17846), (375, 17867), (387, 17945), (390, 17966), (397, 18008), (401, 18029), (411, 18116), (414, 18146), (419, 18209), (422, 18227), (430, 18308), (433, 18320), (435, 18332), (438, 18341), (443, 18395), (454, 18479), (458, 18518),

Gene: TwoPeat_25 Start: 16622, Stop: 19102, Start Num: 57

Candidate Starts for TwoPeat_25:

(Start: 57 @16622 has 60 MA's), (65, 16661), (75, 16724), (Start: 79 @16754 has 1 MA's), (88, 16796), (145, 17003), (149, 17021), (160, 17111), (169, 17174), (174, 17198), (175, 17210), (182, 17261), (236, 17645), (261, 17747), (267, 17786), (271, 17813), (276, 17837), (300, 17966), (318, 18065), (337, 18167), (340, 18188), (343, 18200), (348, 18230), (366, 18329), (375, 18392), (388, 18482), (408, 18611), (412, 18644), (427, 18815), (441, 18926), (449, 18992), (453, 19013), (457, 19052), (461, 19082),

Gene: UnionJack_22 Start: 14796, Stop: 17609, Start Num: 1

Candidate Starts for UnionJack_22:

(Start: 1 @14796 has 49 MA's), (8, 14985), (74, 15468), (Start: 76 @15474 has 2 MA's), (114, 15618), (119, 15654), (136, 15744), (147, 15810), (151, 15831), (158, 15894), (160, 15906), (163, 15939),

(174, 15993), (177, 16026), (180, 16038), (189, 16137), (196, 16170), (210, 16299), (229, 16413), (254, 16464), (281, 16530), (304, 16611), (307, 16623), (312, 16656), (334, 16734), (335, 16743), (346, 16809), (348, 16818), (368, 16881), (375, 16923), (385, 16995), (390, 17022), (393, 17037), (397, 17064), (401, 17085), (411, 17172), (414, 17202), (419, 17265), (430, 17364), (433, 17376), (435, 17388), (438, 17397), (455, 17544),

Gene: VohminGhazi_29 Start: 16735, Stop: 18939, Start Num: 55

Candidate Starts for VohminGhazi_29:

(38, 16576), (47, 16690), (Start: 55 @16735 has 41 MA's), (75, 16846), (77, 16852), (95, 16960), (108, 17002), (119, 17068), (137, 17161), (143, 17188), (160, 17311), (163, 17344), (178, 17434), (185, 17503), (217, 17746), (273, 17884), (325, 18004), (356, 18157), (368, 18220), (375, 18262), (390, 18361), (394, 18382), (397, 18403), (401, 18424), (406, 18475), (409, 18487), (410, 18502), (416, 18583), (425, 18661),

Gene: Waits_28 Start: 15890, Stop: 18079, Start Num: 91

Candidate Starts for Waits_28:

(Start: 60 @15713 has 1 MA's), (Start: 62 @15722 has 4 MA's), (Start: 91 @15890 has 15 MA's), (132, 16133), (133, 16139), (148, 16208), (156, 16265), (176, 16409), (182, 16451), (186, 16499), (187, 16502), (201, 16613), (203, 16631), (217, 16736), (226, 16784), (257, 16889), (272, 16949), (283, 17003), (290, 17039), (293, 17063), (295, 17072), (308, 17135), (309, 17156), (313, 17171), (320, 17195), (324, 17207), (337, 17261), (340, 17282), (347, 17312), (383, 17483), (384, 17504), (400, 17588), (438, 17891), (455, 18014), (456, 18026),

Gene: Warrior24_29 Start: 15894, Stop: 18083, Start Num: 91

Candidate Starts for Warrior24_29:

(Start: 60 @15717 has 1 MA's), (Start: 62 @15726 has 4 MA's), (Start: 91 @15894 has 15 MA's), (132, 16137), (133, 16143), (148, 16212), (156, 16269), (176, 16413), (182, 16455), (184, 16476), (186, 16503), (187, 16506), (201, 16617), (203, 16635), (217, 16740), (226, 16788), (257, 16893), (272, 16953), (283, 17007), (290, 17043), (293, 17067), (295, 17076), (308, 17139), (309, 17160), (313, 17175), (320, 17199), (324, 17211), (337, 17265), (340, 17286), (347, 17316), (383, 17487), (384, 17508), (400, 17592), (438, 17895), (455, 18018), (456, 18030),

Gene: Watermelon_26 Start: 17220, Stop: 19700, Start Num: 57

Candidate Starts for Watermelon_26:

(Start: 57 @17220 has 60 MA's), (65, 17259), (75, 17322), (Start: 79 @17352 has 1 MA's), (88, 17394), (145, 17601), (149, 17619), (160, 17709), (169, 17772), (174, 17796), (175, 17808), (182, 17859), (236, 18243), (261, 18345), (267, 18384), (271, 18411), (276, 18435), (300, 18564), (318, 18663), (337, 18765), (340, 18786), (348, 18828), (366, 18927), (375, 18990), (408, 19209), (412, 19242), (427, 19413), (441, 19524), (453, 19611), (457, 19650), (459, 19665),

Gene: Wheeler_24 Start: 16677, Stop: 19154, Start Num: 57

Candidate Starts for Wheeler_24:

(Start: 57 @16677 has 60 MA's), (Start: 62 @16692 has 4 MA's), (75, 16776), (77, 16782), (Start: 79 @16806 has 1 MA's), (88, 16848), (145, 17055), (149, 17073), (160, 17163), (169, 17226), (174, 17250), (175, 17262), (182, 17313), (236, 17697), (261, 17799), (267, 17838), (271, 17865), (276, 17889), (318, 18117), (337, 18219), (340, 18240), (343, 18252), (348, 18282), (366, 18381), (375, 18444), (408, 18663), (412, 18696), (441, 18978), (453, 19065), (457, 19104), (459, 19119),

Gene: Wiks_29 Start: 16715, Stop: 18931, Start Num: 55

Candidate Starts for Wiks_29:

(47, 16670), (Start: 55 @16715 has 41 MA's), (75, 16826), (108, 16982), (133, 17129), (137, 17141), (159, 17288), (160, 17291), (163, 17324), (178, 17414), (185, 17483), (196, 17558), (217, 17726), (325, 17984), (336, 18029), (356, 18137), (368, 18200), (375, 18242), (390, 18341), (394, 18362),

(401, 18404), (406, 18455), (410, 18482), (416, 18563), (425, 18653),

Gene: WunderPhul_29 Start: 16715, Stop: 18931, Start Num: 55

Candidate Starts for WunderPhul_29:

(47, 16670), (Start: 55 @16715 has 41 MA's), (75, 16826), (108, 16982), (133, 17129), (137, 17141), (159, 17288), (160, 17291), (163, 17324), (178, 17414), (185, 17483), (196, 17558), (217, 17726), (325, 17984), (336, 18029), (356, 18137), (368, 18200), (375, 18242), (390, 18341), (394, 18362), (401, 18404), (406, 18455), (410, 18482), (416, 18563), (425, 18653),

Gene: Yokurt_29 Start: 16715, Stop: 18931, Start Num: 55

Candidate Starts for Yokurt_29:

(47, 16670), (Start: 55 @16715 has 41 MA's), (75, 16826), (108, 16982), (133, 17129), (137, 17141), (159, 17288), (160, 17291), (163, 17324), (178, 17414), (185, 17483), (196, 17558), (217, 17726), (325, 17984), (336, 18029), (356, 18137), (368, 18200), (375, 18242), (390, 18341), (394, 18362), (401, 18404), (406, 18455), (410, 18482), (416, 18563), (425, 18653),

Gene: Zaka_29 Start: 16715, Stop: 18931, Start Num: 55

Candidate Starts for Zaka_29:

(47, 16670), (Start: 55 @16715 has 41 MA's), (75, 16826), (108, 16982), (133, 17129), (137, 17141), (159, 17288), (160, 17291), (163, 17324), (178, 17414), (185, 17483), (196, 17558), (217, 17726), (325, 17984), (336, 18029), (356, 18137), (368, 18200), (375, 18242), (390, 18341), (394, 18362), (401, 18404), (406, 18455), (410, 18482), (416, 18563), (425, 18653),

Gene: Zephyr_24 Start: 16453, Stop: 18933, Start Num: 57

Candidate Starts for Zephyr_24:

(Start: 57 @16453 has 60 MA's), (65, 16492), (75, 16555), (Start: 79 @16585 has 1 MA's), (88, 16627), (145, 16834), (149, 16852), (160, 16942), (169, 17005), (174, 17029), (175, 17041), (182, 17092), (236, 17476), (261, 17578), (267, 17617), (268, 17632), (271, 17644), (276, 17668), (300, 17797), (318, 17896), (337, 17998), (340, 18019), (348, 18061), (366, 18160), (375, 18223), (388, 18313), (408, 18442), (412, 18475), (441, 18757), (449, 18823), (453, 18844), (457, 18883), (459, 18898),

Gene: Zeuska_25 Start: 16887, Stop: 19367, Start Num: 57

Candidate Starts for Zeuska_25:

(Start: 57 @16887 has 60 MA's), (65, 16926), (75, 16989), (Start: 79 @17019 has 1 MA's), (88, 17061), (145, 17268), (149, 17286), (160, 17376), (169, 17439), (174, 17463), (175, 17475), (182, 17526), (236, 17910), (261, 18012), (267, 18051), (271, 18078), (276, 18102), (300, 18231), (318, 18330), (337, 18432), (340, 18453), (343, 18465), (348, 18495), (366, 18594), (375, 18657), (408, 18876), (412, 18909), (441, 19191), (453, 19278), (457, 19317), (459, 19332),

Gene: Zolita_21 Start: 15350, Stop: 18763, Start Num: 1

Candidate Starts for Zolita_21:

(Start: 1 @15350 has 49 MA's), (3, 15410), (10, 15563), (13, 15602), (27, 15788), (45, 16016), (48, 16028), (50, 16040), (74, 16172), (82, 16250), (84, 16280), (90, 16337), (110, 16484), (112, 16490), (114, 16496), (133, 16622), (137, 16634), (160, 16784), (164, 16820), (169, 16850), (172, 16865), (176, 16895), (177, 16907), (181, 16931), (188, 17000), (199, 17066), (217, 17222), (231, 17291), (232, 17294), (236, 17321), (243, 17345), (269, 17483), (274, 17504), (281, 17549), (289, 17591), (327, 17783), (333, 17813), (336, 17837), (337, 17849), (340, 17870), (348, 17912), (364, 17999), (368, 18035), (372, 18056), (375, 18077), (387, 18155), (390, 18176), (394, 18197), (397, 18218), (401, 18239), (403, 18263), (411, 18326), (419, 18419), (422, 18437), (430, 18518), (433, 18530), (435, 18542), (438, 18551), (443, 18605), (454, 18689), (455, 18698),

Gene: Zulu_29 Start: 16714, Stop: 18930, Start Num: 55

Candidate Starts for Zulu_29:

(47, 16669), (Start: 55 @16714 has 41 MA's), (75, 16825), (108, 16981), (133, 17128), (137, 17140),
(159, 17287), (160, 17290), (163, 17323), (178, 17413), (185, 17482), (196, 17557), (217, 17725),
(325, 17983), (336, 18028), (356, 18136), (368, 18199), (375, 18241), (390, 18340), (394, 18361),
(401, 18403), (406, 18454), (410, 18481), (416, 18562), (425, 18652),