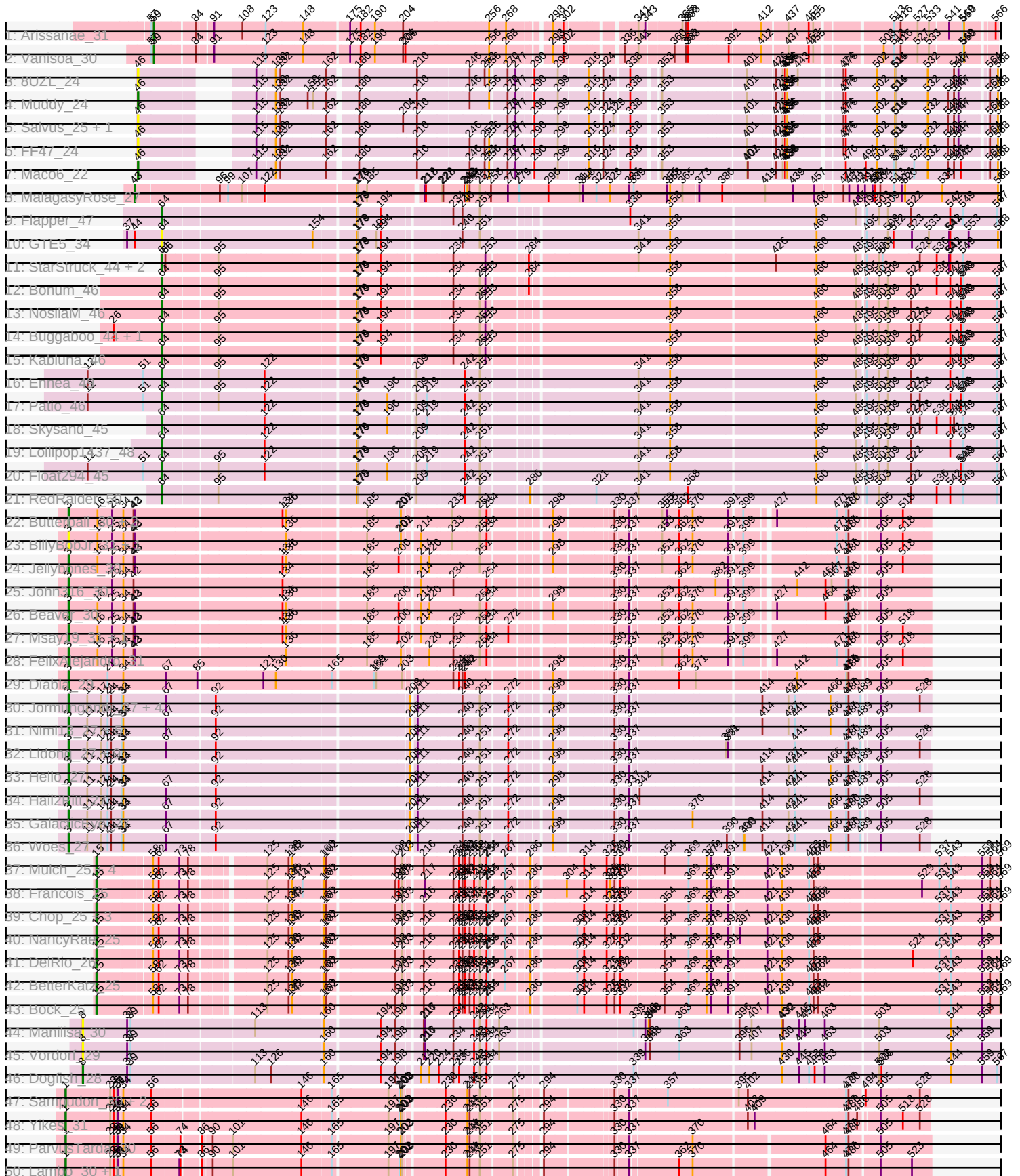


Zoomed Pham 330438



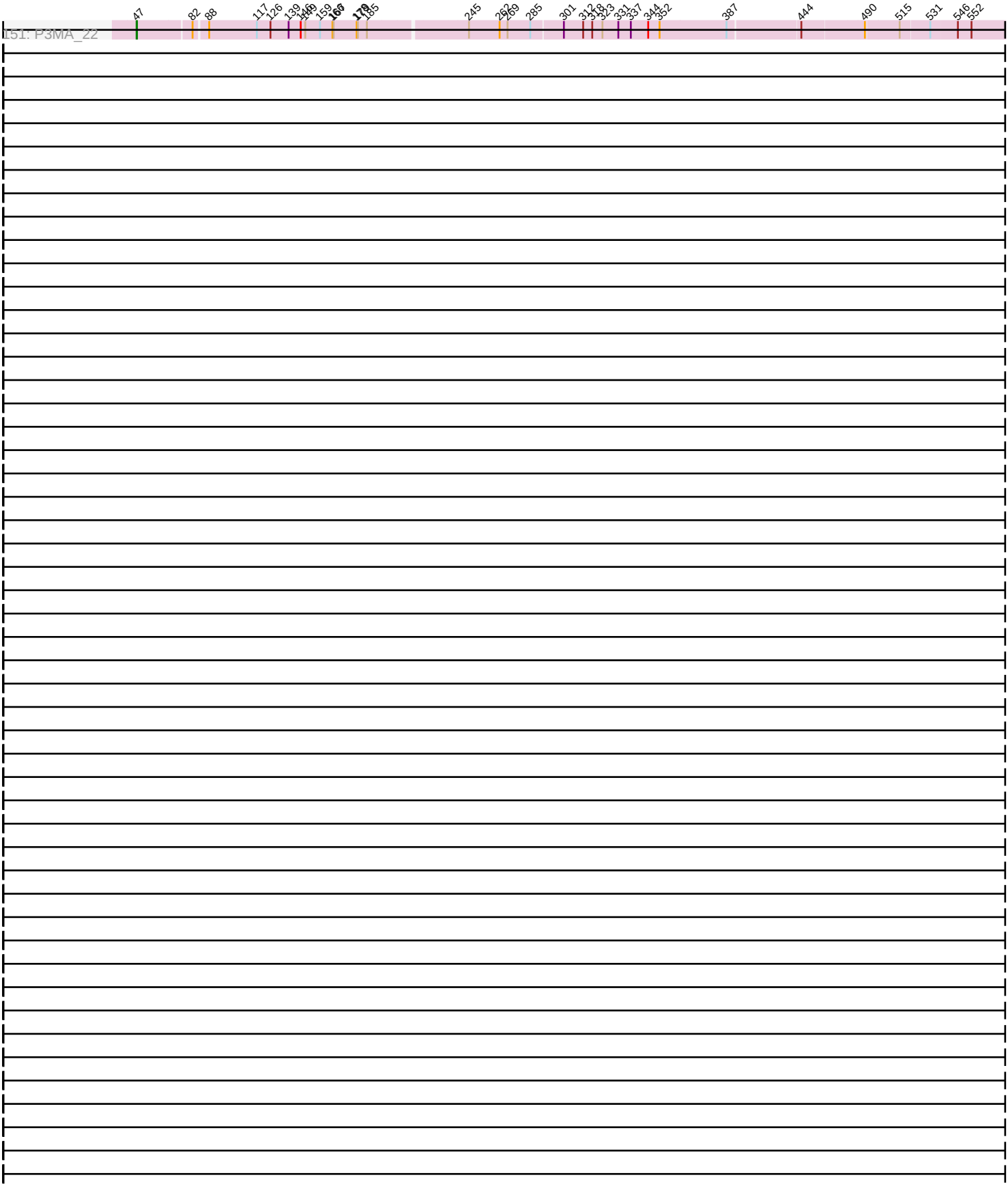
Zoomed Pham 330438

[illegible]

Zoomed Pham 330438

[illegible]

Zoomed Pham 330438



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 330438 Report

This analysis was run 09/05/26 on database version 662.

Pham number 330438 has 259 members, 28 are drafts.

Phages represented in each track:

- Track 1 : Arissanae_31
- Track 2 : Vanisoa_30
- Track 3 : 8UZL_24
- Track 4 : Muddy_24
- Track 5 : Salvus_25, LongHai_25
- Track 6 : FF47_24
- Track 7 : Maco6_22
- Track 8 : MalagasyRose_27
- Track 9 : Flapper_47
- Track 10 : GTE5_34
- Track 11 : StarStruck_44, MerCougar_44, Outis_44
- Track 12 : Bonum_46
- Track 13 : NosilaM_46
- Track 14 : Buggaboo_44, SuperSulley_44
- Track 15 : Kabluna_46
- Track 16 : Ennea_49
- Track 17 : Patio_46
- Track 18 : Skysand_45
- Track 19 : Lollipop1437_48
- Track 20 : Float294_45
- Track 21 : RedRaider_50
- Track 22 : Butterball_30, Boneham_30, BirksAndSocks_30
- Track 23 : BillyBobJr_31, CinnamonToast_31
- Track 24 : Jellybones_30
- Track 25 : John316_30
- Track 26 : Beaver_30
- Track 27 : Msay19_31, Poland_31
- Track 28 : FelixAlejandro_31
- Track 29 : Diabla_29
- Track 30 : Jormungandr_27, Harambe_27, Anamika_27, Lahirium_27, Neoevie_27
- Track 31 : Nimi13_27, Luker_28, Sticker17_27, Newt_28, Guillaume_27, Teal_27
- Track 32 : Lidong_27, Shelley_27, Jams_27, Berries_27, Charianelly_27, Minos_28, Damp_27, Bianmat_27, MrWormie_27, Kaseim_27
- Track 33 : Hello_27
- Track 34 : Hail2Pitt_27
- Track 35 : GalacticEye_27
- Track 36 : Woes_27

- Track 37 : Mulch_25, Parada_25, WheatThin_25, Nadeem_25, Brylie_25
- Track 38 : Francois_25
- Track 39 : Chop_25, Ayotoya_25, GrandSlam_25, Hamood_25
- Track 40 : NancyRae_25
- Track 41 : DelRio_26
- Track 42 : BetterKatz_25
- Track 43 : Bock_25
- Track 44 : Manilisa_30
- Track 45 : Vordorf_29
- Track 46 : Dogfish_28
- Track 47 : Sampudon_30, Jalebi_29, LavAbarElk_28
- Track 48 : Yikes_31
- Track 49 : ParvusTarda_30
- Track 50 : Lambo_30, Lila22_29
- Track 51 : DaviePasture_30
- Track 52 : Nettle_30
- Track 53 : Astralis_27, Riduram_27, Alyssamiracle_30, Genamy16_30, Jamemuya19_27, RazorC_28, NovaSharks_29
- Track 54 : Alephilan_27
- Track 55 : Sadboi_30, Gretellyn_30
- Track 56 : MoiGyank_32, Mima20_28
- Track 57 : Patos_31, NorManre_31
- Track 58 : Avian_27
- Track 59 : OtterstedtS21_30
- Track 60 : Fulcrum_31, GOATification_31
- Track 61 : Gibbin_31
- Track 62 : Rumi_29
- Track 63 : BirthdayBoy_31
- Track 64 : Charminar_27
- Track 65 : LuckyLeo_29, Apeppi_27, Tillicus_29
- Track 66 : Erutan_30, Ranch_30
- Track 67 : Rukungu_30
- Track 68 : DoobyDoo_29
- Track 69 : Zany_29
- Track 70 : Wojtek_29
- Track 71 : Stormer_28
- Track 72 : Pywacket_29
- Track 73 : Rota_29
- Track 74 : Squirty_19
- Track 75 : Mdavu_23, Trice_23, Teejan_23, Biglebops_23, Enkosi_23, Amelie_23, SgtBeansprout_23, LilPharaoh_23, Torres_23, Nutello_23
- Track 76 : McMater_27, Peanam_27, Niklas_27, Richo_27, Dartin_27
- Track 77 : Chavito_27
- Track 78 : Validus_27
- Track 79 : Curiosium_28
- Track 80 : Nikao_23
- Track 81 : TingHuaYa_27
- Track 82 : Shaobing_27
- Track 83 : LastHope_27
- Track 84 : ZoeJ_23
- Track 85 : Findley_23
- Track 86 : Mufasa_23, Doughnut_23, BoostSeason_23
- Track 87 : DismalStressor_23, DismalFunk_23, Marcoliusprime_23

- Track 88 : Strobilo_23
- Track 89 : Milly_23
- Track 90 : TM4_23
- Track 91 : MacnCheese_27
- Track 92 : Lea83_26, ShedlockHolmes_26
- Track 93 : Pharb_26
- Track 94 : Keshu_26
- Track 95 : TribbleTrouble_25
- Track 96 : Pixie_26, TBond007_26
- Track 97 : Hurricane_26
- Track 98 : YasnayaPolyana_28, Fionnbharth_28, JF1_28, Y2_28, Malthus_29, Y10_28, Wintermute_28
- Track 99 : Kraw_28
- Track 100 : MissDaisy_28
- Track 101 : Chancellor_28, Slarp_28, Qhanda_29, Cheetobro_28
- Track 102 : Bobquesha_29
- Track 103 : Patt_28
- Track 104 : Mitti_28
- Track 105 : OmniCritical_28
- Track 106 : Lebo14_28
- Track 107 : Reptar3000_28
- Track 108 : Phrank_26, Bryler_26, Cain_26
- Track 109 : Ekdilam_24
- Track 110 : Krueger_26, Tigress9_26
- Track 111 : Syra333_26
- Track 112 : PhelpsODU_26, Unicorn_26
- Track 113 : DarthP_26
- Track 114 : Sunflower1121_25
- Track 115 : TCLif_26
- Track 116 : Ximenita_27
- Track 117 : Yuna_28
- Track 118 : Amohnition_26
- Track 119 : Amgine_25
- Track 120 : Tierra_26
- Track 121 : Shadow1_25
- Track 122 : Lavahound_25
- Track 123 : Hammy_26
- Track 124 : November_25
- Track 125 : Ellie_24
- Track 126 : Fefferhead_26
- Track 127 : Applecrisp_25
- Track 128 : MiniLon_21, MiniMac_21, Lolly9_21
- Track 129 : Samty_21, Finnry_21, Moostard_21, Bellis_21
- Track 130 : TriFive_21, Nicholas_21, Red305_21, Jobypre_21, Snenia_21, MsGreen_21, Jubie_21, Clautastrophe_21, Kingsolomon_21, Lumos_21
- Track 131 : KirDoubleO7_19
- Track 132 : DuncansLeg_21
- Track 133 : LiyuLake_21, BourbonZero_20
- Track 134 : Whirlwind_22, Krypton555_21
- Track 135 : Ellson_21
- Track 136 : Panchino_20, SkinnyPete_20
- Track 137 : Phloss_20
- Track 138 : Andies_20

- Track 139 : Scitech_20
- Track 140 : Xeno_20
- Track 141 : Shweta_20
- Track 142 : Fulbright_20
- Track 143 : Impisi_21
- Track 144 : StressBall_21, Glaske_21, KilKor_21, Phalm_21, Gavriela_21, Megiddo_21, CactusJack_21
- Track 145 : Dynamo_21, Willsammy_21
- Track 146 : Phineas_21
- Track 147 : Faiyaz_27, AuntGwenStacy_27, Typha_27
- Track 148 : Bipper_27, Cracklewink_27
- Track 149 : Hilltopfarm_27
- Track 150 : TPA4_24
- Track 151 : P3MA_22

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

The start number called the most often in the published annotations is 19, it was called in 60 of the 231 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amelie_23, Amgine_25, Amohnition_26, Applecrisp_25, Biglebops_23, BoostSeason_23, Bryler_26, Cain_26, Chavito_27, DarthP_26, Dartin_27, DismalFunk_23, DismalStressor_23, Doughnut_23, Ekdilam_24, Ellie_24, Enkosi_23, Fefferhead_26, Findley_23, Hammy_26, Hurricane_26, Keshu_26, Krueger_26, Lavahound_25, Lea83_26, LilPharaoh_23, MacnCheese_27, Marcoliusprime_23, McMater_27, Mdavu_23, Milly_23, Mufasa_23, Nikao_23, Niklas_27, November_25, Nutello_23, Peanam_27, Pharb_26, PhelpsODU_26, Phrank_26, Pixie_26, Richo_27, SgtBeansprout_23, Shadow1_25, Shaobing_27, ShedlockHolmes_26, Strobilo_23, Sunflower1121_25, Syra333_26, TBond007_26, TClif_26, TM4_23, TPA4_24, Teejan_23, Tierra_26, Tigress9_26, Torres_23, TribbleTrouble_25, Trice_23, Unicorn_26, Validus_27, Ximenita_27, Yuna_28, ZoeJ_23,

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

•

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

- 8UZL_24, Alephilan_27, Alyssamiracle_30, Anamika_27, Andies_20, Apeppi_27, Arissanae_31, Astralis_27, AuntGwenStacy_27, Avian_27, Ayotoya_25, Beaver_30, Bellis_21, Berries_27, BetterKatz_25, Bianmat_27, BillyBobJr_31, Bipper_27, BirksAndSocks_30, BirthdayBoy_31, Bobquesha_29, Bock_25, Boneham_30, Bonum_46, BourbonZero_20, Brylie_25, Buggaboo_44, Butterball_30, CactusJack_21, Chancellor_28, Charianelly_27, Charminar_27, Cheetobro_28, Chop_25, CinnamonToast_31, Clautastrophe_21, Cracklewink_27, Curiosium_28, Damp_27, DaviePasture_30, DelRio_26, Diabla_29, Dogfish_28, DoobyDoo_29, DuncansLeg_21, Dynamo_21, Ellson_21, Ennea_49, Erutan_30, FF47_24, Faiyaz_27, FelixAlejandro_31, Finnry_21, Fionnbharth_28, Flapper_47, Float294_45, Francois_25, Fulbright_20, Fulcrum_31, GOATification_31, GTE5_34, GalacticEye_27, Gavriela_21, Genamy16_30, Gibbin_31, Glaske_21, GrandSlam_25, Gretellyn_30, Guillaume_27, Hail2Pitt_27, Hamood_25,

Harambe_27, Hello_27, Hilltopfarm_27, Impisi_21, JF1_28, Jalebi_29, Jamemuya19_27, Jams_27, Jellybones_30, Jobypre_21, John316_30, Jormungandr_27, Jubie_21, Kabluna_46, Kaseim_27, KilKor_21, Kingsolomon_21, KirDoubleO7_19, Kraw_28, Krypton555_21, Lahirium_27, Lambo_30, LastHope_27, LavAbarElk_28, Lebo14_28, Lidong_27, Lila22_29, LiyuLake_21, Lollipop1437_48, Lolly9_21, LongHai_25, LuckyLeo_29, Luker_28, Lumos_21, Maco6_22, MalagasyRose_27, Malthus_29, Manilisa_30, Megiddo_21, MerCougar_44, Mima20_28, MiniLon_21, MiniMac_21, Minos_28, MissDaisy_28, Mitti_28, MoiGyank_32, Moostard_21, MrWormie_27, MsGreen_21, Msay19_31, Muddy_24, Mulch_25, Nadeem_25, NancyRae_25, Neoevie_27, Nettle_30, Newt_28, Nicholas_21, Nimi13_27, NorManre_31, NosilaM_46, NovaSharks_29, OmniCritical_28, OtterstedtS21_30, Outis_44, P3MA_22, Panchino_20, Parada_25, ParvusTarda_30, Patio_46, Patos_31, Patt_28, Phalm_21, Phineas_21, Phloss_20, Poland_31, Pywacket_29, Qhanda_29, Ranch_30, RazorC_28, Red305_21, RedRaider_50, Reptar3000_28, Riduram_27, Rota_29, Rukungu_30, Rumi_29, Sadboi_30, Salvus_25, Sampudon_30, Samty_21, Scitech_20, Shelley_27, Shweta_20, SkinnyPete_20, Skysand_45, Slarp_28, Snenia_21, Squirty_19, StarStruck_44, Sticker17_27, Stormer_28, StressBall_21, SuperSulley_44, Teal_27, Tillicus_29, TingHuaYa_27, TriFive_21, Typha_27, Vanisoa_30, Vordorf_29, WheatThin_25, Whirlwind_22, Willsammy_21, Wintermute_28, Woes_27, Wojtek_29, Xeno_20, Y10_28, Y2_28, YasnayaPolyana_28, Yikes_31, Zany_29,

Summary by start number:

Start 1:

- Found in 43 of 259 (16.6%) of genes in pham
- Manual Annotations of this start: 38 of 231
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alephilan_27 (DV), Alyssamiracle_30 (DV), Apeppi_27 (DV), Astralis_27 (DV), Avian_27 (DV), BirthdayBoy_31 (DV), Charminar_27 (DV), DaviePasture_30 (DV), DoobyDoo_29 (DV), Erutan_30 (DV), Fulcrum_31 (DV), GOATification_31 (DV), Genamy16_30 (DV), Gibbin_31 (DV), GretelLyn_30 (DV), Jalebi_29 (DV), Jamemuya19_27 (DV), Lambo_30 (DV), LavAbarElk_28 (DV), Lila22_29 (DV), LuckyLeo_29 (DV), Mima20_28 (DV), MoiGyank_32 (DV), Nettle_30 (DV), NorManre_31 (DV), NovaSharks_29 (DV), OtterstedtS21_30 (DV), ParvusTarda_30 (DV), Patos_31 (DV), Pywacket_29 (DV), Ranch_30 (DV), RazorC_28 (DV), Riduram_27 (DV), Rota_29 (DV), Rukungu_30 (DV), Rumi_29 (DV), Sadboi_30 (DV), Sampudon_30 (DV), Stormer_28 (DV), Tillicus_29 (DV), Wojtek_29 (DV), Yikes_31 (DV), Zany_29 (DV),

Start 3:

- Found in 37 of 259 (14.3%) of genes in pham
- Manual Annotations of this start: 35 of 231
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anamika_27 (CS3), Beaver_30 (CS2), Berries_27 (CS3), Bianmat_27 (CS3), BillyBobJr_31 (CS2), BirksAndSocks_30 (CS2), Boneham_30 (CS2), Butterball_30 (CS2), Charianelly_27 (CS3), CinnamonToast_31 (CS2), Damp_27 (CS3), Diabla_29 (CS2), FelixAlejandro_31 (CS2), GalacticEye_27 (CS3), Guillaume_27 (CS3), Hail2Pitt_27 (CS3), Harambe_27 (CS3), Hello_27 (CS3), Jams_27 (CS3), Jellybones_30 (CS2), John316_30 (CS2), Jormungandr_27 (CS3), Kaseim_27 (CS3), Lahirium_27 (CS3), Lidong_27 (CS3), Luker_28 (CS3), Minos_28 (CS3), MrWormie_27 (CS3), Msay19_31 (CS2), Neoevie_27 (CS3), Newt_28 (CS3), Nimi13_27 (CS3), Poland_31 (CS2), Shelley_27

(CS3), Sticker17_27 (CS3), Teal_27 (CS3), Woes_27 (CS3),

Start 4:

- Found in 1 of 259 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 231
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Squirty_19 (F3),

Start 5:

- Found in 19 of 259 (7.3%) of genes in pham
- Manual Annotations of this start: 17 of 231
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Andies_20 (N), CactusJack_21 (P1), Dynamo_21 (P1), Fulbright_20 (N), Gavriela_21 (P1), Glaske_21 (P1), Impisi_21 (N), KilKor_21 (P1), Megiddo_21 (P1), Panchino_20 (N), Phalm_21 (P1), Phineas_21 (P1), Phloss_20 (N), Scitech_20 (N), Shweta_20 (N), SkinnyPete_20 (N), StressBall_21 (P1), Willsammy_21 (P1), Xeno_20 (N),

Start 8:

- Found in 3 of 259 (1.2%) of genes in pham
- Manual Annotations of this start: 1 of 231
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dogfish_28 (DT), Manilisa_30 (DT), Vordorf_29 (DT),

Start 14:

- Found in 24 of 259 (9.3%) of genes in pham
- Manual Annotations of this start: 19 of 231
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bellis_21 (L3), BourbonZero_20 (L3), Clautastrophe_21 (L3), DuncansLeg_21 (L3), Ellson_21 (L3), Finnry_21 (L3), Jobypre_21 (L3), Jubie_21 (L3), Kingsolomon_21 (L3), KirDoubleO7_19 (L3), Krypton555_21 (L3), LiyuLake_21 (L3), Lolly9_21 (L3), Lumos_21 (L3), MiniLon_21 (L3), MiniMac_21 (L3), Moostard_21 (L3), MsGreen_21 (L3), Nicholas_21 (L3), Red305_21 (L3), Samty_21 (L3), Snenia_21 (L3), TriFive_21 (L3), Whirlwind_22 (L3),

Start 15:

- Found in 14 of 259 (5.4%) of genes in pham
- Manual Annotations of this start: 14 of 231
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ayotoya_25 (DI), BetterKatz_25 (DI), Bock_25 (DI), Brylie_25 (DI), Chop_25 (DI), DelRio_26 (DI), Francois_25 (DI), GrandSlam_25 (DI), Hamood_25 (DI), Mulch_25 (DI), Nadeem_25 (DI), NancyRae_25 (DI), Parada_25 (DI), WheatThin_25 (DI),

Start 19:

- Found in 64 of 259 (24.7%) of genes in pham
- Manual Annotations of this start: 60 of 231
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amelie_23 (K1), Amgine_25 (K6), Amohnition_26 (K6), Applecrisp_25 (K6), Binglebops_23 (K1), BoostSeason_23 (K2), Bryler_26 (K6), Cain_26 (K6), Chavito_27 (K1), DarthP_26 (K6), Dartin_27 (K1), DismalFunk_23 (K2), DismalStressor_23 (K2), Doughnut_23 (K2), EkdiIam_24 (K6),

Ellie_24 (K6), Enkosi_23 (K1), Fefferhead_26 (K6), Findley_23 (K2), Hammy_26 (K6), Hurricane_26 (K3), Keshu_26 (K3), Krueger_26 (K6), Lavahound_25 (K6), Lea83_26 (K3), LilPharaoh_23 (K1), MacnCheese_27 (K3), Marcoliusprime_23 (K2), McMater_27 (K1), Mdavu_23 (K1), Milly_23 (K2), Mufasa_23 (K2), Nikao_23 (K1), Niklas_27 (K1), November_25 (K6), Nutello_23 (K1), Peanam_27 (K1), Pharb_26 (K3), PhelpsODU_26 (K6), Phrank_26 (K6), Pixie_26 (K3), Richo_27 (K1), SgtBeansprout_23 (K1), Shadow1_25 (K6), Shaobing_27 (K1), ShedlockHolmes_26 (K3), Strobilo_23 (K2), Sunflower1121_25 (K6), Syra333_26 (K6), TBond007_26 (K3), TClif_26 (K6), TM4_23 (K2), TPA4_24 (singleton), Teejan_23 (K1), Tierra_26 (K6), Tigress9_26 (K6), Torres_23 (K1), TribbleTrouble_25 (K3), Trice_23 (K1), Unicorn_26 (K6), Validus_27 (K1), Ximenita_27 (K6), Yuna_28 (K6), ZoeJ_23 (K2),

Start 20:

- Found in 10 of 259 (3.9%) of genes in pham
- Manual Annotations of this start: 6 of 231
- Called 60.0% of time when present
- Phage (with cluster) where this start called: AuntGwenStacy_27 (Y), Bipper_27 (Y), Cracklewink_27 (Y), Faiyaz_27 (Y), Hilltopfarm_27 (Y), Typha_27 (Y),

Start 43:

- Found in 21 of 259 (8.1%) of genes in pham
- Manual Annotations of this start: 1 of 231
- Called 4.8% of time when present
- Phage (with cluster) where this start called: MalagasyRose_27 (AG),

Start 46:

- Found in 6 of 259 (2.3%) of genes in pham
- Manual Annotations of this start: 2 of 231
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 8UZL_24 (AB), FF47_24 (AB), LongHai_25 (AB), Maco6_22 (AB), Muddy_24 (AB), Salvus_25 (AB),

Start 47:

- Found in 1 of 259 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 231
- Called 100.0% of time when present
- Phage (with cluster) where this start called: P3MA_22 (singleton),

Start 49:

- Found in 22 of 259 (8.5%) of genes in pham
- Manual Annotations of this start: 18 of 231
- Called 95.5% of time when present
- Phage (with cluster) where this start called: Bobquesha_29 (K4), Chancellor_28 (K4), Cheetobro_28 (K4), Fionnbharth_28 (K4), JF1_28 (K4), Kraw_28 (K4), LastHope_27 (K1), Lebo14_28 (K4), Malthus_29 (K4), MissDaisy_28 (K4), Mitti_28 (K4), OmniCritical_28 (K4), Patt_28 (K4), Qhanda_29 (K4), Reptar3000_28 (K4), Slarp_28 (K4), TingHuaYa_27 (K1), Wintermute_28 (K4), Y10_28 (K4), Y2_28 (K4), YasnayaPolyana_28 (K4),

Start 52:

- Found in 11 of 259 (4.2%) of genes in pham
- Manual Annotations of this start: 1 of 231
- Called 9.1% of time when present

- Phage (with cluster) where this start called: Curiosium_28 (K1),

Start 59:

- Found in 2 of 259 (0.8%) of genes in pham
- Manual Annotations of this start: 2 of 231
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arissanae_31 (A9), Vanisoa_30 (A9),

Start 64:

- Found in 16 of 259 (6.2%) of genes in pham
- Manual Annotations of this start: 15 of 231
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bonum_46 (CR2), Buggaboo_44 (CR2), Ennea_49 (CR3), Flapper_47 (CR1), Float294_45 (CR3), GTE5_34 (CR1), Kabluna_46 (CR2), Lollipop1437_48 (CR3), MerCougar_44 (CR2), NosilaM_46 (CR2), Outis_44 (CR2), Patio_46 (CR3), RedRaider_50 (CR3), Skysand_45 (CR3), StarStruck_44 (CR2), SuperSulley_44 (CR2),

Summary by clusters:

There are 22 clusters represented in this pham: singleton, DI, K3, K2, K1, P1, K6, K4, DV, DT, A9, CS3, CS2, AB, AG, N, F3, L3, Y, CR2, CR3, CR1,

Info for manual annotations of cluster A9:

- Start number 59 was manually annotated 2 times for cluster A9.

Info for manual annotations of cluster AB:

- Start number 46 was manually annotated 2 times for cluster AB.

Info for manual annotations of cluster AG:

- Start number 43 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster CR1:

- Start number 64 was manually annotated 1 time for cluster CR1.

Info for manual annotations of cluster CR2:

- Start number 64 was manually annotated 8 times for cluster CR2.

Info for manual annotations of cluster CR3:

- Start number 64 was manually annotated 6 times for cluster CR3.

Info for manual annotations of cluster CS2:

- Start number 3 was manually annotated 10 times for cluster CS2.

Info for manual annotations of cluster CS3:

- Start number 3 was manually annotated 25 times for cluster CS3.

Info for manual annotations of cluster DI:

- Start number 15 was manually annotated 14 times for cluster DI.

Info for manual annotations of cluster DT:

- Start number 8 was manually annotated 1 time for cluster DT.

Info for manual annotations of cluster DV:

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

Info for manual annotations of cluster F3:

- Start number 4 was manually annotated 1 time for cluster F3.

Info for manual annotations of cluster K1:

- Start number 19 was manually annotated 16 times for cluster K1.
- Start number 49 was manually annotated 1 time for cluster K1.
- Start number 52 was manually annotated 1 time for cluster K1.

Info for manual annotations of cluster K2:

- Start number 19 was manually annotated 11 times for cluster K2.

Info for manual annotations of cluster K3:

- Start number 19 was manually annotated 9 times for cluster K3.

Info for manual annotations of cluster K4:

- Start number 49 was manually annotated 17 times for cluster K4.

Info for manual annotations of cluster K6:

- Start number 19 was manually annotated 24 times for cluster K6.

Info for manual annotations of cluster L3:

- Start number 14 was manually annotated 19 times for cluster L3.

Info for manual annotations of cluster N:

- Start number 5 was manually annotated 7 times for cluster N.

Info for manual annotations of cluster P1:

- Start number 5 was manually annotated 10 times for cluster P1.

Info for manual annotations of cluster Y:

- Start number 20 was manually annotated 6 times for cluster Y.

Gene Information:

Gene: 8UZL_24 Start: 19399, Stop: 21717, Start Num: 46

Candidate Starts for 8UZL_24:

(Start: 46 @19399 has 2 MA's), (115, 19600), (130, 19645), (132, 19657), (162, 19768), (180, 19834), (210, 19975), (246, 20107), (252, 20146), (256, 20158), (270, 20197), (277, 20215), (290, 20251), (299, 20311), (316, 20386), (324, 20413), (338, 20476), (353, 20533), (401, 20728), (426, 20797), (431, 20815), (434, 20821), (435, 20824), (436, 20827), (443, 20851), (474, 20944), (476, 20950), (502, 21028), (514, 21076), (515, 21079), (532, 21157), (546, 21223), (547, 21235), (564, 21298), (568, 21319), (574, 21340), (586, 21397), (589, 21418), (602, 21457), (621, 21499), (637, 21532), (639, 21538), (644, 21553), (669, 21637),

Gene: Alephilan_27 Start: 25947, Stop: 27947, Start Num: 1

Candidate Starts for Alephilan_27:

(Start: 1 @25947 has 38 MA's), (23, 26061), (26, 26070), (29, 26079), (31, 26082), (34, 26091), (56, 26160), (101, 26346), (146, 26523), (197, 26730), (201, 26757), (202, 26760), (203, 26763), (230,

26850), (244, 26898), (246, 26904), (251, 26931), (294, 27060), (330, 27219), (337, 27252), (349, 27294), (399, 27513), (402, 27525), (409, 27543), (414, 27564), (427, 27600), (477, 27759), (480, 27765), (505, 27825), (528, 27921),

Gene: Alyssamiracle_30 Start: 24757, Stop: 26757, Start Num: 1

Candidate Starts for Alyssamiracle_30:

(Start: 1 @24757 has 38 MA's), (23, 24871), (26, 24880), (29, 24889), (31, 24892), (34, 24901), (56, 24970), (101, 25156), (146, 25333), (197, 25540), (202, 25570), (214, 25606), (220, 25621), (230, 25660), (244, 25708), (246, 25714), (251, 25741), (272, 25807), (298, 25894), (330, 26029), (337, 26062), (342, 26074), (370, 26203), (389, 26287), (437, 26440), (441, 26452), (466, 26533), (477, 26569), (480, 26575), (505, 26635), (528, 26731),

Gene: Amelie_23 Start: 20414, Stop: 22900, Start Num: 19

Candidate Starts for Amelie_23:

(Start: 19 @20414 has 60 MA's), (34, 20462), (104, 20642), (105, 20645), (124, 20708), (126, 20720), (162, 20852), (170, 20891), (185, 20948), (191, 20972), (194, 20984), (202, 21032), (203, 21035), (217, 21068), (225, 21107), (234, 21140), (236, 21152), (240, 21161), (242, 21167), (257, 21233), (262, 21248), (296, 21359), (300, 21392), (321, 21476), (326, 21491), (337, 21551), (351, 21620), (374, 21740), (395, 21833), (433, 21947), (459, 22025), (461, 22031), (468, 22055), (485, 22118), (486, 22121), (490, 22133), (510, 22199), (511, 22205), (521, 22247), (525, 22268), (527, 22277), (534, 22310), (536, 22328), (549, 22397), (575, 22496), (576, 22502), (579, 22520), (589, 22574), (594, 22589), (605, 22616), (631, 22673),

Gene: Amgine_25 Start: 20975, Stop: 23359, Start Num: 19

Candidate Starts for Amgine_25:

(Start: 19 @20975 has 60 MA's), (28, 21005), (34, 21023), (60, 21107), (126, 21281), (162, 21413), (184, 21503), (194, 21545), (203, 21596), (220, 21638), (221, 21641), (234, 21698), (240, 21722), (242, 21728), (251, 21767), (267, 21824), (296, 21920), (321, 22037), (338, 22106), (343, 22145), (353, 22163), (356, 22175), (388, 22319), (434, 22454), (435, 22457), (436, 22460), (450, 22499), (468, 22553), (510, 22694), (511, 22700), (515, 22715), (516, 22727), (525, 22757), (540, 22844), (542, 22850), (578, 23000), (591, 23063), (600, 23090), (607, 23099), (652, 23201), (657, 23222), (658, 23225), (686, 23333),

Gene: Amohnition_26 Start: 21373, Stop: 23781, Start Num: 19

Candidate Starts for Amohnition_26:

(Start: 19 @21373 has 60 MA's), (22, 21382), (34, 21421), (69, 21544), (104, 21601), (107, 21613), (126, 21679), (129, 21688), (143, 21733), (162, 21811), (184, 21901), (185, 21907), (194, 21943), (203, 21994), (220, 22036), (221, 22039), (224, 22060), (240, 22120), (242, 22126), (296, 22318), (321, 22435), (338, 22504), (343, 22543), (353, 22561), (356, 22573), (388, 22717), (434, 22852), (436, 22858), (450, 22897), (468, 22951), (483, 23005), (510, 23092), (511, 23098), (515, 23113), (516, 23125), (525, 23155), (540, 23242), (542, 23248), (578, 23398), (589, 23452), (654, 23611), (657, 23626), (658, 23629), (686, 23755),

Gene: Anamika_27 Start: 35607, Stop: 37631, Start Num: 3

Candidate Starts for Anamika_27:

(Start: 3 @35607 has 35 MA's), (11, 35655), (17, 35691), (21, 35709), (24, 35718), (33, 35748), (34, 35751), (67, 35862), (92, 35982), (208, 36459), (211, 36468), (240, 36567), (251, 36612), (272, 36678), (298, 36765), (330, 36900), (337, 36933), (414, 37245), (437, 37311), (441, 37323), (466, 37404), (477, 37440), (480, 37446), (489, 37473), (505, 37506), (528, 37602),

Gene: Andies_20 Start: 17553, Stop: 20192, Start Num: 5

Candidate Starts for Andies_20:

(2, 17541), (Start: 5 @17553 has 17 MA's), (7, 17565), (9, 17577), (Start: 20 @17631 has 6 MA's), (Start: 43 @17700 has 1 MA's), (45, 17703), (48, 17712), (53, 17727), (93, 17904), (116, 17985), (118, 17994), (136, 18051), (141, 18066), (156, 18117), (171, 18189), (179, 18219), (188, 18255), (200, 18318), (205, 18333), (213, 18360), (215, 18366), (234, 18441), (240, 18465), (242, 18471), (253, 18525), (255, 18531), (281, 18618), (310, 18750), (315, 18768), (322, 18801), (328, 18828), (337, 18879), (377, 19089), (394, 19155), (406, 19191), (437, 19290), (439, 19302), (461, 19365), (511, 19527), (515, 19542), (527, 19593), (549, 19710), (558, 19755), (572, 19797), (579, 19833), (590, 19887), (608, 19935), (664, 20079), (677, 20136), (685, 20175), (688, 20184),

Gene: Apeppi_27 Start: 26090, Stop: 28090, Start Num: 1

Candidate Starts for Apeppi_27:

(Start: 1 @26090 has 38 MA's), (23, 26204), (26, 26213), (29, 26222), (31, 26225), (34, 26234), (56, 26303), (70, 26360), (165, 26741), (173, 26774), (200, 26897), (202, 26903), (246, 27047), (251, 27074), (294, 27203), (298, 27227), (330, 27362), (337, 27395), (402, 27668), (410, 27692), (477, 27902), (480, 27908), (494, 27938), (505, 27971),

Gene: Applecrisp_25 Start: 21389, Stop: 23770, Start Num: 19

Candidate Starts for Applecrisp_25:

(Start: 19 @21389 has 60 MA's), (28, 21419), (34, 21437), (60, 21521), (126, 21695), (162, 21827), (184, 21917), (194, 21959), (203, 22010), (220, 22052), (221, 22055), (234, 22112), (240, 22136), (242, 22142), (251, 22181), (267, 22238), (296, 22334), (321, 22451), (338, 22520), (343, 22559), (353, 22577), (356, 22589), (388, 22733), (434, 22868), (435, 22871), (436, 22874), (450, 22913), (468, 22967), (510, 23105), (511, 23111), (515, 23126), (516, 23138), (525, 23168), (540, 23255), (542, 23261), (568, 23366), (575, 23390), (578, 23411), (591, 23474), (657, 23633), (658, 23636), (686, 23744),

Gene: Arissanae_31 Start: 22459, Stop: 24807, Start Num: 59

Candidate Starts for Arissanae_31:

(57, 22453), (Start: 59 @22459 has 2 MA's), (84, 22558), (91, 22591), (108, 22666), (123, 22726), (148, 22816), (175, 22918), (182, 22945), (190, 22981), (204, 23050), (256, 23266), (268, 23308), (298, 23398), (302, 23425), (341, 23572), (343, 23590), (365, 23674), (366, 23683), (368, 23689), (412, 23869), (437, 23929), (452, 23977), (455, 23989), (513, 24169), (516, 24187), (527, 24226), (533, 24256), (541, 24301), (549, 24337), (550, 24340), (566, 24403), (602, 24547), (631, 24613), (669, 24727), (683, 24772), (685, 24784),

Gene: Astralis_27 Start: 24347, Stop: 26347, Start Num: 1

Candidate Starts for Astralis_27:

(Start: 1 @24347 has 38 MA's), (23, 24461), (26, 24470), (29, 24479), (31, 24482), (34, 24491), (56, 24560), (101, 24746), (146, 24923), (197, 25130), (202, 25160), (214, 25196), (220, 25211), (230, 25250), (244, 25298), (246, 25304), (251, 25331), (272, 25397), (298, 25484), (330, 25619), (337, 25652), (342, 25664), (370, 25793), (389, 25877), (437, 26030), (441, 26042), (466, 26123), (477, 26159), (480, 26165), (505, 26225), (528, 26321),

Gene: AuntGwenStacy_27 Start: 23429, Stop: 26023, Start Num: 20

Candidate Starts for AuntGwenStacy_27:

(Start: 20 @23429 has 6 MA's), (32, 23468), (54, 23543), (78, 23645), (80, 23654), (97, 23732), (116, 23813), (118, 23822), (132, 23867), (134, 23870), (136, 23879), (140, 23891), (141, 23894), (147, 23918), (156, 23945), (158, 23954), (171, 24017), (188, 24083), (196, 24119), (197, 24122), (215, 24194), (217, 24200), (234, 24269), (253, 24353), (278, 24434), (282, 24455), (322, 24629), (328, 24656), (337, 24707), (344, 24752), (355, 24803), (358, 24812), (373, 24890), (403, 25013), (405, 25016), (406, 25019), (439, 25130), (461, 25193), (476, 25241), (504, 25328), (511, 25355), (513, 25364), (515, 25370), (527, 25421), (549, 25538), (550, 25541), (572, 25625), (579, 25661), (586, 25691), (590, 25715), (608, 25766), (612, 25772), (615, 25778), (657, 25880), (665, 25916), (685,

26006), (688, 26015),

Gene: Avian_27 Start: 24739, Stop: 26739, Start Num: 1

Candidate Starts for Avian_27:

(Start: 1 @24739 has 38 MA's), (23, 24853), (26, 24862), (29, 24871), (31, 24874), (34, 24883), (56, 24952), (101, 25138), (146, 25315), (197, 25522), (202, 25552), (214, 25588), (220, 25603), (230, 25642), (244, 25690), (246, 25696), (251, 25723), (272, 25789), (298, 25876), (328, 25999), (330, 26011), (337, 26044), (389, 26269), (391, 26275), (441, 26434), (466, 26515), (477, 26551), (480, 26557), (489, 26584), (505, 26617), (528, 26713),

Gene: Ayotoya_25 Start: 21393, Stop: 23903, Start Num: 15

Candidate Starts for Ayotoya_25:

(Start: 15 @21393 has 14 MA's), (58, 21525), (62, 21540), (73, 21585), (78, 21603), (125, 21768), (138, 21822), (142, 21831), (160, 21909), (162, 21915), (198, 22080), (203, 22095), (216, 22131), (234, 22206), (236, 22218), (240, 22227), (246, 22245), (248, 22257), (254, 22290), (255, 22293), (267, 22329), (286, 22383), (314, 22506), (326, 22560), (330, 22581), (332, 22590), (354, 22692), (369, 22752), (376, 22800), (379, 22812), (391, 22857), (421, 22944), (430, 22983), (453, 23052), (456, 23064), (462, 23076), (537, 23364), (543, 23394), (559, 23475), (564, 23496), (569, 23523), (574, 23547), (617, 23712), (635, 23757), (663, 23856), (673, 23895),

Gene: Beaver_30 Start: 35090, Stop: 37087, Start Num: 3

Candidate Starts for Beaver_30:

(Start: 3 @35090 has 35 MA's), (16, 35165), (25, 35204), (34, 35234), (42, 35261), (Start: 43 @35264 has 1 MA's), (134, 35639), (136, 35648), (185, 35840), (200, 35918), (214, 35960), (220, 35975), (251, 36095), (254, 36113), (298, 36248), (330, 36383), (337, 36416), (353, 36482), (362, 36518), (370, 36554), (391, 36644), (399, 36674), (427, 36737), (464, 36851), (477, 36896), (480, 36902), (505, 36962),

Gene: Bellis_21 Start: 19726, Stop: 22239, Start Num: 14

Candidate Starts for Bellis_21:

(Start: 14 @19726 has 19 MA's), (30, 19789), (53, 19861), (75, 19951), (77, 19957), (94, 20029), (144, 20221), (146, 20233), (152, 20251), (161, 20290), (168, 20320), (184, 20377), (191, 20407), (193, 20413), (202, 20467), (204, 20473), (239, 20620), (241, 20623), (244, 20632), (248, 20650), (261, 20710), (264, 20719), (268, 20731), (284, 20782), (287, 20785), (328, 20950), (341, 21007), (361, 21091), (365, 21109), (366, 21118), (378, 21181), (412, 21301), (431, 21346), (437, 21361), (441, 21379), (452, 21409), (482, 21499), (506, 21568), (513, 21601), (517, 21622), (527, 21658), (535, 21694), (545, 21739), (548, 21763), (549, 21769), (553, 21784), (556, 21802), (566, 21835), (579, 21889), (584, 21913), (593, 21949), (595, 21955), (602, 21979), (664, 22144), (666, 22153), (669, 22159),

Gene: Berries_27 Start: 35568, Stop: 37589, Start Num: 3

Candidate Starts for Berries_27:

(Start: 3 @35568 has 35 MA's), (11, 35616), (17, 35652), (21, 35670), (24, 35679), (33, 35709), (34, 35712), (67, 35823), (92, 35943), (208, 36420), (211, 36429), (240, 36528), (251, 36573), (272, 36639), (298, 36726), (330, 36861), (337, 36894), (389, 37119), (391, 37125), (441, 37284), (477, 37401), (480, 37407), (489, 37434), (505, 37467), (528, 37563),

Gene: BetterKatz_25 Start: 20866, Stop: 23376, Start Num: 15

Candidate Starts for BetterKatz_25:

(Start: 15 @20866 has 14 MA's), (58, 20998), (62, 21013), (73, 21058), (78, 21076), (125, 21241), (138, 21295), (142, 21304), (160, 21382), (162, 21388), (198, 21553), (203, 21568), (216, 21604), (234, 21679), (236, 21691), (240, 21700), (242, 21706), (246, 21718), (248, 21730), (251, 21745), (254, 21763), (255, 21766), (267, 21802), (286, 21856), (309, 21961), (314, 21979), (326, 22033),

(330, 22054), (332, 22063), (354, 22165), (369, 22225), (376, 22273), (379, 22285), (391, 22330), (421, 22417), (430, 22456), (453, 22525), (456, 22537), (462, 22549), (537, 22837), (543, 22867), (559, 22948), (564, 22969), (569, 22996), (574, 23020), (617, 23185), (635, 23230), (663, 23329), (673, 23368),

Gene: Bianmat_27 Start: 35608, Stop: 37629, Start Num: 3

Candidate Starts for Bianmat_27:

(Start: 3 @35608 has 35 MA's), (11, 35656), (17, 35692), (21, 35710), (24, 35719), (33, 35749), (34, 35752), (67, 35863), (92, 35983), (208, 36460), (211, 36469), (240, 36568), (251, 36613), (272, 36679), (298, 36766), (330, 36901), (337, 36934), (389, 37159), (391, 37165), (441, 37324), (477, 37441), (480, 37447), (489, 37474), (505, 37507), (528, 37603),

Gene: Binglebops_23 Start: 20414, Stop: 22900, Start Num: 19

Candidate Starts for Binglebops_23:

(Start: 19 @20414 has 60 MA's), (34, 20462), (104, 20642), (105, 20645), (124, 20708), (126, 20720), (162, 20852), (170, 20891), (185, 20948), (191, 20972), (194, 20984), (202, 21032), (203, 21035), (217, 21068), (225, 21107), (234, 21140), (236, 21152), (240, 21161), (242, 21167), (257, 21233), (262, 21248), (296, 21359), (300, 21392), (321, 21476), (326, 21491), (337, 21551), (351, 21620), (374, 21740), (395, 21833), (433, 21947), (459, 22025), (461, 22031), (468, 22055), (485, 22118), (486, 22121), (490, 22133), (510, 22199), (511, 22205), (521, 22247), (525, 22268), (527, 22277), (534, 22310), (536, 22328), (549, 22397), (575, 22496), (576, 22502), (579, 22520), (589, 22574), (594, 22589), (605, 22616), (631, 22673),

Gene: BillyBobJr_31 Start: 35117, Stop: 37114, Start Num: 3

Candidate Starts for BillyBobJr_31:

(Start: 3 @35117 has 35 MA's), (16, 35192), (25, 35231), (34, 35261), (42, 35288), (Start: 43 @35291 has 1 MA's), (136, 35675), (185, 35867), (201, 35948), (202, 35951), (214, 35987), (233, 36053), (251, 36122), (254, 36140), (298, 36275), (330, 36410), (337, 36443), (353, 36509), (362, 36545), (370, 36581), (391, 36671), (399, 36701), (471, 36905), (477, 36923), (480, 36929), (505, 36989), (518, 37046),

Gene: Bipper_27 Start: 23567, Stop: 26155, Start Num: 20

Candidate Starts for Bipper_27:

(Start: 20 @23567 has 6 MA's), (76, 23756), (83, 23777), (87, 23807), (101, 23870), (118, 23936), (120, 23939), (132, 23981), (147, 24032), (158, 24068), (166, 24107), (197, 24242), (214, 24320), (215, 24323), (234, 24404), (242, 24434), (250, 24470), (259, 24509), (261, 24521), (273, 24551), (275, 24557), (278, 24569), (280, 24578), (282, 24590), (292, 24614), (295, 24638), (315, 24731), (322, 24764), (323, 24767), (337, 24842), (339, 24854), (355, 24938), (413, 25184), (417, 25190), (435, 25247), (461, 25328), (476, 25376), (511, 25490), (527, 25556), (545, 25643), (549, 25673), (561, 25724), (579, 25796), (584, 25820), (586, 25826), (589, 25847), (596, 25865), (624, 25934), (656, 26009), (665, 26048), (667, 26054), (669, 26060), (685, 26138), (688, 26147),

Gene: BirksAndSocks_30 Start: 35064, Stop: 37061, Start Num: 3

Candidate Starts for BirksAndSocks_30:

(Start: 3 @35064 has 35 MA's), (16, 35139), (25, 35178), (34, 35208), (42, 35235), (Start: 43 @35238 has 1 MA's), (134, 35613), (136, 35622), (185, 35814), (201, 35895), (202, 35898), (233, 36000), (251, 36069), (254, 36087), (298, 36222), (330, 36357), (337, 36390), (353, 36456), (355, 36468), (362, 36492), (370, 36528), (391, 36618), (399, 36648), (427, 36711), (471, 36852), (477, 36870), (480, 36876), (505, 36936), (518, 36993),

Gene: BirthdayBoy_31 Start: 26800, Stop: 28773, Start Num: 1

Candidate Starts for BirthdayBoy_31:

(Start: 1 @26800 has 38 MA's), (23, 26914), (26, 26923), (29, 26932), (31, 26935), (34, 26944), (56, 27013), (73, 27076), (74, 27079), (86, 27118), (90, 27139), (101, 27193), (146, 27370), (165, 27445), (197, 27577), (201, 27604), (202, 27607), (203, 27610), (230, 27697), (244, 27745), (246, 27751), (251, 27778), (275, 27856), (294, 27907), (330, 28066), (337, 28099), (370, 28234), (464, 28540), (477, 28585), (480, 28591), (505, 28651), (523, 28726), (528, 28747),

Gene: Bobquesha_29 Start: 22017, Stop: 24326, Start Num: 49

Candidate Starts for Bobquesha_29:

(Start: 49 @22017 has 18 MA's), (58, 22047), (63, 22065), (79, 22128), (137, 22269), (157, 22335), (170, 22398), (184, 22449), (186, 22458), (194, 22491), (202, 22539), (220, 22596), (234, 22656), (236, 22668), (242, 22683), (244, 22689), (251, 22722), (265, 22770), (291, 22824), (308, 22896), (345, 23076), (367, 23157), (404, 23310), (418, 23352), (436, 23409), (438, 23421), (464, 23508), (468, 23526), (486, 23592), (492, 23607), (517, 23703), (549, 23856), (553, 23871), (554, 23877), (560, 23907), (562, 23913), (568, 23940), (572, 23952), (591, 24048), (613, 24102), (622, 24123), (659, 24210), (665, 24240), (688, 24318),

Gene: Bock_25 Start: 20616, Stop: 23126, Start Num: 15

Candidate Starts for Bock_25:

(Start: 15 @20616 has 14 MA's), (58, 20748), (62, 20763), (73, 20808), (78, 20826), (125, 20991), (138, 21045), (142, 21054), (160, 21132), (162, 21138), (198, 21303), (203, 21318), (216, 21354), (234, 21429), (236, 21441), (240, 21450), (242, 21456), (246, 21468), (248, 21480), (251, 21495), (254, 21513), (255, 21516), (286, 21606), (309, 21711), (314, 21729), (326, 21783), (330, 21804), (332, 21813), (354, 21915), (369, 21975), (376, 22023), (379, 22035), (391, 22080), (421, 22167), (430, 22206), (453, 22275), (456, 22287), (462, 22299), (537, 22587), (543, 22617), (559, 22698), (564, 22719), (569, 22746), (574, 22770), (617, 22935), (635, 22980), (663, 23079), (673, 23118),

Gene: Boneham_30 Start: 35063, Stop: 37060, Start Num: 3

Candidate Starts for Boneham_30:

(Start: 3 @35063 has 35 MA's), (16, 35138), (25, 35177), (34, 35207), (42, 35234), (Start: 43 @35237 has 1 MA's), (134, 35612), (136, 35621), (185, 35813), (201, 35894), (202, 35897), (233, 35999), (251, 36068), (254, 36086), (298, 36221), (330, 36356), (337, 36389), (353, 36455), (355, 36467), (362, 36491), (370, 36527), (391, 36617), (399, 36647), (427, 36710), (471, 36851), (477, 36869), (480, 36875), (505, 36935), (518, 36992),

Gene: Bonum_46 Start: 32908, Stop: 35466, Start Num: 64

Candidate Starts for Bonum_46:

(Start: 64 @32908 has 15 MA's), (95, 33037), (178, 33376), (179, 33379), (194, 33436), (234, 33589), (251, 33655), (253, 33670), (284, 33760), (358, 34111), (460, 34489), (485, 34594), (495, 34612), (503, 34645), (509, 34666), (522, 34720), (536, 34789), (542, 34825), (548, 34852), (549, 34858), (567, 34948), (587, 35044), (588, 35047), (605, 35110), (616, 35143), (622, 35161), (623, 35164), (637, 35200), (643, 35224), (653, 35245), (674, 35335), (675, 35347),

Gene: BoostSeason_23 Start: 18687, Stop: 21026, Start Num: 19

Candidate Starts for BoostSeason_23:

(Start: 19 @18687 has 60 MA's), (104, 18927), (135, 19035), (137, 19044), (145, 19065), (151, 19089), (186, 19218), (188, 19230), (202, 19299), (240, 19434), (246, 19452), (251, 19479), (292, 19581), (308, 19653), (318, 19695), (319, 19701), (321, 19710), (324, 19716), (340, 19797), (343, 19818), (355, 19860), (360, 19881), (366, 19911), (385, 19998), (388, 20007), (398, 20043), (416, 20097), (437, 20151), (439, 20163), (461, 20223), (482, 20283), (486, 20301), (499, 20328), (513, 20385), (554, 20574), (564, 20604), (580, 20682), (586, 20703), (598, 20745), (610, 20778), (613, 20787), (622, 20808), (636, 20835), (661, 20916), (668, 20940),

Gene: BourbonZero_20 Start: 19707, Stop: 22217, Start Num: 14

Candidate Starts for BourbonZero_20:

(Start: 14 @19707 has 19 MA's), (30, 19770), (65, 19890), (109, 20076), (144, 20202), (146, 20214), (152, 20232), (161, 20271), (168, 20301), (191, 20388), (202, 20448), (204, 20454), (238, 20595), (241, 20601), (244, 20610), (248, 20628), (261, 20688), (268, 20709), (284, 20760), (287, 20763), (303, 20832), (341, 20985), (361, 21069), (365, 21087), (366, 21096), (392, 21207), (395, 21225), (412, 21279), (431, 21324), (437, 21339), (452, 21387), (482, 21477), (486, 21495), (506, 21546), (513, 21579), (516, 21597), (517, 21600), (527, 21636), (533, 21666), (535, 21672), (545, 21717), (548, 21741), (549, 21747), (553, 21762), (556, 21780), (566, 21813), (567, 21816), (579, 21867), (595, 21933), (602, 21957), (637, 22032), (651, 22068), (669, 22137),

Gene: Bryler_26 Start: 20070, Stop: 22406, Start Num: 19

Candidate Starts for Bryler_26:

(Start: 19 @20070 has 60 MA's), (34, 20118), (36, 20127), (69, 20241), (71, 20259), (107, 20310), (135, 20406), (137, 20415), (162, 20505), (164, 20517), (188, 20616), (191, 20625), (213, 20718), (234, 20799), (242, 20829), (246, 20841), (251, 20868), (253, 20883), (268, 20907), (292, 20967), (300, 21012), (308, 21039), (317, 21078), (321, 21096), (325, 21105), (340, 21174), (341, 21177), (343, 21195), (355, 21237), (360, 21258), (366, 21288), (385, 21375), (404, 21438), (412, 21471), (420, 21480), (439, 21543), (455, 21591), (461, 21603), (483, 21672), (497, 21696), (503, 21726), (513, 21765), (554, 21954), (575, 22029), (586, 22083), (613, 22167), (621, 22185), (655, 22272), (661, 22296), (675, 22338), (691, 22398),

Gene: Brylie_25 Start: 20607, Stop: 23117, Start Num: 15

Candidate Starts for Brylie_25:

(Start: 15 @20607 has 14 MA's), (58, 20739), (62, 20754), (73, 20799), (78, 20817), (125, 20982), (138, 21036), (142, 21045), (160, 21123), (162, 21129), (198, 21294), (203, 21309), (216, 21345), (234, 21420), (236, 21432), (240, 21441), (242, 21447), (246, 21459), (248, 21471), (251, 21486), (254, 21504), (255, 21507), (267, 21543), (286, 21597), (314, 21720), (326, 21774), (330, 21795), (332, 21804), (354, 21906), (369, 21966), (376, 22014), (379, 22026), (391, 22071), (421, 22158), (430, 22197), (453, 22266), (456, 22278), (462, 22290), (537, 22578), (543, 22608), (559, 22689), (564, 22710), (569, 22737), (574, 22761), (617, 22926), (635, 22971), (663, 23070), (673, 23109),

Gene: Buggaboo_44 Start: 33387, Stop: 35945, Start Num: 64

Candidate Starts for Buggaboo_44:

(26, 33258), (Start: 64 @33387 has 15 MA's), (95, 33516), (178, 33855), (179, 33858), (194, 33915), (234, 34068), (251, 34134), (253, 34149), (358, 34590), (460, 34968), (485, 35073), (495, 35091), (503, 35124), (509, 35145), (522, 35199), (528, 35223), (542, 35304), (548, 35331), (549, 35337), (567, 35427), (587, 35523), (588, 35526), (605, 35589), (616, 35622), (622, 35640), (623, 35643), (637, 35679), (643, 35703), (653, 35724), (674, 35814), (675, 35826), (693, 35937),

Gene: Butterball_30 Start: 35063, Stop: 37060, Start Num: 3

Candidate Starts for Butterball_30:

(Start: 3 @35063 has 35 MA's), (16, 35138), (25, 35177), (34, 35207), (42, 35234), (Start: 43 @35237 has 1 MA's), (134, 35612), (136, 35621), (185, 35813), (201, 35894), (202, 35897), (233, 35999), (251, 36068), (254, 36086), (298, 36221), (330, 36356), (337, 36389), (353, 36455), (355, 36467), (362, 36491), (370, 36527), (391, 36617), (399, 36647), (427, 36710), (471, 36851), (477, 36869), (480, 36875), (505, 36935), (518, 36992),

Gene: CactusJack_21 Start: 18926, Stop: 21559, Start Num: 5

Candidate Starts for CactusJack_21:

(Start: 5 @18926 has 17 MA's), (6, 18935), (45, 19079), (116, 19352), (120, 19364), (127, 19385), (134, 19409), (156, 19484), (171, 19556), (179, 19586), (188, 19622), (200, 19685), (205, 19700), (213, 19727), (215, 19733), (234, 19808), (240, 19832), (242, 19838), (246, 19850), (253, 19892), (255, 19898), (281, 19985), (289, 20006), (293, 20030), (305, 20096), (310, 20117), (315, 20135),

(322, 20168), (327, 20192), (328, 20195), (337, 20246), (358, 20351), (366, 20393), (406, 20558), (436, 20654), (461, 20732), (465, 20744), (496, 20834), (511, 20894), (513, 20903), (525, 20951), (527, 20960), (549, 21077), (558, 21122), (572, 21164), (586, 21230), (590, 21254), (608, 21302), (612, 21308), (615, 21314), (656, 21413), (659, 21422), (665, 21452), (685, 21542), (688, 21551),

Gene: Cain_26 Start: 20058, Stop: 22394, Start Num: 19

Candidate Starts for Cain_26:

(Start: 19 @20058 has 60 MA's), (34, 20106), (36, 20115), (69, 20229), (71, 20247), (107, 20298), (135, 20394), (137, 20403), (162, 20493), (164, 20505), (188, 20604), (191, 20613), (213, 20706), (234, 20787), (242, 20817), (246, 20829), (251, 20856), (253, 20871), (268, 20895), (292, 20955), (300, 21000), (308, 21027), (317, 21066), (321, 21084), (325, 21093), (340, 21162), (341, 21165), (343, 21183), (355, 21225), (360, 21246), (366, 21276), (385, 21363), (404, 21426), (412, 21459), (420, 21468), (439, 21531), (455, 21579), (461, 21591), (483, 21660), (497, 21684), (503, 21714), (513, 21753), (554, 21942), (575, 22017), (586, 22071), (613, 22155), (621, 22173), (655, 22260), (661, 22284), (675, 22326), (691, 22386),

Gene: Chancellor_28 Start: 22283, Stop: 24592, Start Num: 49

Candidate Starts for Chancellor_28:

(Start: 49 @22283 has 18 MA's), (79, 22394), (105, 22418), (137, 22535), (170, 22664), (184, 22715), (186, 22724), (194, 22757), (199, 22796), (202, 22805), (220, 22862), (223, 22871), (234, 22922), (236, 22934), (242, 22949), (244, 22955), (251, 22988), (265, 23036), (291, 23090), (308, 23162), (317, 23201), (320, 23213), (325, 23228), (334, 23273), (345, 23342), (367, 23423), (404, 23576), (436, 23675), (438, 23687), (468, 23792), (486, 23858), (492, 23873), (517, 23969), (549, 24122), (553, 24137), (554, 24143), (557, 24167), (568, 24206), (572, 24218), (591, 24314), (613, 24368), (622, 24389), (659, 24476), (665, 24506), (688, 24584),

Gene: Charianelly_27 Start: 35318, Stop: 37339, Start Num: 3

Candidate Starts for Charianelly_27:

(Start: 3 @35318 has 35 MA's), (11, 35366), (17, 35402), (21, 35420), (24, 35429), (33, 35459), (34, 35462), (67, 35573), (92, 35693), (208, 36170), (211, 36179), (240, 36278), (251, 36323), (272, 36389), (298, 36476), (330, 36611), (337, 36644), (389, 36869), (391, 36875), (441, 37034), (477, 37151), (480, 37157), (489, 37184), (505, 37217), (528, 37313),

Gene: Charminar_27 Start: 24350, Stop: 26350, Start Num: 1

Candidate Starts for Charminar_27:

(Start: 1 @24350 has 38 MA's), (23, 24464), (26, 24473), (29, 24482), (31, 24485), (34, 24494), (56, 24563), (101, 24749), (146, 24926), (197, 25133), (202, 25163), (214, 25199), (220, 25214), (230, 25253), (244, 25301), (246, 25307), (251, 25334), (272, 25400), (298, 25487), (330, 25622), (337, 25655), (342, 25667), (370, 25796), (389, 25880), (391, 25886), (437, 26033), (441, 26045), (466, 26126), (477, 26162), (480, 26168), (505, 26228), (528, 26324),

Gene: Chavito_27 Start: 20243, Stop: 22753, Start Num: 19

Candidate Starts for Chavito_27:

(Start: 19 @20243 has 60 MA's), (34, 20291), (69, 20414), (103, 20465), (107, 20483), (126, 20549), (143, 20603), (162, 20681), (170, 20720), (185, 20777), (194, 20813), (203, 20864), (217, 20894), (221, 20909), (225, 20933), (233, 20963), (234, 20966), (236, 20978), (240, 20987), (242, 20993), (251, 21032), (296, 21185), (303, 21230), (321, 21302), (333, 21356), (337, 21377), (339, 21389), (361, 21497), (373, 21560), (384, 21614), (395, 21665), (402, 21686), (435, 21785), (461, 21863), (468, 21887), (469, 21893), (485, 21950), (515, 22052), (527, 22109), (534, 22142), (536, 22160), (545, 22199), (554, 22250), (591, 22415), (614, 22469), (621, 22484), (638, 22526), (657, 22583), (661, 22601), (669, 22631), (672, 22649),

Gene: Cheetobro_28 Start: 22280, Stop: 24589, Start Num: 49

Candidate Starts for Cheetobro_28:

(Start: 49 @22280 has 18 MA's), (79, 22391), (105, 22415), (137, 22532), (170, 22661), (184, 22712), (186, 22721), (194, 22754), (199, 22793), (202, 22802), (220, 22859), (223, 22868), (234, 22919), (236, 22931), (242, 22946), (244, 22952), (251, 22985), (265, 23033), (291, 23087), (308, 23159), (317, 23198), (320, 23210), (325, 23225), (334, 23270), (345, 23339), (367, 23420), (404, 23573), (436, 23672), (438, 23684), (468, 23789), (486, 23855), (492, 23870), (517, 23966), (549, 24119), (553, 24134), (554, 24140), (557, 24164), (568, 24203), (572, 24215), (591, 24311), (613, 24365), (622, 24386), (659, 24473), (665, 24503), (688, 24581),

Gene: Chop_25 Start: 21141, Stop: 23651, Start Num: 15

Candidate Starts for Chop_25:

(Start: 15 @21141 has 14 MA's), (58, 21273), (62, 21288), (73, 21333), (78, 21351), (125, 21516), (138, 21570), (142, 21579), (160, 21657), (162, 21663), (198, 21828), (203, 21843), (216, 21879), (234, 21954), (236, 21966), (240, 21975), (246, 21993), (248, 22005), (254, 22038), (255, 22041), (267, 22077), (286, 22131), (314, 22254), (326, 22308), (330, 22329), (332, 22338), (354, 22440), (369, 22500), (376, 22548), (379, 22560), (391, 22605), (421, 22692), (430, 22731), (453, 22800), (456, 22812), (462, 22824), (537, 23112), (543, 23142), (559, 23223), (564, 23244), (569, 23271), (574, 23295), (617, 23460), (635, 23505), (663, 23604), (673, 23643),

Gene: CinnamonToast_31 Start: 35117, Stop: 37114, Start Num: 3

Candidate Starts for CinnamonToast_31:

(Start: 3 @35117 has 35 MA's), (16, 35192), (25, 35231), (34, 35261), (42, 35288), (Start: 43 @35291 has 1 MA's), (136, 35675), (185, 35867), (201, 35948), (202, 35951), (214, 35987), (233, 36053), (251, 36122), (254, 36140), (298, 36275), (330, 36410), (337, 36443), (353, 36509), (362, 36545), (370, 36581), (391, 36671), (399, 36701), (471, 36905), (477, 36923), (480, 36929), (505, 36989), (518, 37046),

Gene: Clautastrophe_21 Start: 19724, Stop: 22237, Start Num: 14

Candidate Starts for Clautastrophe_21:

(Start: 14 @19724 has 19 MA's), (30, 19787), (53, 19859), (75, 19949), (77, 19955), (94, 20027), (112, 20114), (144, 20219), (146, 20231), (152, 20249), (161, 20288), (168, 20318), (184, 20375), (191, 20405), (193, 20411), (202, 20465), (204, 20471), (239, 20618), (241, 20621), (244, 20630), (248, 20648), (261, 20708), (264, 20717), (268, 20729), (284, 20780), (287, 20783), (328, 20948), (341, 21005), (361, 21089), (365, 21107), (366, 21116), (378, 21179), (412, 21299), (425, 21323), (431, 21344), (437, 21359), (441, 21377), (452, 21407), (482, 21497), (506, 21566), (513, 21599), (517, 21620), (527, 21656), (535, 21692), (545, 21737), (548, 21761), (549, 21767), (553, 21782), (556, 21800), (579, 21887), (584, 21911), (593, 21947), (595, 21953), (602, 21977), (637, 22052), (638, 22055), (664, 22142), (666, 22151), (669, 22157),

Gene: Cracklewink_27 Start: 23567, Stop: 26155, Start Num: 20

Candidate Starts for Cracklewink_27:

(Start: 20 @23567 has 6 MA's), (76, 23756), (83, 23777), (87, 23807), (101, 23870), (118, 23936), (120, 23939), (132, 23981), (147, 24032), (158, 24068), (166, 24107), (197, 24242), (214, 24320), (215, 24323), (234, 24404), (242, 24434), (250, 24470), (259, 24509), (261, 24521), (273, 24551), (275, 24557), (278, 24569), (280, 24578), (282, 24590), (292, 24614), (295, 24638), (315, 24731), (322, 24764), (323, 24767), (337, 24842), (339, 24854), (355, 24938), (413, 25184), (417, 25190), (435, 25247), (461, 25328), (476, 25376), (511, 25490), (527, 25556), (545, 25643), (549, 25673), (561, 25724), (579, 25796), (584, 25820), (586, 25826), (589, 25847), (596, 25865), (624, 25934), (656, 26009), (665, 26048), (667, 26054), (669, 26060), (685, 26138), (688, 26147),

Gene: Curiosium_28 Start: 20582, Stop: 23062, Start Num: 52

Candidate Starts for Curiosium_28:

(Start: 52 @20582 has 1 MA's), (93, 20753), (107, 20810), (122, 20861), (146, 20945), (164, 21017), (179, 21077), (185, 21098), (192, 21125), (196, 21149), (202, 21185), (217, 21230), (218, 21233), (242, 21332), (243, 21335), (251, 21371), (262, 21422), (279, 21476), (288, 21509), (311, 21635), (313, 21644), (337, 21767), (339, 21779), (359, 21878), (373, 21947), (380, 21980), (415, 22109), (419, 22115), (436, 22172), (440, 22190), (474, 22304), (483, 22331), (487, 22343), (491, 22358), (500, 22385), (504, 22400), (513, 22436), (514, 22439), (538, 22556), (540, 22571), (570, 22712), (591, 22820), (619, 22859), (620, 22862), (630, 22886), (663, 22964), (676, 23009), (681, 23027),

Gene: Damp_27 Start: 34482, Stop: 36503, Start Num: 3

Candidate Starts for Damp_27:

(Start: 3 @34482 has 35 MA's), (11, 34530), (17, 34566), (21, 34584), (24, 34593), (33, 34623), (34, 34626), (67, 34737), (92, 34857), (208, 35334), (211, 35343), (240, 35442), (251, 35487), (272, 35553), (298, 35640), (330, 35775), (337, 35808), (389, 36033), (391, 36039), (441, 36198), (477, 36315), (480, 36321), (489, 36348), (505, 36381), (528, 36477),

Gene: DarthP_26 Start: 21319, Stop: 23703, Start Num: 19

Candidate Starts for DarthP_26:

(Start: 19 @21319 has 60 MA's), (22, 21328), (34, 21367), (69, 21490), (104, 21547), (107, 21559), (126, 21625), (143, 21679), (162, 21757), (184, 21847), (194, 21889), (203, 21940), (220, 21982), (221, 21985), (224, 22006), (240, 22066), (242, 22072), (296, 22264), (321, 22381), (338, 22450), (343, 22489), (356, 22519), (388, 22663), (434, 22798), (435, 22801), (436, 22804), (450, 22843), (468, 22897), (510, 23038), (511, 23044), (515, 23059), (540, 23188), (542, 23194), (565, 23290), (568, 23299), (575, 23323), (578, 23344), (654, 23551), (657, 23566), (658, 23569), (686, 23677),

Gene: Dartin_27 Start: 20230, Stop: 22731, Start Num: 19

Candidate Starts for Dartin_27:

(Start: 19 @20230 has 60 MA's), (34, 20278), (Start: 52 @20329 has 1 MA's), (69, 20401), (103, 20452), (107, 20470), (114, 20503), (124, 20524), (126, 20536), (143, 20590), (162, 20668), (170, 20707), (185, 20764), (194, 20800), (203, 20851), (217, 20881), (221, 20896), (225, 20920), (234, 20953), (240, 20974), (242, 20980), (251, 21019), (296, 21172), (300, 21205), (303, 21217), (319, 21280), (337, 21364), (373, 21547), (384, 21601), (395, 21643), (459, 21835), (461, 21841), (468, 21865), (485, 21928), (499, 21967), (515, 22030), (527, 22087), (534, 22120), (536, 22138), (545, 22177), (551, 22216), (553, 22222), (566, 22279), (591, 22393), (614, 22447), (621, 22462), (634, 22492), (638, 22504), (657, 22561), (661, 22579), (669, 22609), (672, 22627), (687, 22708),

Gene: DaviePasture_30 Start: 26566, Stop: 28572, Start Num: 1

Candidate Starts for DaviePasture_30:

(Start: 1 @26566 has 38 MA's), (23, 26680), (26, 26689), (29, 26698), (31, 26701), (34, 26710), (56, 26779), (146, 27142), (197, 27349), (201, 27376), (202, 27379), (203, 27382), (214, 27415), (230, 27469), (244, 27517), (246, 27523), (251, 27550), (275, 27628), (294, 27679), (330, 27838), (337, 27871), (357, 27952), (402, 28144), (427, 28222), (428, 28228), (477, 28381), (480, 28387), (494, 28417), (505, 28450), (528, 28546),

Gene: DelRio_26 Start: 21615, Stop: 24125, Start Num: 15

Candidate Starts for DelRio_26:

(Start: 15 @21615 has 14 MA's), (58, 21747), (62, 21762), (73, 21807), (78, 21825), (125, 21990), (138, 22044), (142, 22053), (160, 22131), (162, 22137), (198, 22302), (203, 22317), (216, 22353), (234, 22428), (236, 22440), (240, 22449), (246, 22467), (248, 22479), (251, 22494), (254, 22512), (255, 22515), (267, 22551), (286, 22605), (309, 22710), (314, 22728), (326, 22782), (332, 22812), (354, 22914), (369, 22974), (376, 23022), (379, 23034), (391, 23079), (421, 23166), (430, 23205), (453, 23274), (456, 23286), (524, 23520), (537, 23586), (543, 23616), (559, 23697), (574, 23769), (617, 23934), (635, 23979), (663, 24078), (673, 24117),

Gene: Diabla_29 Start: 34911, Stop: 36917, Start Num: 3

Candidate Starts for Diabla_29:

(Start: 3 @34911 has 35 MA's), (21, 35013), (34, 35055), (67, 35166), (85, 35247), (121, 35409), (130, 35442), (165, 35583), (189, 35679), (191, 35685), (203, 35748), (234, 35850), (236, 35862), (240, 35871), (242, 35877), (298, 36069), (330, 36204), (337, 36237), (362, 36339), (371, 36381), (442, 36615), (477, 36726), (479, 36729), (480, 36732), (505, 36792),

Gene: DismalFunk_23 Start: 18661, Stop: 21000, Start Num: 19

Candidate Starts for DismalFunk_23:

(Start: 19 @18661 has 60 MA's), (69, 18832), (71, 18850), (78, 18874), (137, 19018), (147, 19051), (183, 19180), (185, 19189), (188, 19204), (192, 19216), (194, 19225), (202, 19273), (230, 19369), (234, 19387), (240, 19408), (251, 19453), (292, 19555), (308, 19627), (318, 19669), (319, 19675), (321, 19684), (340, 19771), (343, 19792), (355, 19834), (360, 19855), (385, 19972), (388, 19981), (416, 20071), (437, 20125), (439, 20137), (448, 20161), (486, 20275), (499, 20302), (513, 20359), (527, 20416), (554, 20548), (564, 20578), (576, 20629), (579, 20647), (586, 20677), (600, 20731), (613, 20761), (622, 20782), (668, 20914),

Gene: DismalStressor_23 Start: 18661, Stop: 21000, Start Num: 19

Candidate Starts for DismalStressor_23:

(Start: 19 @18661 has 60 MA's), (69, 18832), (71, 18850), (78, 18874), (137, 19018), (147, 19051), (183, 19180), (185, 19189), (188, 19204), (192, 19216), (194, 19225), (202, 19273), (230, 19369), (234, 19387), (240, 19408), (251, 19453), (292, 19555), (308, 19627), (318, 19669), (319, 19675), (321, 19684), (340, 19771), (343, 19792), (355, 19834), (360, 19855), (385, 19972), (388, 19981), (416, 20071), (437, 20125), (439, 20137), (448, 20161), (486, 20275), (499, 20302), (513, 20359), (527, 20416), (554, 20548), (564, 20578), (576, 20629), (579, 20647), (586, 20677), (600, 20731), (613, 20761), (622, 20782), (668, 20914),

Gene: Dogfish_28 Start: 23683, Stop: 26286, Start Num: 8

Candidate Starts for Dogfish_28:

(Start: 8 @23683 has 1 MA's), (37, 23797), (39, 23806), (113, 24109), (126, 24151), (160, 24283), (194, 24418), (198, 24454), (214, 24502), (220, 24520), (224, 24544), (234, 24580), (236, 24592), (248, 24631), (251, 24646), (254, 24664), (339, 24997), (430, 25360), (445, 25402), (453, 25423), (458, 25438), (463, 25465), (503, 25591), (506, 25597), (544, 25774), (559, 25855), (567, 25894), (574, 25927), (624, 26113), (634, 26134), (673, 26278),

Gene: DoobyDoo_29 Start: 25722, Stop: 27725, Start Num: 1

Candidate Starts for DoobyDoo_29:

(Start: 1 @25722 has 38 MA's), (23, 25836), (26, 25845), (29, 25854), (31, 25857), (34, 25866), (56, 25935), (101, 26121), (146, 26298), (165, 26373), (188, 26466), (197, 26505), (202, 26535), (214, 26571), (220, 26586), (230, 26625), (244, 26673), (246, 26679), (251, 26706), (275, 26784), (294, 26835), (330, 26994), (337, 27027), (357, 27108), (395, 27276), (402, 27300), (477, 27537), (480, 27543), (494, 27573), (505, 27606),

Gene: Doughnut_23 Start: 18681, Stop: 21020, Start Num: 19

Candidate Starts for Doughnut_23:

(Start: 19 @18681 has 60 MA's), (104, 18921), (135, 19029), (137, 19038), (145, 19059), (151, 19083), (186, 19212), (188, 19224), (202, 19293), (240, 19428), (246, 19446), (251, 19473), (292, 19575), (308, 19647), (318, 19689), (319, 19695), (321, 19704), (324, 19710), (340, 19791), (343, 19812), (355, 19854), (360, 19875), (366, 19905), (385, 19992), (388, 20001), (398, 20037), (416, 20091), (437, 20145), (439, 20157), (461, 20217), (482, 20277), (486, 20295), (499, 20322), (513, 20379), (554, 20568), (564, 20598), (580, 20676), (586, 20697), (598, 20739), (610, 20772), (613, 20781), (622, 20802), (636, 20829), (661, 20910), (668, 20934),

Gene: DuncansLeg_21 Start: 19709, Stop: 22222, Start Num: 14

Candidate Starts for DuncansLeg_21:

(Start: 14 @19709 has 19 MA's), (30, 19772), (Start: 52 @19841 has 1 MA's), (53, 19844), (94, 20012), (144, 20204), (152, 20234), (161, 20273), (168, 20303), (184, 20360), (191, 20390), (193, 20396), (202, 20450), (204, 20456), (239, 20603), (241, 20606), (244, 20615), (248, 20633), (261, 20693), (268, 20714), (284, 20765), (287, 20768), (297, 20795), (328, 20933), (341, 20990), (361, 21074), (365, 21092), (366, 21101), (378, 21164), (395, 21230), (412, 21284), (431, 21329), (437, 21344), (452, 21392), (482, 21482), (486, 21500), (503, 21545), (506, 21551), (513, 21584), (516, 21602), (527, 21641), (535, 21677), (545, 21722), (548, 21746), (553, 21767), (556, 21785), (566, 21818), (584, 21896), (593, 21932), (602, 21962), (637, 22037), (651, 22073), (666, 22136), (669, 22142),

Gene: Dynamo_21 Start: 19047, Stop: 21686, Start Num: 5

Candidate Starts for Dynamo_21:

(Start: 5 @19047 has 17 MA's), (6, 19056), (45, 19200), (116, 19473), (118, 19482), (120, 19485), (127, 19506), (131, 19518), (132, 19527), (140, 19551), (156, 19605), (171, 19683), (179, 19713), (188, 19749), (194, 19770), (196, 19785), (205, 19827), (215, 19860), (234, 19935), (240, 19959), (242, 19965), (246, 19977), (253, 20019), (255, 20025), (281, 20112), (310, 20244), (315, 20262), (322, 20295), (328, 20322), (337, 20373), (377, 20583), (394, 20649), (406, 20685), (437, 20784), (439, 20796), (461, 20859), (511, 21021), (515, 21036), (527, 21087), (549, 21204), (558, 21249), (572, 21291), (579, 21327), (590, 21381), (608, 21429), (664, 21573), (677, 21630), (685, 21669), (688, 21678),

Gene: Ekdilam_24 Start: 21084, Stop: 23462, Start Num: 19

Candidate Starts for Ekdilam_24:

(Start: 19 @21084 has 60 MA's), (22, 21093), (34, 21132), (69, 21255), (107, 21324), (143, 21444), (184, 21612), (194, 21654), (203, 21705), (220, 21747), (221, 21750), (224, 21771), (242, 21837), (267, 21933), (296, 22029), (304, 22077), (321, 22146), (338, 22215), (343, 22254), (356, 22284), (388, 22428), (434, 22563), (435, 22566), (436, 22569), (450, 22608), (468, 22662), (486, 22725), (510, 22803), (511, 22809), (515, 22824), (516, 22836), (525, 22866), (540, 22953), (542, 22959), (568, 23064), (575, 23088), (578, 23109), (589, 23163), (599, 23193), (614, 23223), (652, 23304), (657, 23325), (658, 23328), (686, 23436),

Gene: Ellie_24 Start: 21059, Stop: 23461, Start Num: 19

Candidate Starts for Ellie_24:

(Start: 19 @21059 has 60 MA's), (28, 21089), (34, 21107), (60, 21191), (126, 21365), (162, 21497), (184, 21587), (194, 21629), (203, 21680), (220, 21722), (221, 21725), (234, 21782), (240, 21806), (242, 21812), (251, 21851), (267, 21908), (296, 22004), (321, 22121), (338, 22190), (343, 22229), (356, 22259), (366, 22301), (388, 22403), (434, 22538), (435, 22541), (436, 22544), (450, 22583), (468, 22637), (510, 22775), (511, 22781), (515, 22796), (516, 22808), (525, 22838), (540, 22925), (542, 22931), (551, 22973), (578, 23081), (589, 23135), (622, 23231), (624, 23237), (633, 23255), (645, 23291), (646, 23294), (651, 23303), (657, 23327), (663, 23354),

Gene: Ellson_21 Start: 19717, Stop: 22227, Start Num: 14

Candidate Starts for Ellson_21:

(Start: 14 @19717 has 19 MA's), (30, 19780), (65, 19900), (109, 20086), (144, 20212), (146, 20224), (152, 20242), (161, 20281), (168, 20311), (191, 20398), (202, 20458), (204, 20464), (238, 20605), (241, 20611), (244, 20620), (248, 20638), (261, 20698), (268, 20719), (284, 20770), (287, 20773), (303, 20842), (341, 20995), (361, 21079), (365, 21097), (366, 21106), (392, 21217), (395, 21235), (412, 21289), (431, 21334), (437, 21349), (452, 21397), (482, 21487), (486, 21505), (506, 21556), (513, 21589), (516, 21607), (527, 21646), (535, 21682), (545, 21727), (548, 21751), (553, 21772), (556, 21790), (566, 21823), (567, 21826), (579, 21877), (595, 21943), (602, 21967), (637, 22042), (651, 22078), (669, 22147),

Gene: Enkosi_23 Start: 20414, Stop: 22900, Start Num: 19

Candidate Starts for Enkosi_23:

(Start: 19 @20414 has 60 MA's), (34, 20462), (104, 20642), (105, 20645), (124, 20708), (126, 20720), (162, 20852), (170, 20891), (185, 20948), (191, 20972), (194, 20984), (202, 21032), (203, 21035), (217, 21068), (225, 21107), (234, 21140), (236, 21152), (240, 21161), (242, 21167), (257, 21233), (262, 21248), (296, 21359), (300, 21392), (321, 21476), (326, 21491), (337, 21551), (351, 21620), (374, 21740), (395, 21833), (433, 21947), (459, 22025), (461, 22031), (468, 22055), (485, 22118), (486, 22121), (490, 22133), (510, 22199), (511, 22205), (521, 22247), (525, 22268), (527, 22277), (534, 22310), (536, 22328), (549, 22397), (575, 22496), (576, 22502), (579, 22520), (589, 22574), (594, 22589), (605, 22616), (631, 22673),

Gene: Ennea_49 Start: 34236, Stop: 36794, Start Num: 64

Candidate Starts for Ennea_49:

(12, 34038), (51, 34185), (Start: 64 @34236 has 15 MA's), (95, 34365), (122, 34485), (178, 34704), (179, 34707), (209, 34836), (242, 34944), (251, 34983), (341, 35355), (358, 35439), (460, 35817), (485, 35922), (495, 35940), (503, 35973), (509, 35994), (522, 36048), (542, 36153), (549, 36186), (567, 36276), (587, 36372), (588, 36375), (605, 36438), (616, 36471), (622, 36489), (623, 36492), (637, 36528), (643, 36552), (653, 36573), (674, 36663), (675, 36675),

Gene: Erutan_30 Start: 26244, Stop: 28223, Start Num: 1

Candidate Starts for Erutan_30:

(Start: 1 @26244 has 38 MA's), (23, 26358), (26, 26367), (29, 26376), (31, 26379), (34, 26388), (56, 26457), (73, 26520), (74, 26523), (86, 26562), (90, 26583), (101, 26637), (146, 26814), (165, 26889), (197, 27021), (201, 27048), (202, 27051), (203, 27054), (230, 27141), (244, 27189), (246, 27195), (251, 27222), (275, 27300), (294, 27351), (330, 27510), (337, 27543), (362, 27645), (370, 27681), (464, 27987), (477, 28032), (480, 28038), (505, 28098),

Gene: FF47_24 Start: 19326, Stop: 21644, Start Num: 46

Candidate Starts for FF47_24:

(Start: 46 @19326 has 2 MA's), (115, 19527), (130, 19572), (132, 19584), (162, 19695), (180, 19761), (210, 19902), (246, 20034), (252, 20073), (256, 20085), (270, 20124), (277, 20142), (290, 20178), (299, 20238), (316, 20313), (324, 20340), (338, 20403), (353, 20460), (401, 20655), (426, 20724), (431, 20742), (434, 20748), (435, 20751), (436, 20754), (474, 20871), (476, 20877), (502, 20955), (514, 21003), (515, 21006), (532, 21084), (540, 21135), (546, 21150), (547, 21162), (564, 21225), (568, 21246), (574, 21267), (586, 21324), (589, 21345), (602, 21384), (621, 21426), (637, 21459), (639, 21465), (644, 21480), (669, 21564),

Gene: Faiyaz_27 Start: 23429, Stop: 26023, Start Num: 20

Candidate Starts for Faiyaz_27:

(Start: 20 @23429 has 6 MA's), (32, 23468), (54, 23543), (78, 23645), (80, 23654), (97, 23732), (116, 23813), (118, 23822), (132, 23867), (134, 23870), (136, 23879), (140, 23891), (141, 23894), (147, 23918), (156, 23945), (158, 23954), (171, 24017), (188, 24083), (196, 24119), (197, 24122), (215, 24194), (217, 24200), (234, 24269), (253, 24353), (278, 24434), (282, 24455), (322, 24629), (328, 24656), (337, 24707), (344, 24752), (355, 24803), (358, 24812), (373, 24890), (403, 25013), (405, 25016), (406, 25019), (439, 25130), (461, 25193), (476, 25241), (504, 25328), (511, 25355), (513, 25364), (515, 25370), (527, 25421), (549, 25538), (550, 25541), (572, 25625), (579, 25661), (586, 25691), (590, 25715), (608, 25766), (612, 25772), (615, 25778), (657, 25880), (665, 25916), (685, 26006), (688, 26015),

Gene: Fefferhead_26 Start: 21226, Stop: 23613, Start Num: 19

Candidate Starts for Fefferhead_26:

(Start: 19 @21226 has 60 MA's), (28, 21256), (34, 21274), (60, 21358), (126, 21532), (162, 21664), (184, 21754), (194, 21796), (203, 21847), (220, 21889), (221, 21892), (234, 21949), (240, 21973),

(242, 21979), (251, 22018), (267, 22075), (296, 22171), (321, 22288), (338, 22357), (343, 22396), (350, 22405), (356, 22426), (366, 22468), (388, 22570), (434, 22705), (435, 22708), (436, 22711), (450, 22750), (468, 22804), (516, 22978), (540, 23095), (542, 23101), (567, 23203), (590, 23308), (591, 23314), (609, 23362), (647, 23455), (657, 23479), (664, 23509), (686, 23587),

Gene: FelixAlejandro_31 Start: 35261, Stop: 37258, Start Num: 3

Candidate Starts for FelixAlejandro_31:

(Start: 3 @35261 has 35 MA's), (16, 35336), (25, 35375), (34, 35405), (42, 35432), (Start: 43 @35435 has 1 MA's), (136, 35819), (185, 36011), (202, 36095), (220, 36146), (234, 36200), (251, 36266), (254, 36284), (330, 36554), (337, 36587), (353, 36653), (362, 36689), (370, 36725), (391, 36815), (399, 36845), (427, 36908), (471, 37049), (477, 37067), (480, 37073), (505, 37133), (518, 37190),

Gene: Findley_23 Start: 18661, Stop: 21000, Start Num: 19

Candidate Starts for Findley_23:

(Start: 19 @18661 has 60 MA's), (69, 18832), (71, 18850), (104, 18901), (137, 19018), (147, 19051), (183, 19180), (185, 19189), (188, 19204), (192, 19216), (194, 19225), (202, 19273), (230, 19369), (234, 19387), (240, 19408), (251, 19453), (292, 19555), (308, 19627), (318, 19669), (319, 19675), (321, 19684), (340, 19771), (343, 19792), (355, 19834), (360, 19855), (385, 19972), (388, 19981), (398, 20017), (416, 20071), (437, 20125), (439, 20137), (448, 20161), (482, 20257), (486, 20275), (499, 20302), (513, 20359), (527, 20416), (554, 20548), (564, 20578), (576, 20629), (579, 20647), (586, 20677), (600, 20731), (613, 20761), (622, 20782), (668, 20914),

Gene: Finnry_21 Start: 19728, Stop: 22241, Start Num: 14

Candidate Starts for Finnry_21:

(Start: 14 @19728 has 19 MA's), (30, 19791), (53, 19863), (75, 19953), (77, 19959), (94, 20031), (144, 20223), (146, 20235), (152, 20253), (161, 20292), (168, 20322), (184, 20379), (191, 20409), (193, 20415), (202, 20469), (204, 20475), (239, 20622), (241, 20625), (244, 20634), (248, 20652), (261, 20712), (264, 20721), (268, 20733), (284, 20784), (287, 20787), (328, 20952), (341, 21009), (361, 21093), (365, 21111), (366, 21120), (378, 21183), (412, 21303), (431, 21348), (437, 21363), (441, 21381), (452, 21411), (482, 21501), (506, 21570), (513, 21603), (517, 21624), (527, 21660), (535, 21696), (545, 21741), (548, 21765), (549, 21771), (553, 21786), (556, 21804), (566, 21837), (579, 21891), (584, 21915), (593, 21951), (595, 21957), (602, 21981), (664, 22146), (666, 22155), (669, 22161),

Gene: Fionnbharth_28 Start: 22273, Stop: 24582, Start Num: 49

Candidate Starts for Fionnbharth_28:

(Start: 49 @22273 has 18 MA's), (70, 22363), (79, 22384), (105, 22408), (137, 22525), (170, 22654), (186, 22714), (199, 22786), (202, 22795), (219, 22846), (220, 22852), (223, 22861), (234, 22912), (236, 22924), (242, 22939), (244, 22945), (251, 22978), (265, 23026), (291, 23080), (308, 23152), (317, 23191), (320, 23203), (325, 23218), (334, 23263), (345, 23332), (367, 23413), (404, 23566), (418, 23608), (459, 23737), (468, 23782), (486, 23848), (492, 23863), (517, 23959), (549, 24112), (553, 24127), (554, 24133), (557, 24157), (560, 24163), (562, 24169), (563, 24172), (568, 24196), (572, 24208), (591, 24304), (612, 24355), (613, 24358), (643, 24427), (658, 24463), (665, 24496), (682, 24550), (684, 24559), (688, 24574),

Gene: Flapper_47 Start: 33951, Stop: 36509, Start Num: 64

Candidate Starts for Flapper_47:

(Start: 64 @33951 has 15 MA's), (178, 34419), (179, 34422), (194, 34479), (234, 34632), (240, 34653), (251, 34698), (338, 35049), (358, 35154), (460, 35532), (485, 35637), (495, 35655), (503, 35688), (509, 35709), (522, 35763), (542, 35868), (549, 35901), (567, 35991), (577, 36045), (578, 36048), (587, 36087), (588, 36090), (605, 36153), (616, 36186), (622, 36204), (623, 36207), (637, 36243), (638, 36246), (653, 36288), (674, 36378), (675, 36390), (692, 36480),

Gene: Float294_45 Start: 33678, Stop: 36236, Start Num: 64

Candidate Starts for Float294_45:

(12, 33480), (51, 33627), (Start: 64 @33678 has 15 MA's), (95, 33807), (122, 33927), (178, 34146), (179, 34149), (196, 34221), (209, 34278), (219, 34299), (242, 34386), (251, 34425), (341, 34797), (358, 34881), (460, 35259), (485, 35364), (495, 35382), (503, 35415), (509, 35436), (522, 35490), (548, 35622), (549, 35628), (567, 35718), (587, 35814), (588, 35817), (605, 35880), (616, 35913), (622, 35931), (623, 35934), (637, 35970), (643, 35994), (653, 36015), (674, 36105), (675, 36117),

Gene: Francois_25 Start: 20630, Stop: 23140, Start Num: 15

Candidate Starts for Francois_25:

(Start: 15 @20630 has 14 MA's), (58, 20762), (62, 20777), (73, 20822), (78, 20840), (125, 21005), (138, 21059), (142, 21068), (147, 21095), (160, 21146), (162, 21152), (198, 21317), (200, 21323), (203, 21332), (217, 21371), (234, 21443), (236, 21455), (240, 21464), (242, 21470), (248, 21494), (251, 21509), (254, 21527), (255, 21530), (267, 21566), (286, 21620), (304, 21698), (314, 21743), (326, 21797), (328, 21806), (330, 21818), (332, 21827), (369, 21989), (376, 22037), (379, 22049), (391, 22094), (421, 22181), (430, 22220), (453, 22289), (456, 22301), (529, 22559), (537, 22601), (543, 22631), (559, 22712), (564, 22733), (569, 22760), (574, 22784), (617, 22949), (635, 22994), (663, 23093), (673, 23132),

Gene: Fulbright_20 Start: 17553, Stop: 20198, Start Num: 5

Candidate Starts for Fulbright_20:

(2, 17541), (Start: 5 @17553 has 17 MA's), (7, 17565), (9, 17577), (Start: 20 @17631 has 6 MA's), (Start: 43 @17700 has 1 MA's), (45, 17703), (48, 17712), (53, 17727), (93, 17904), (116, 17985), (118, 17994), (172, 18198), (185, 18246), (188, 18261), (194, 18282), (197, 18300), (200, 18324), (205, 18339), (207, 18348), (215, 18375), (217, 18381), (234, 18450), (240, 18471), (242, 18477), (245, 18486), (250, 18513), (253, 18531), (281, 18624), (289, 18645), (310, 18756), (315, 18774), (322, 18807), (337, 18885), (358, 18990), (366, 19032), (423, 19251), (435, 19290), (436, 19293), (439, 19308), (461, 19371), (476, 19419), (511, 19533), (517, 19563), (525, 19590), (527, 19599), (549, 19716), (558, 19761), (572, 19803), (586, 19869), (590, 19893), (608, 19941), (612, 19947), (615, 19953), (621, 19968), (656, 20052), (665, 20091), (685, 20181), (688, 20190),

Gene: Fulcrum_31 Start: 26768, Stop: 28750, Start Num: 1

Candidate Starts for Fulcrum_31:

(Start: 1 @26768 has 38 MA's), (23, 26882), (26, 26891), (29, 26900), (31, 26903), (34, 26912), (56, 26981), (70, 27038), (146, 27344), (165, 27419), (197, 27551), (201, 27578), (202, 27581), (203, 27584), (230, 27671), (244, 27719), (246, 27725), (251, 27752), (275, 27830), (294, 27881), (330, 28040), (337, 28073), (362, 28175), (370, 28211), (464, 28517), (477, 28562), (480, 28568), (505, 28628), (523, 28703), (528, 28724),

Gene: GOATification_31 Start: 26768, Stop: 28750, Start Num: 1

Candidate Starts for GOATification_31:

(Start: 1 @26768 has 38 MA's), (23, 26882), (26, 26891), (29, 26900), (31, 26903), (34, 26912), (56, 26981), (70, 27038), (146, 27344), (165, 27419), (197, 27551), (201, 27578), (202, 27581), (203, 27584), (230, 27671), (244, 27719), (246, 27725), (251, 27752), (275, 27830), (294, 27881), (330, 28040), (337, 28073), (362, 28175), (370, 28211), (464, 28517), (477, 28562), (480, 28568), (505, 28628), (523, 28703), (528, 28724),

Gene: GTE5_34 Start: 26806, Stop: 29361, Start Num: 64

Candidate Starts for GTE5_34:

(37, 26713), (44, 26734), (Start: 64 @26806 has 15 MA's), (154, 27175), (178, 27274), (179, 27277), (191, 27322), (194, 27334), (240, 27508), (251, 27553), (341, 27925), (358, 28009), (460, 28387), (495, 28510), (509, 28564), (512, 28579), (523, 28621), (533, 28666), (541, 28720), (542, 28723), (553, 28771), (568, 28849), (587, 28942), (588, 28945), (603, 29005), (605, 29008), (616, 29041),

(624, 29065), (634, 29086), (635, 29089), (653, 29143), (675, 29245), (692, 29335),

Gene: GalacticEye_27 Start: 35289, Stop: 37313, Start Num: 3

Candidate Starts for GalacticEye_27:

(Start: 3 @35289 has 35 MA's), (11, 35337), (17, 35373), (21, 35391), (24, 35400), (33, 35430), (34, 35433), (67, 35544), (92, 35664), (208, 36141), (211, 36150), (240, 36249), (251, 36294), (272, 36360), (298, 36447), (330, 36582), (337, 36615), (370, 36756), (414, 36927), (437, 36993), (441, 37005), (466, 37086), (477, 37122), (480, 37128), (489, 37155), (505, 37188),

Gene: Gavriela_21 Start: 18926, Stop: 21559, Start Num: 5

Candidate Starts for Gavriela_21:

(Start: 5 @18926 has 17 MA's), (6, 18935), (45, 19079), (116, 19352), (120, 19364), (127, 19385), (134, 19409), (156, 19484), (171, 19556), (179, 19586), (188, 19622), (200, 19685), (205, 19700), (213, 19727), (215, 19733), (234, 19808), (240, 19832), (242, 19838), (246, 19850), (253, 19892), (255, 19898), (281, 19985), (289, 20006), (293, 20030), (305, 20096), (310, 20117), (315, 20135), (322, 20168), (327, 20192), (328, 20195), (337, 20246), (358, 20351), (366, 20393), (406, 20558), (436, 20654), (461, 20732), (465, 20744), (496, 20834), (511, 20894), (513, 20903), (525, 20951), (527, 20960), (549, 21077), (558, 21122), (572, 21164), (586, 21230), (590, 21254), (608, 21302), (612, 21308), (615, 21314), (656, 21413), (659, 21422), (665, 21452), (685, 21542), (688, 21551),

Gene: Genamy16_30 Start: 24757, Stop: 26757, Start Num: 1

Candidate Starts for Genamy16_30:

(Start: 1 @24757 has 38 MA's), (23, 24871), (26, 24880), (29, 24889), (31, 24892), (34, 24901), (56, 24970), (101, 25156), (146, 25333), (197, 25540), (202, 25570), (214, 25606), (220, 25621), (230, 25660), (244, 25708), (246, 25714), (251, 25741), (272, 25807), (298, 25894), (330, 26029), (337, 26062), (342, 26074), (370, 26203), (389, 26287), (437, 26440), (441, 26452), (466, 26533), (477, 26569), (480, 26575), (505, 26635), (528, 26731),

Gene: Gibbin_31 Start: 26849, Stop: 28849, Start Num: 1

Candidate Starts for Gibbin_31:

(Start: 1 @26849 has 38 MA's), (23, 26963), (26, 26972), (29, 26981), (31, 26984), (34, 26993), (56, 27062), (146, 27425), (165, 27500), (197, 27632), (201, 27659), (202, 27662), (203, 27665), (230, 27752), (244, 27800), (246, 27806), (251, 27833), (275, 27911), (294, 27962), (330, 28121), (337, 28154), (402, 28427), (409, 28445), (477, 28661), (480, 28667), (486, 28685), (505, 28727), (518, 28784), (528, 28823),

Gene: Glaske_21 Start: 18926, Stop: 21559, Start Num: 5

Candidate Starts for Glaske_21:

(Start: 5 @18926 has 17 MA's), (6, 18935), (45, 19079), (116, 19352), (120, 19364), (127, 19385), (134, 19409), (156, 19484), (171, 19556), (179, 19586), (188, 19622), (200, 19685), (205, 19700), (213, 19727), (215, 19733), (234, 19808), (240, 19832), (242, 19838), (246, 19850), (253, 19892), (255, 19898), (281, 19985), (289, 20006), (293, 20030), (305, 20096), (310, 20117), (315, 20135), (322, 20168), (327, 20192), (328, 20195), (337, 20246), (358, 20351), (366, 20393), (406, 20558), (436, 20654), (461, 20732), (465, 20744), (496, 20834), (511, 20894), (513, 20903), (525, 20951), (527, 20960), (549, 21077), (558, 21122), (572, 21164), (586, 21230), (590, 21254), (608, 21302), (612, 21308), (615, 21314), (656, 21413), (659, 21422), (665, 21452), (685, 21542), (688, 21551),

Gene: GrandSlam_25 Start: 21141, Stop: 23651, Start Num: 15

Candidate Starts for GrandSlam_25:

(Start: 15 @21141 has 14 MA's), (58, 21273), (62, 21288), (73, 21333), (78, 21351), (125, 21516), (138, 21570), (142, 21579), (160, 21657), (162, 21663), (198, 21828), (203, 21843), (216, 21879), (234, 21954), (236, 21966), (240, 21975), (246, 21993), (248, 22005), (254, 22038), (255, 22041), (267, 22077), (286, 22131), (314, 22254), (326, 22308), (330, 22329), (332, 22338), (354, 22440),

(369, 22500), (376, 22548), (379, 22560), (391, 22605), (421, 22692), (430, 22731), (453, 22800), (456, 22812), (462, 22824), (537, 23112), (543, 23142), (559, 23223), (564, 23244), (569, 23271), (574, 23295), (617, 23460), (635, 23505), (663, 23604), (673, 23643),

Gene: Gretellyn_30 Start: 27111, Stop: 29111, Start Num: 1

Candidate Starts for Gretellyn_30:

(Start: 1 @27111 has 38 MA's), (23, 27225), (26, 27234), (29, 27243), (31, 27246), (34, 27255), (56, 27324), (101, 27510), (146, 27687), (197, 27894), (201, 27921), (202, 27924), (203, 27927), (230, 28014), (244, 28062), (246, 28068), (251, 28095), (275, 28173), (294, 28224), (328, 28371), (330, 28383), (337, 28416), (342, 28428), (402, 28689), (466, 28890), (477, 28926), (480, 28932), (505, 28992),

Gene: Guillaume_27 Start: 35339, Stop: 37363, Start Num: 3

Candidate Starts for Guillaume_27:

(Start: 3 @35339 has 35 MA's), (11, 35387), (17, 35423), (21, 35441), (24, 35450), (33, 35480), (34, 35483), (67, 35594), (92, 35714), (208, 36191), (211, 36200), (240, 36299), (251, 36344), (272, 36410), (298, 36497), (330, 36632), (337, 36665), (414, 36977), (437, 37043), (441, 37055), (466, 37136), (477, 37172), (480, 37178), (489, 37205), (505, 37238),

Gene: Hail2Pitt_27 Start: 35816, Stop: 37840, Start Num: 3

Candidate Starts for Hail2Pitt_27:

(Start: 3 @35816 has 35 MA's), (11, 35864), (17, 35900), (21, 35918), (24, 35927), (33, 35957), (34, 35960), (67, 36071), (92, 36191), (208, 36668), (211, 36677), (240, 36776), (251, 36821), (272, 36887), (298, 36974), (330, 37109), (337, 37142), (342, 37154), (414, 37454), (437, 37520), (441, 37532), (466, 37613), (477, 37649), (480, 37655), (489, 37682), (505, 37715), (528, 37811),

Gene: Hammy_26 Start: 21316, Stop: 23694, Start Num: 19

Candidate Starts for Hammy_26:

(Start: 19 @21316 has 60 MA's), (22, 21325), (34, 21364), (69, 21487), (104, 21544), (107, 21556), (126, 21622), (143, 21676), (162, 21754), (184, 21844), (194, 21886), (203, 21937), (220, 21979), (221, 21982), (224, 22003), (240, 22063), (242, 22069), (296, 22261), (321, 22378), (343, 22486), (353, 22504), (356, 22516), (388, 22660), (434, 22795), (435, 22798), (436, 22801), (447, 22834), (450, 22840), (468, 22894), (501, 23002), (510, 23035), (511, 23041), (515, 23056), (525, 23098), (540, 23185), (542, 23191), (575, 23320), (578, 23341), (652, 23536), (657, 23557), (658, 23560), (668, 23599), (686, 23668),

Gene: Hamood_25 Start: 21141, Stop: 23651, Start Num: 15

Candidate Starts for Hamood_25:

(Start: 15 @21141 has 14 MA's), (58, 21273), (62, 21288), (73, 21333), (78, 21351), (125, 21516), (138, 21570), (142, 21579), (160, 21657), (162, 21663), (198, 21828), (203, 21843), (216, 21879), (234, 21954), (236, 21966), (240, 21975), (246, 21993), (248, 22005), (254, 22038), (255, 22041), (267, 22077), (286, 22131), (314, 22254), (326, 22308), (330, 22329), (332, 22338), (354, 22440), (369, 22500), (376, 22548), (379, 22560), (391, 22605), (421, 22692), (430, 22731), (453, 22800), (456, 22812), (462, 22824), (537, 23112), (543, 23142), (559, 23223), (564, 23244), (569, 23271), (574, 23295), (617, 23460), (635, 23505), (663, 23604), (673, 23643),

Gene: Harambe_27 Start: 35606, Stop: 37630, Start Num: 3

Candidate Starts for Harambe_27:

(Start: 3 @35606 has 35 MA's), (11, 35654), (17, 35690), (21, 35708), (24, 35717), (33, 35747), (34, 35750), (67, 35861), (92, 35981), (208, 36458), (211, 36467), (240, 36566), (251, 36611), (272, 36677), (298, 36764), (330, 36899), (337, 36932), (414, 37244), (437, 37310), (441, 37322), (466, 37403), (477, 37439), (480, 37445), (489, 37472), (505, 37505), (528, 37601),

Gene: Hello_27 Start: 35568, Stop: 37592, Start Num: 3

Candidate Starts for Hello_27:

(Start: 3 @35568 has 35 MA's), (11, 35616), (17, 35652), (21, 35670), (24, 35679), (33, 35709), (34, 35712), (92, 35943), (208, 36420), (211, 36429), (240, 36528), (251, 36573), (272, 36639), (298, 36726), (330, 36861), (337, 36894), (414, 37206), (437, 37272), (441, 37284), (466, 37365), (477, 37401), (480, 37407), (489, 37434), (505, 37467),

Gene: Hilltopfarm_27 Start: 23459, Stop: 26053, Start Num: 20

Candidate Starts for Hilltopfarm_27:

(Start: 20 @23459 has 6 MA's), (32, 23498), (54, 23573), (78, 23675), (80, 23684), (97, 23762), (116, 23843), (118, 23852), (132, 23897), (134, 23900), (136, 23909), (140, 23921), (141, 23924), (147, 23948), (156, 23975), (158, 23984), (171, 24047), (188, 24113), (196, 24149), (197, 24152), (215, 24224), (217, 24230), (234, 24299), (253, 24383), (278, 24464), (282, 24485), (310, 24608), (322, 24659), (328, 24686), (337, 24737), (344, 24782), (355, 24833), (358, 24842), (365, 24875), (373, 24920), (403, 25043), (405, 25046), (406, 25049), (439, 25160), (461, 25223), (476, 25271), (504, 25358), (511, 25385), (513, 25394), (515, 25400), (525, 25442), (527, 25451), (549, 25568), (550, 25571), (572, 25655), (579, 25691), (590, 25745), (608, 25796), (612, 25802), (615, 25808), (632, 25850), (657, 25910), (665, 25946), (685, 26036), (688, 26045),

Gene: Hurricane_26 Start: 21315, Stop: 23663, Start Num: 19

Candidate Starts for Hurricane_26:

(Start: 19 @21315 has 60 MA's), (27, 21342), (38, 21375), (53, 21420), (68, 21480), (128, 21636), (143, 21681), (152, 21717), (157, 21735), (177, 21813), (188, 21861), (222, 21993), (234, 22047), (237, 22062), (276, 22170), (308, 22287), (318, 22329), (319, 22335), (321, 22344), (325, 22353), (341, 22434), (343, 22452), (347, 22455), (355, 22494), (360, 22515), (365, 22536), (366, 22545), (385, 22632), (411, 22725), (412, 22728), (439, 22800), (486, 22938), (503, 22983), (513, 23022), (516, 23040), (539, 23139), (542, 23157), (554, 23211), (564, 23241), (567, 23259), (575, 23286), (576, 23292), (586, 23340), (610, 23415), (613, 23424), (622, 23445), (625, 23454), (661, 23553), (675, 23595),

Gene: Impisi_21 Start: 17560, Stop: 20205, Start Num: 5

Candidate Starts for Impisi_21:

(2, 17548), (Start: 5 @17560 has 17 MA's), (7, 17572), (35, 17683), (Start: 43 @17707 has 1 MA's), (45, 17710), (48, 17719), (81, 17857), (89, 17899), (90, 17902), (116, 17992), (118, 18001), (120, 18004), (127, 18025), (131, 18037), (140, 18070), (156, 18124), (171, 18202), (179, 18232), (188, 18268), (200, 18331), (205, 18346), (215, 18379), (234, 18454), (240, 18478), (242, 18484), (246, 18496), (253, 18538), (255, 18544), (281, 18631), (289, 18652), (293, 18676), (305, 18742), (310, 18763), (315, 18781), (322, 18814), (327, 18838), (328, 18841), (337, 18892), (358, 18997), (366, 19039), (406, 19204), (436, 19300), (461, 19378), (465, 19390), (496, 19480), (511, 19540), (513, 19549), (525, 19597), (527, 19606), (549, 19723), (558, 19768), (572, 19810), (586, 19876), (590, 19900), (608, 19948), (612, 19954), (615, 19960), (656, 20059), (659, 20068), (665, 20098), (685, 20188), (688, 20197),

Gene: JF1_28 Start: 22272, Stop: 24581, Start Num: 49

Candidate Starts for JF1_28:

(Start: 49 @22272 has 18 MA's), (70, 22362), (79, 22383), (105, 22407), (137, 22524), (170, 22653), (186, 22713), (199, 22785), (202, 22794), (219, 22845), (220, 22851), (223, 22860), (234, 22911), (236, 22923), (242, 22938), (244, 22944), (251, 22977), (265, 23025), (291, 23079), (308, 23151), (317, 23190), (320, 23202), (325, 23217), (334, 23262), (345, 23331), (367, 23412), (404, 23565), (418, 23607), (459, 23736), (468, 23781), (486, 23847), (492, 23862), (517, 23958), (549, 24111), (553, 24126), (554, 24132), (557, 24156), (560, 24162), (562, 24168), (563, 24171), (568, 24195), (572, 24207), (591, 24303), (612, 24354), (613, 24357), (643, 24426), (658, 24462), (665, 24495), (682, 24549), (684, 24558), (688, 24573),

Gene: Jalebi_29 Start: 27278, Stop: 29284, Start Num: 1

Candidate Starts for Jalebi_29:

(Start: 1 @27278 has 38 MA's), (23, 27392), (26, 27401), (29, 27410), (31, 27413), (34, 27422), (56, 27491), (146, 27854), (165, 27929), (197, 28061), (201, 28088), (202, 28091), (203, 28094), (230, 28181), (244, 28229), (246, 28235), (251, 28262), (275, 28340), (294, 28391), (330, 28550), (337, 28583), (357, 28664), (395, 28832), (402, 28856), (477, 29093), (480, 29099), (494, 29129), (505, 29162), (528, 29258),

Gene: Jamemuya19_27 Start: 24347, Stop: 26347, Start Num: 1

Candidate Starts for Jamemuya19_27:

(Start: 1 @24347 has 38 MA's), (23, 24461), (26, 24470), (29, 24479), (31, 24482), (34, 24491), (56, 24560), (101, 24746), (146, 24923), (197, 25130), (202, 25160), (214, 25196), (220, 25211), (230, 25250), (244, 25298), (246, 25304), (251, 25331), (272, 25397), (298, 25484), (330, 25619), (337, 25652), (342, 25664), (370, 25793), (389, 25877), (437, 26030), (441, 26042), (466, 26123), (477, 26159), (480, 26165), (505, 26225), (528, 26321),

Gene: Jams_27 Start: 34768, Stop: 36789, Start Num: 3

Candidate Starts for Jams_27:

(Start: 3 @34768 has 35 MA's), (11, 34816), (17, 34852), (21, 34870), (24, 34879), (33, 34909), (34, 34912), (67, 35023), (92, 35143), (208, 35620), (211, 35629), (240, 35728), (251, 35773), (272, 35839), (298, 35926), (330, 36061), (337, 36094), (389, 36319), (391, 36325), (441, 36484), (477, 36601), (480, 36607), (489, 36634), (505, 36667), (528, 36763),

Gene: Jellybones_30 Start: 35122, Stop: 37119, Start Num: 3

Candidate Starts for Jellybones_30:

(Start: 3 @35122 has 35 MA's), (16, 35197), (25, 35236), (34, 35266), (42, 35293), (Start: 43 @35296 has 1 MA's), (134, 35671), (136, 35680), (185, 35872), (200, 35950), (214, 35992), (220, 36007), (251, 36127), (298, 36280), (330, 36415), (337, 36448), (353, 36514), (362, 36550), (370, 36586), (391, 36676), (399, 36706), (471, 36910), (477, 36928), (480, 36934), (505, 36994), (518, 37051),

Gene: Jobypre_21 Start: 19724, Stop: 22237, Start Num: 14

Candidate Starts for Jobypre_21:

(Start: 14 @19724 has 19 MA's), (30, 19787), (53, 19859), (75, 19949), (77, 19955), (94, 20027), (112, 20114), (144, 20219), (146, 20231), (152, 20249), (161, 20288), (168, 20318), (184, 20375), (191, 20405), (193, 20411), (202, 20465), (204, 20471), (239, 20618), (241, 20621), (244, 20630), (248, 20648), (261, 20708), (264, 20717), (268, 20729), (284, 20780), (287, 20783), (328, 20948), (341, 21005), (361, 21089), (365, 21107), (366, 21116), (378, 21179), (412, 21299), (425, 21323), (431, 21344), (437, 21359), (441, 21377), (452, 21407), (482, 21497), (506, 21566), (513, 21599), (517, 21620), (527, 21656), (535, 21692), (545, 21737), (548, 21761), (549, 21767), (553, 21782), (556, 21800), (579, 21887), (584, 21911), (593, 21947), (595, 21953), (602, 21977), (637, 22052), (638, 22055), (664, 22142), (666, 22151), (669, 22157),

Gene: John316_30 Start: 35078, Stop: 37075, Start Num: 3

Candidate Starts for John316_30:

(Start: 3 @35078 has 35 MA's), (25, 35192), (34, 35222), (42, 35249), (134, 35627), (185, 35828), (214, 35948), (234, 36017), (254, 36101), (330, 36371), (337, 36404), (362, 36506), (382, 36599), (391, 36632), (399, 36662), (442, 36773), (464, 36839), (467, 36851), (477, 36884), (480, 36890), (505, 36950),

Gene: Jormungandr_27 Start: 35321, Stop: 37345, Start Num: 3

Candidate Starts for Jormungandr_27:

(Start: 3 @35321 has 35 MA's), (11, 35369), (17, 35405), (21, 35423), (24, 35432), (33, 35462), (34, 35465), (67, 35576), (92, 35696), (208, 36173), (211, 36182), (240, 36281), (251, 36326), (272, 36392), (298, 36479), (330, 36614), (337, 36647), (414, 36959), (437, 37025), (441, 37037), (466, 37118), (477, 37154), (480, 37160), (489, 37187), (505, 37220), (528, 37316),

Gene: Jubie_21 Start: 19725, Stop: 22238, Start Num: 14

Candidate Starts for Jubie_21:

(Start: 14 @19725 has 19 MA's), (30, 19788), (53, 19860), (75, 19950), (77, 19956), (94, 20028), (112, 20115), (144, 20220), (146, 20232), (152, 20250), (161, 20289), (168, 20319), (184, 20376), (191, 20406), (193, 20412), (202, 20466), (204, 20472), (239, 20619), (241, 20622), (244, 20631), (248, 20649), (261, 20709), (264, 20718), (268, 20730), (284, 20781), (287, 20784), (328, 20949), (341, 21006), (361, 21090), (365, 21108), (366, 21117), (378, 21180), (412, 21300), (425, 21324), (431, 21345), (437, 21360), (441, 21378), (452, 21408), (482, 21498), (506, 21567), (513, 21600), (517, 21621), (527, 21657), (535, 21693), (545, 21738), (548, 21762), (549, 21768), (553, 21783), (556, 21801), (579, 21888), (584, 21912), (593, 21948), (595, 21954), (602, 21978), (637, 22053), (638, 22056), (664, 22143), (666, 22152), (669, 22158),

Gene: Kabluna_46 Start: 32323, Stop: 34881, Start Num: 64

Candidate Starts for Kabluna_46:

(Start: 64 @32323 has 15 MA's), (95, 32452), (178, 32791), (179, 32794), (194, 32851), (234, 33004), (251, 33070), (253, 33085), (358, 33526), (460, 33904), (485, 34009), (495, 34027), (503, 34060), (509, 34081), (522, 34135), (542, 34240), (548, 34267), (549, 34273), (567, 34363), (587, 34459), (588, 34462), (605, 34525), (616, 34558), (635, 34606), (643, 34639), (653, 34660), (673, 34747), (675, 34762), (693, 34873),

Gene: Kaseim_27 Start: 34753, Stop: 36774, Start Num: 3

Candidate Starts for Kaseim_27:

(Start: 3 @34753 has 35 MA's), (11, 34801), (17, 34837), (21, 34855), (24, 34864), (33, 34894), (34, 34897), (67, 35008), (92, 35128), (208, 35605), (211, 35614), (240, 35713), (251, 35758), (272, 35824), (298, 35911), (330, 36046), (337, 36079), (389, 36304), (391, 36310), (441, 36469), (477, 36586), (480, 36592), (489, 36619), (505, 36652), (528, 36748),

Gene: Keshu_26 Start: 21307, Stop: 23655, Start Num: 19

Candidate Starts for Keshu_26:

(Start: 19 @21307 has 60 MA's), (27, 21334), (38, 21367), (53, 21412), (143, 21676), (144, 21682), (146, 21694), (188, 21856), (219, 21976), (222, 21988), (234, 22042), (237, 22057), (240, 22063), (251, 22108), (253, 22123), (268, 22150), (276, 22165), (308, 22282), (319, 22330), (321, 22339), (329, 22372), (335, 22384), (340, 22417), (341, 22420), (345, 22444), (355, 22486), (360, 22507), (365, 22528), (366, 22537), (412, 22723), (439, 22792), (461, 22852), (476, 22900), (506, 22981), (513, 23014), (540, 23143), (546, 23158), (554, 23203), (555, 23212), (564, 23233), (575, 23278), (576, 23284), (580, 23311), (586, 23332), (598, 23374), (613, 23416), (625, 23446), (661, 23545), (662, 23551), (675, 23587),

Gene: KilKor_21 Start: 18926, Stop: 21559, Start Num: 5

Candidate Starts for KilKor_21:

(Start: 5 @18926 has 17 MA's), (6, 18935), (45, 19079), (116, 19352), (120, 19364), (127, 19385), (134, 19409), (156, 19484), (171, 19556), (179, 19586), (188, 19622), (200, 19685), (205, 19700), (213, 19727), (215, 19733), (234, 19808), (240, 19832), (242, 19838), (246, 19850), (253, 19892), (255, 19898), (281, 19985), (289, 20006), (293, 20030), (305, 20096), (310, 20117), (315, 20135), (322, 20168), (327, 20192), (328, 20195), (337, 20246), (358, 20351), (366, 20393), (406, 20558), (436, 20654), (461, 20732), (465, 20744), (496, 20834), (511, 20894), (513, 20903), (525, 20951), (527, 20960), (549, 21077), (558, 21122), (572, 21164), (586, 21230), (590, 21254), (608, 21302), (612, 21308), (615, 21314), (656, 21413), (659, 21422), (665, 21452), (685, 21542), (688, 21551),

Gene: Kingsolomon_21 Start: 19724, Stop: 22237, Start Num: 14

Candidate Starts for Kingsolomon_21:

(Start: 14 @19724 has 19 MA's), (30, 19787), (53, 19859), (75, 19949), (77, 19955), (94, 20027), (112, 20114), (144, 20219), (146, 20231), (152, 20249), (161, 20288), (168, 20318), (184, 20375), (191, 20405), (193, 20411), (202, 20465), (204, 20471), (239, 20618), (241, 20621), (244, 20630), (248, 20648), (261, 20708), (264, 20717), (268, 20729), (284, 20780), (287, 20783), (328, 20948), (341, 21005), (361, 21089), (365, 21107), (366, 21116), (378, 21179), (412, 21299), (425, 21323), (431, 21344), (437, 21359), (441, 21377), (452, 21407), (482, 21497), (506, 21566), (513, 21599), (517, 21620), (527, 21656), (535, 21692), (545, 21737), (548, 21761), (549, 21767), (553, 21782), (556, 21800), (579, 21887), (584, 21911), (593, 21947), (595, 21953), (602, 21977), (637, 22052), (638, 22055), (664, 22142), (666, 22151), (669, 22157),

Gene: KirDoubleO7_19 Start: 19718, Stop: 22231, Start Num: 14

Candidate Starts for KirDoubleO7_19:

(Start: 14 @19718 has 19 MA's), (30, 19781), (53, 19853), (77, 19949), (94, 20021), (112, 20108), (144, 20213), (152, 20243), (161, 20282), (168, 20312), (184, 20369), (191, 20399), (193, 20405), (202, 20459), (204, 20465), (239, 20612), (241, 20615), (244, 20624), (248, 20642), (261, 20702), (268, 20723), (284, 20774), (287, 20777), (297, 20804), (328, 20942), (341, 20999), (361, 21083), (365, 21101), (366, 21110), (378, 21173), (395, 21239), (412, 21293), (431, 21338), (437, 21353), (452, 21401), (482, 21491), (486, 21509), (503, 21554), (506, 21560), (513, 21593), (516, 21611), (527, 21650), (535, 21686), (545, 21731), (548, 21755), (553, 21776), (556, 21794), (566, 21827), (584, 21905), (593, 21941), (602, 21971), (637, 22046), (651, 22082), (666, 22145), (669, 22151),

Gene: Kraw_28 Start: 22196, Stop: 24505, Start Num: 49

Candidate Starts for Kraw_28:

(Start: 49 @22196 has 18 MA's), (70, 22286), (79, 22307), (105, 22331), (137, 22448), (170, 22577), (186, 22637), (199, 22709), (202, 22718), (219, 22769), (220, 22775), (223, 22784), (234, 22835), (236, 22847), (242, 22862), (244, 22868), (251, 22901), (265, 22949), (291, 23003), (308, 23075), (317, 23114), (320, 23126), (325, 23141), (334, 23186), (345, 23255), (367, 23336), (404, 23489), (418, 23531), (459, 23660), (468, 23705), (486, 23771), (492, 23786), (517, 23882), (549, 24035), (553, 24050), (554, 24056), (557, 24080), (560, 24086), (562, 24092), (563, 24095), (568, 24119), (572, 24131), (591, 24227), (612, 24278), (613, 24281), (643, 24350), (658, 24386), (665, 24419), (684, 24482), (688, 24497),

Gene: Krueger_26 Start: 20014, Stop: 22350, Start Num: 19

Candidate Starts for Krueger_26:

(13, 19981), (Start: 19 @20014 has 60 MA's), (22, 20023), (36, 20071), (38, 20074), (71, 20203), (107, 20254), (135, 20350), (137, 20359), (162, 20449), (170, 20488), (188, 20560), (191, 20569), (213, 20662), (234, 20743), (242, 20773), (251, 20812), (253, 20827), (268, 20851), (292, 20911), (300, 20956), (308, 20983), (317, 21022), (321, 21040), (325, 21049), (340, 21118), (341, 21121), (343, 21139), (355, 21181), (360, 21202), (364, 21217), (366, 21232), (385, 21319), (411, 21412), (412, 21415), (439, 21487), (455, 21535), (483, 21616), (497, 21640), (502, 21664), (503, 21670), (513, 21709), (554, 21898), (575, 21973), (586, 22027), (613, 22111), (621, 22129), (655, 22216), (661, 22240), (675, 22282), (691, 22342),

Gene: Krypton555_21 Start: 19647, Stop: 22160, Start Num: 14

Candidate Starts for Krypton555_21:

(Start: 14 @19647 has 19 MA's), (30, 19710), (53, 19782), (100, 19980), (137, 20124), (144, 20142), (146, 20154), (152, 20172), (161, 20211), (164, 20226), (168, 20241), (184, 20298), (191, 20328), (193, 20334), (202, 20388), (204, 20394), (218, 20451), (239, 20541), (241, 20544), (244, 20553), (248, 20571), (261, 20631), (284, 20703), (287, 20706), (322, 20850), (328, 20871), (341, 20928), (361, 21012), (365, 21030), (366, 21039), (412, 21222), (431, 21267), (437, 21282), (441, 21300),

(452, 21330), (472, 21390), (482, 21420), (506, 21489), (513, 21522), (517, 21543), (527, 21579), (533, 21609), (548, 21684), (549, 21690), (553, 21705), (556, 21723), (566, 21756), (578, 21807), (579, 21810), (585, 21837), (593, 21870), (602, 21900), (637, 21975), (651, 22011), (666, 22074), (669, 22080), (690, 22152),

Gene: Lahirium_27 Start: 35843, Stop: 37867, Start Num: 3

Candidate Starts for Lahirium_27:

(Start: 3 @35843 has 35 MA's), (11, 35891), (17, 35927), (21, 35945), (24, 35954), (33, 35984), (34, 35987), (67, 36098), (92, 36218), (208, 36695), (211, 36704), (240, 36803), (251, 36848), (272, 36914), (298, 37001), (330, 37136), (337, 37169), (414, 37481), (437, 37547), (441, 37559), (466, 37640), (477, 37676), (480, 37682), (489, 37709), (505, 37742), (528, 37838),

Gene: Lambo_30 Start: 26783, Stop: 28762, Start Num: 1

Candidate Starts for Lambo_30:

(Start: 1 @26783 has 38 MA's), (23, 26897), (26, 26906), (29, 26915), (31, 26918), (34, 26927), (56, 26996), (73, 27059), (74, 27062), (86, 27101), (90, 27122), (101, 27176), (146, 27353), (165, 27428), (197, 27560), (201, 27587), (202, 27590), (203, 27593), (230, 27680), (244, 27728), (246, 27734), (251, 27761), (275, 27839), (294, 27890), (330, 28049), (337, 28082), (362, 28184), (370, 28220), (464, 28526), (477, 28571), (480, 28577), (505, 28637), (523, 28712),

Gene: LastHope_27 Start: 20175, Stop: 22487, Start Num: 49

Candidate Starts for LastHope_27:

(Start: 49 @20175 has 18 MA's), (110, 20325), (116, 20346), (133, 20403), (136, 20415), (153, 20469), (163, 20514), (174, 20556), (176, 20568), (187, 20613), (212, 20724), (220, 20745), (231, 20796), (235, 20811), (240, 20826), (262, 20907), (274, 20937), (291, 20976), (297, 20991), (307, 21051), (328, 21135), (340, 21207), (414, 21510), (418, 21516), (435, 21570), (436, 21573), (438, 21585), (449, 21612), (454, 21630), (455, 21636), (486, 21753), (492, 21768), (549, 22017), (553, 22032), (557, 22062), (568, 22101), (572, 22113), (591, 22209), (601, 22239), (621, 22281), (629, 22302), (649, 22344), (658, 22368), (659, 22371), (664, 22395), (665, 22401), (684, 22464), (688, 22479),

Gene: LavAbarElk_28 Start: 25217, Stop: 27223, Start Num: 1

Candidate Starts for LavAbarElk_28:

(Start: 1 @25217 has 38 MA's), (23, 25331), (26, 25340), (29, 25349), (31, 25352), (34, 25361), (56, 25430), (146, 25793), (165, 25868), (197, 26000), (201, 26027), (202, 26030), (203, 26033), (230, 26120), (244, 26168), (246, 26174), (251, 26201), (275, 26279), (294, 26330), (330, 26489), (337, 26522), (357, 26603), (395, 26771), (402, 26795), (477, 27032), (480, 27038), (494, 27068), (505, 27101), (528, 27197),

Gene: Lavahound_25 Start: 20978, Stop: 23365, Start Num: 19

Candidate Starts for Lavahound_25:

(Start: 19 @20978 has 60 MA's), (28, 21008), (34, 21026), (60, 21110), (126, 21284), (162, 21416), (184, 21506), (194, 21548), (203, 21599), (220, 21641), (221, 21644), (234, 21701), (240, 21725), (242, 21731), (251, 21770), (267, 21827), (296, 21923), (321, 22040), (338, 22109), (343, 22148), (350, 22157), (356, 22178), (366, 22220), (434, 22457), (435, 22460), (436, 22463), (450, 22502), (468, 22556), (516, 22730), (525, 22760), (540, 22847), (542, 22853), (567, 22955), (590, 23060), (591, 23066), (609, 23114), (647, 23207), (657, 23231), (664, 23261), (686, 23339),

Gene: Lea83_26 Start: 21295, Stop: 23643, Start Num: 19

Candidate Starts for Lea83_26:

(Start: 19 @21295 has 60 MA's), (27, 21322), (38, 21355), (53, 21400), (129, 21619), (143, 21664), (152, 21700), (157, 21718), (177, 21796), (188, 21844), (222, 21976), (234, 22030), (237, 22045), (276, 22153), (308, 22270), (318, 22312), (319, 22318), (321, 22327), (325, 22336), (335, 22381), (341, 22417), (343, 22435), (355, 22477), (360, 22498), (365, 22519), (366, 22528), (385, 22615),

(411, 22708), (412, 22711), (439, 22783), (503, 22966), (516, 23023), (539, 23122), (542, 23140), (554, 23194), (564, 23224), (566, 23239), (567, 23242), (571, 23251), (575, 23269), (576, 23275), (580, 23302), (586, 23323), (592, 23353), (610, 23398), (613, 23407), (661, 23536), (675, 23575), (678, 23578),

Gene: Lebo14_28 Start: 22289, Stop: 24595, Start Num: 49

Candidate Starts for Lebo14_28:

(Start: 49 @22289 has 18 MA's), (79, 22400), (105, 22424), (137, 22541), (170, 22670), (184, 22721), (186, 22730), (194, 22763), (199, 22802), (202, 22811), (220, 22868), (223, 22877), (234, 22928), (236, 22940), (242, 22955), (244, 22961), (251, 22994), (265, 23042), (291, 23096), (308, 23168), (317, 23207), (320, 23219), (325, 23234), (334, 23279), (345, 23348), (367, 23429), (404, 23582), (436, 23681), (438, 23693), (468, 23798), (486, 23864), (490, 23876), (492, 23879), (517, 23975), (549, 24128), (553, 24143), (554, 24149), (557, 24173), (568, 24212), (591, 24320), (613, 24374), (622, 24395), (628, 24410), (659, 24479), (665, 24509), (688, 24587),

Gene: Lidong_27 Start: 35568, Stop: 37589, Start Num: 3

Candidate Starts for Lidong_27:

(Start: 3 @35568 has 35 MA's), (11, 35616), (17, 35652), (21, 35670), (24, 35679), (33, 35709), (34, 35712), (67, 35823), (92, 35943), (208, 36420), (211, 36429), (240, 36528), (251, 36573), (272, 36639), (298, 36726), (330, 36861), (337, 36894), (389, 37119), (391, 37125), (441, 37284), (477, 37401), (480, 37407), (489, 37434), (505, 37467), (528, 37563),

Gene: LilPharaoh_23 Start: 20414, Stop: 22900, Start Num: 19

Candidate Starts for LilPharaoh_23:

(Start: 19 @20414 has 60 MA's), (34, 20462), (104, 20642), (105, 20645), (124, 20708), (126, 20720), (162, 20852), (170, 20891), (185, 20948), (191, 20972), (194, 20984), (202, 21032), (203, 21035), (217, 21068), (225, 21107), (234, 21140), (236, 21152), (240, 21161), (242, 21167), (257, 21233), (262, 21248), (296, 21359), (300, 21392), (321, 21476), (326, 21491), (337, 21551), (351, 21620), (374, 21740), (395, 21833), (433, 21947), (459, 22025), (461, 22031), (468, 22055), (485, 22118), (486, 22121), (490, 22133), (510, 22199), (511, 22205), (521, 22247), (525, 22268), (527, 22277), (534, 22310), (536, 22328), (549, 22397), (575, 22496), (576, 22502), (579, 22520), (589, 22574), (594, 22589), (605, 22616), (631, 22673),

Gene: Lila22_29 Start: 26738, Stop: 28717, Start Num: 1

Candidate Starts for Lila22_29:

(Start: 1 @26738 has 38 MA's), (23, 26852), (26, 26861), (29, 26870), (31, 26873), (34, 26882), (56, 26951), (73, 27014), (74, 27017), (86, 27056), (90, 27077), (101, 27131), (146, 27308), (165, 27383), (197, 27515), (201, 27542), (202, 27545), (203, 27548), (230, 27635), (244, 27683), (246, 27689), (251, 27716), (275, 27794), (294, 27845), (330, 28004), (337, 28037), (362, 28139), (370, 28175), (464, 28481), (477, 28526), (480, 28532), (505, 28592), (523, 28667),

Gene: LiyuLake_21 Start: 19709, Stop: 22219, Start Num: 14

Candidate Starts for LiyuLake_21:

(Start: 14 @19709 has 19 MA's), (30, 19772), (65, 19892), (109, 20078), (144, 20204), (146, 20216), (152, 20234), (161, 20273), (168, 20303), (191, 20390), (202, 20450), (204, 20456), (238, 20597), (241, 20603), (244, 20612), (248, 20630), (261, 20690), (268, 20711), (284, 20762), (287, 20765), (303, 20834), (341, 20987), (361, 21071), (365, 21089), (366, 21098), (392, 21209), (395, 21227), (412, 21281), (431, 21326), (437, 21341), (452, 21389), (482, 21479), (486, 21497), (506, 21548), (513, 21581), (516, 21599), (517, 21602), (527, 21638), (533, 21668), (535, 21674), (545, 21719), (548, 21743), (549, 21749), (553, 21764), (556, 21782), (566, 21815), (567, 21818), (579, 21869), (595, 21935), (602, 21959), (637, 22034), (651, 22070), (669, 22139),

Gene: Lollipop1437_48 Start: 34224, Stop: 36782, Start Num: 64

Candidate Starts for Lollipop1437_48:

(Start: 64 @34224 has 15 MA's), (122, 34473), (178, 34692), (179, 34695), (209, 34824), (242, 34932), (251, 34971), (341, 35343), (358, 35427), (460, 35805), (485, 35910), (495, 35928), (503, 35961), (509, 35982), (522, 36036), (542, 36141), (549, 36174), (567, 36264), (587, 36360), (588, 36363), (605, 36426), (616, 36459), (622, 36477), (623, 36480), (637, 36516), (643, 36540), (653, 36561), (674, 36651), (675, 36663),

Gene: Lolly9_21 Start: 19528, Stop: 22035, Start Num: 14

Candidate Starts for Lolly9_21:

(Start: 14 @19528 has 19 MA's), (30, 19591), (53, 19663), (65, 19711), (109, 19897), (144, 20023), (152, 20053), (161, 20092), (168, 20122), (191, 20209), (196, 20236), (202, 20269), (204, 20275), (218, 20326), (238, 20413), (241, 20419), (244, 20428), (248, 20446), (261, 20506), (268, 20527), (284, 20578), (287, 20581), (303, 20650), (341, 20803), (361, 20887), (365, 20905), (366, 20914), (412, 21097), (425, 21121), (431, 21142), (437, 21157), (452, 21205), (482, 21295), (483, 21304), (513, 21397), (516, 21415), (517, 21418), (535, 21490), (548, 21559), (549, 21565), (553, 21580), (556, 21598), (566, 21631), (567, 21634), (579, 21685), (584, 21709), (595, 21751), (602, 21775), (637, 21850), (638, 21853), (669, 21955),

Gene: LongHai_25 Start: 19700, Stop: 22018, Start Num: 46

Candidate Starts for LongHai_25:

(Start: 46 @19700 has 2 MA's), (115, 19901), (130, 19946), (132, 19958), (162, 20069), (180, 20135), (204, 20249), (210, 20276), (270, 20498), (277, 20516), (290, 20552), (299, 20612), (316, 20687), (324, 20714), (329, 20741), (338, 20777), (353, 20834), (401, 21029), (426, 21098), (431, 21116), (434, 21122), (435, 21125), (436, 21128), (474, 21245), (476, 21251), (502, 21329), (514, 21377), (515, 21380), (532, 21458), (540, 21509), (546, 21524), (547, 21536), (564, 21599), (568, 21620), (574, 21641), (586, 21698), (589, 21719), (602, 21758), (621, 21800), (637, 21833), (639, 21839), (644, 21854), (669, 21938),

Gene: LuckyLeo_29 Start: 26090, Stop: 28090, Start Num: 1

Candidate Starts for LuckyLeo_29:

(Start: 1 @26090 has 38 MA's), (23, 26204), (26, 26213), (29, 26222), (31, 26225), (34, 26234), (56, 26303), (70, 26360), (165, 26741), (173, 26774), (200, 26897), (202, 26903), (246, 27047), (251, 27074), (294, 27203), (298, 27227), (330, 27362), (337, 27395), (402, 27668), (410, 27692), (477, 27902), (480, 27908), (494, 27938), (505, 27971),

Gene: Luker_28 Start: 35796, Stop: 37820, Start Num: 3

Candidate Starts for Luker_28:

(Start: 3 @35796 has 35 MA's), (11, 35844), (17, 35880), (21, 35898), (24, 35907), (33, 35937), (34, 35940), (67, 36051), (92, 36171), (208, 36648), (211, 36657), (240, 36756), (251, 36801), (272, 36867), (298, 36954), (330, 37089), (337, 37122), (414, 37434), (437, 37500), (441, 37512), (466, 37593), (477, 37629), (480, 37635), (489, 37662), (505, 37695),

Gene: Lumos_21 Start: 19721, Stop: 22234, Start Num: 14

Candidate Starts for Lumos_21:

(Start: 14 @19721 has 19 MA's), (30, 19784), (53, 19856), (75, 19946), (77, 19952), (94, 20024), (112, 20111), (144, 20216), (146, 20228), (152, 20246), (161, 20285), (168, 20315), (184, 20372), (191, 20402), (193, 20408), (202, 20462), (204, 20468), (239, 20615), (241, 20618), (244, 20627), (248, 20645), (261, 20705), (264, 20714), (268, 20726), (284, 20777), (287, 20780), (328, 20945), (341, 21002), (361, 21086), (365, 21104), (366, 21113), (378, 21176), (412, 21296), (425, 21320), (431, 21341), (437, 21356), (441, 21374), (452, 21404), (482, 21494), (506, 21563), (513, 21596), (517, 21617), (527, 21653), (535, 21689), (545, 21734), (548, 21758), (549, 21764), (553, 21779), (556, 21797), (579, 21884), (584, 21908), (593, 21944), (595, 21950), (602, 21974), (637, 22049), (638, 22052), (664, 22139), (666, 22148), (669, 22154),

Gene: MacnCheese_27 Start: 21549, Stop: 24002, Start Num: 19

Candidate Starts for MacnCheese_27:

(Start: 19 @21549 has 60 MA's), (27, 21576), (38, 21609), (41, 21621), (68, 21714), (129, 21978), (143, 22023), (146, 22041), (152, 22059), (157, 22077), (172, 22137), (177, 22155), (186, 22191), (197, 22242), (234, 22389), (276, 22512), (308, 22629), (318, 22671), (319, 22677), (321, 22686), (328, 22710), (341, 22776), (343, 22794), (355, 22836), (360, 22857), (365, 22878), (366, 22887), (385, 22974), (411, 23067), (412, 23070), (439, 23142), (483, 23271), (486, 23280), (503, 23325), (506, 23331), (513, 23364), (516, 23382), (539, 23481), (542, 23499), (554, 23553), (566, 23598), (576, 23634), (586, 23682), (613, 23766), (661, 23895), (675, 23934),

Gene: Maco6_22 Start: 18657, Stop: 20975, Start Num: 46

Candidate Starts for Maco6_22:

(Start: 46 @18657 has 2 MA's), (115, 18858), (130, 18903), (132, 18915), (162, 19026), (180, 19092), (210, 19233), (246, 19365), (252, 19404), (256, 19416), (270, 19455), (277, 19473), (290, 19509), (299, 19569), (316, 19644), (324, 19671), (338, 19734), (353, 19791), (401, 19986), (402, 19989), (426, 20055), (431, 20073), (434, 20079), (435, 20082), (436, 20085), (476, 20208), (494, 20256), (502, 20286), (513, 20331), (515, 20337), (525, 20379), (532, 20415), (540, 20466), (546, 20481), (548, 20499), (564, 20556), (568, 20577), (574, 20598), (586, 20655), (589, 20676), (602, 20715), (621, 20757), (637, 20790), (639, 20796), (644, 20811), (669, 20895),

Gene: MalagasyRose_27 Start: 20187, Stop: 22691, Start Num: 43

Candidate Starts for MalagasyRose_27:

(Start: 43 @20187 has 1 MA's), (96, 20397), (99, 20412), (107, 20445), (122, 20496), (178, 20712), (179, 20715), (185, 20736), (217, 20868), (218, 20871), (227, 20913), (228, 20916), (242, 20970), (243, 20973), (244, 20976), (246, 20982), (251, 21009), (258, 21039), (271, 21084), (279, 21114), (296, 21189), (311, 21270), (313, 21279), (321, 21315), (328, 21351), (337, 21402), (339, 21414), (355, 21501), (358, 21510), (365, 21543), (373, 21582), (386, 21642), (419, 21750), (439, 21822), (457, 21876), (474, 21939), (481, 21954), (487, 21978), (493, 21996), (499, 22014), (500, 22020), (504, 22035), (513, 22071), (517, 22092), (520, 22101), (538, 22191), (568, 22335), (572, 22347), (575, 22359), (584, 22407), (585, 22410), (586, 22413), (597, 22455), (611, 22476), (621, 22497), (622, 22500), (627, 22512), (663, 22596), (688, 22683),

Gene: Malthus_29 Start: 22196, Stop: 24505, Start Num: 49

Candidate Starts for Malthus_29:

(Start: 49 @22196 has 18 MA's), (70, 22286), (79, 22307), (105, 22331), (137, 22448), (170, 22577), (186, 22637), (199, 22709), (202, 22718), (219, 22769), (220, 22775), (223, 22784), (234, 22835), (236, 22847), (242, 22862), (244, 22868), (251, 22901), (265, 22949), (291, 23003), (308, 23075), (317, 23114), (320, 23126), (325, 23141), (334, 23186), (345, 23255), (367, 23336), (404, 23489), (418, 23531), (459, 23660), (468, 23705), (486, 23771), (492, 23786), (517, 23882), (549, 24035), (553, 24050), (554, 24056), (557, 24080), (560, 24086), (562, 24092), (563, 24095), (568, 24119), (572, 24131), (591, 24227), (612, 24278), (613, 24281), (643, 24350), (658, 24386), (665, 24419), (682, 24473), (684, 24482), (688, 24497),

Gene: Manilisa_30 Start: 24464, Stop: 27067, Start Num: 8

Candidate Starts for Manilisa_30:

(Start: 8 @24464 has 1 MA's), (37, 24578), (39, 24587), (113, 24890), (160, 25064), (194, 25199), (198, 25235), (216, 25286), (217, 25289), (234, 25361), (248, 25412), (251, 25427), (254, 25445), (263, 25469), (339, 25778), (343, 25799), (346, 25808), (348, 25811), (363, 25883), (396, 26030), (407, 26060), (430, 26141), (432, 26144), (445, 26183), (451, 26195), (463, 26246), (503, 26372), (544, 26555), (559, 26636), (583, 26759), (603, 26834), (622, 26888), (641, 26948), (648, 26960),

Gene: Marcoliusprime_23 Start: 18661, Stop: 21000, Start Num: 19

Candidate Starts for Marcoliusprime_23:

(Start: 19 @18661 has 60 MA's), (69, 18832), (71, 18850), (78, 18874), (137, 19018), (147, 19051), (183, 19180), (185, 19189), (188, 19204), (192, 19216), (194, 19225), (202, 19273), (230, 19369), (234, 19387), (240, 19408), (251, 19453), (292, 19555), (308, 19627), (318, 19669), (319, 19675), (321, 19684), (340, 19771), (343, 19792), (355, 19834), (360, 19855), (385, 19972), (388, 19981), (416, 20071), (437, 20125), (439, 20137), (448, 20161), (486, 20275), (499, 20302), (513, 20359), (527, 20416), (554, 20548), (564, 20578), (576, 20629), (579, 20647), (586, 20677), (600, 20731), (613, 20761), (622, 20782), (668, 20914),

Gene: McMater_27 Start: 20230, Stop: 22731, Start Num: 19

Candidate Starts for McMater_27:

(Start: 19 @20230 has 60 MA's), (34, 20278), (Start: 52 @20329 has 1 MA's), (69, 20401), (103, 20452), (107, 20470), (114, 20503), (124, 20524), (126, 20536), (143, 20590), (162, 20668), (170, 20707), (185, 20764), (194, 20800), (203, 20851), (217, 20881), (221, 20896), (225, 20920), (234, 20953), (240, 20974), (242, 20980), (251, 21019), (296, 21172), (300, 21205), (303, 21217), (319, 21280), (337, 21364), (373, 21547), (384, 21601), (395, 21643), (459, 21835), (461, 21841), (468, 21865), (485, 21928), (499, 21967), (515, 22030), (527, 22087), (534, 22120), (536, 22138), (545, 22177), (551, 22216), (553, 22222), (566, 22279), (591, 22393), (614, 22447), (621, 22462), (634, 22492), (638, 22504), (657, 22561), (661, 22579), (669, 22609), (672, 22627), (687, 22708),

Gene: Mdavu_23 Start: 20402, Stop: 22888, Start Num: 19

Candidate Starts for Mdavu_23:

(Start: 19 @20402 has 60 MA's), (34, 20450), (104, 20630), (105, 20633), (124, 20696), (126, 20708), (162, 20840), (170, 20879), (185, 20936), (191, 20960), (194, 20972), (202, 21020), (203, 21023), (217, 21056), (225, 21095), (234, 21128), (236, 21140), (240, 21149), (242, 21155), (257, 21221), (262, 21236), (296, 21347), (300, 21380), (321, 21464), (326, 21479), (337, 21539), (351, 21608), (374, 21728), (395, 21821), (433, 21935), (459, 22013), (461, 22019), (468, 22043), (485, 22106), (486, 22109), (490, 22121), (510, 22187), (511, 22193), (521, 22235), (525, 22256), (527, 22265), (534, 22298), (536, 22316), (549, 22385), (575, 22484), (576, 22490), (579, 22508), (589, 22562), (594, 22577), (605, 22604), (631, 22661),

Gene: Megiddo_21 Start: 18926, Stop: 21559, Start Num: 5

Candidate Starts for Megiddo_21:

(Start: 5 @18926 has 17 MA's), (6, 18935), (45, 19079), (116, 19352), (120, 19364), (127, 19385), (134, 19409), (156, 19484), (171, 19556), (179, 19586), (188, 19622), (200, 19685), (205, 19700), (213, 19727), (215, 19733), (234, 19808), (240, 19832), (242, 19838), (246, 19850), (253, 19892), (255, 19898), (281, 19985), (289, 20006), (293, 20030), (305, 20096), (310, 20117), (315, 20135), (322, 20168), (327, 20192), (328, 20195), (337, 20246), (358, 20351), (366, 20393), (406, 20558), (436, 20654), (461, 20732), (465, 20744), (496, 20834), (511, 20894), (513, 20903), (525, 20951), (527, 20960), (549, 21077), (558, 21122), (572, 21164), (586, 21230), (590, 21254), (608, 21302), (612, 21308), (615, 21314), (656, 21413), (659, 21422), (665, 21452), (685, 21542), (688, 21551),

Gene: MerCougar_44 Start: 33507, Stop: 36065, Start Num: 64

Candidate Starts for MerCougar_44:

(Start: 64 @33507 has 15 MA's), (66, 33516), (95, 33636), (178, 33975), (179, 33978), (194, 34035), (234, 34188), (253, 34269), (284, 34359), (341, 34626), (358, 34710), (426, 34980), (460, 35088), (485, 35193), (495, 35211), (503, 35244), (507, 35253), (528, 35343), (536, 35388), (541, 35421), (542, 35424), (549, 35457), (573, 35577), (577, 35601), (578, 35604), (587, 35643), (588, 35646), (616, 35742), (650, 35838), (653, 35844), (670, 35916), (675, 35946), (680, 35973), (689, 36018), (692, 36036),

Gene: Milly_23 Start: 18661, Stop: 21000, Start Num: 19

Candidate Starts for Milly_23:

(Start: 19 @18661 has 60 MA's), (69, 18832), (71, 18850), (78, 18874), (137, 19018), (147, 19051), (183, 19180), (185, 19189), (188, 19204), (192, 19216), (194, 19225), (202, 19273), (230, 19369), (234, 19387), (240, 19408), (251, 19453), (292, 19555), (308, 19627), (318, 19669), (319, 19675), (321, 19684), (340, 19771), (343, 19792), (355, 19834), (360, 19855), (385, 19972), (388, 19981), (398, 20017), (416, 20071), (437, 20125), (439, 20137), (448, 20161), (486, 20275), (499, 20302), (513, 20359), (554, 20548), (564, 20578), (576, 20629), (586, 20677), (600, 20731), (613, 20761), (622, 20782), (668, 20914),

Gene: Mima20_28 Start: 26467, Stop: 28473, Start Num: 1

Candidate Starts for Mima20_28:

(Start: 1 @26467 has 38 MA's), (23, 26581), (26, 26590), (29, 26599), (31, 26602), (34, 26611), (56, 26680), (146, 27043), (165, 27118), (197, 27250), (201, 27277), (202, 27280), (203, 27283), (230, 27370), (244, 27418), (246, 27424), (251, 27451), (275, 27529), (294, 27580), (330, 27739), (337, 27772), (357, 27853), (395, 28021), (402, 28045), (477, 28282), (480, 28288), (494, 28318), (505, 28351), (518, 28408), (526, 28438), (528, 28447),

Gene: MiniLon_21 Start: 19528, Stop: 22035, Start Num: 14

Candidate Starts for MiniLon_21:

(Start: 14 @19528 has 19 MA's), (30, 19591), (53, 19663), (65, 19711), (109, 19897), (144, 20023), (152, 20053), (161, 20092), (168, 20122), (191, 20209), (196, 20236), (202, 20269), (204, 20275), (218, 20326), (238, 20413), (241, 20419), (244, 20428), (248, 20446), (261, 20506), (268, 20527), (284, 20578), (287, 20581), (303, 20650), (341, 20803), (361, 20887), (365, 20905), (366, 20914), (412, 21097), (425, 21121), (431, 21142), (437, 21157), (452, 21205), (482, 21295), (483, 21304), (513, 21397), (516, 21415), (517, 21418), (535, 21490), (548, 21559), (549, 21565), (553, 21580), (556, 21598), (566, 21631), (567, 21634), (579, 21685), (584, 21709), (595, 21751), (602, 21775), (637, 21850), (638, 21853), (669, 21955),

Gene: MiniMac_21 Start: 19529, Stop: 22036, Start Num: 14

Candidate Starts for MiniMac_21:

(Start: 14 @19529 has 19 MA's), (30, 19592), (53, 19664), (65, 19712), (109, 19898), (144, 20024), (152, 20054), (161, 20093), (168, 20123), (191, 20210), (196, 20237), (202, 20270), (204, 20276), (218, 20327), (238, 20414), (241, 20420), (244, 20429), (248, 20447), (261, 20507), (268, 20528), (284, 20579), (287, 20582), (303, 20651), (341, 20804), (361, 20888), (365, 20906), (366, 20915), (412, 21098), (425, 21122), (431, 21143), (437, 21158), (452, 21206), (482, 21296), (483, 21305), (513, 21398), (516, 21416), (517, 21419), (535, 21491), (548, 21560), (549, 21566), (553, 21581), (556, 21599), (566, 21632), (567, 21635), (579, 21686), (584, 21710), (595, 21752), (602, 21776), (637, 21851), (638, 21854), (669, 21956),

Gene: Minos_28 Start: 35310, Stop: 37331, Start Num: 3

Candidate Starts for Minos_28:

(Start: 3 @35310 has 35 MA's), (11, 35358), (17, 35394), (21, 35412), (24, 35421), (33, 35451), (34, 35454), (67, 35565), (92, 35685), (208, 36162), (211, 36171), (240, 36270), (251, 36315), (272, 36381), (298, 36468), (330, 36603), (337, 36636), (389, 36861), (391, 36867), (441, 37026), (477, 37143), (480, 37149), (489, 37176), (505, 37209), (528, 37305),

Gene: MissDaisy_28 Start: 22035, Stop: 24344, Start Num: 49

Candidate Starts for MissDaisy_28:

(Start: 49 @22035 has 18 MA's), (63, 22083), (65, 22092), (79, 22146), (107, 22179), (137, 22287), (157, 22353), (170, 22416), (184, 22467), (186, 22476), (194, 22509), (202, 22557), (220, 22614), (234, 22674), (236, 22686), (242, 22701), (244, 22707), (251, 22740), (265, 22788), (291, 22842), (308, 22914), (345, 23094), (367, 23175), (404, 23328), (418, 23370), (438, 23439), (464, 23526), (468, 23544), (473, 23571), (486, 23610), (492, 23625), (517, 23721), (549, 23874), (553, 23889), (554, 23895), (560, 23925), (562, 23931), (568, 23958), (572, 23970), (591, 24066), (613, 24120),

(622, 24141), (659, 24228), (665, 24258), (688, 24336),

Gene: Mitti_28 Start: 22196, Stop: 24505, Start Num: 49

Candidate Starts for Mitti_28:

(Start: 49 @22196 has 18 MA's), (79, 22307), (105, 22331), (137, 22448), (170, 22577), (186, 22637), (199, 22709), (202, 22718), (220, 22775), (223, 22784), (234, 22835), (236, 22847), (242, 22862), (244, 22868), (251, 22901), (265, 22949), (291, 23003), (308, 23075), (317, 23114), (320, 23126), (325, 23141), (334, 23186), (345, 23255), (367, 23336), (404, 23489), (418, 23531), (436, 23588), (438, 23600), (449, 23630), (468, 23705), (473, 23732), (486, 23771), (492, 23786), (517, 23882), (549, 24035), (553, 24050), (554, 24056), (560, 24086), (562, 24092), (568, 24119), (572, 24131), (591, 24227), (613, 24281), (622, 24302), (659, 24389), (665, 24419), (688, 24497),

Gene: MoiGyank_32 Start: 27148, Stop: 29154, Start Num: 1

Candidate Starts for MoiGyank_32:

(Start: 1 @27148 has 38 MA's), (23, 27262), (26, 27271), (29, 27280), (31, 27283), (34, 27292), (56, 27361), (146, 27724), (165, 27799), (197, 27931), (201, 27958), (202, 27961), (203, 27964), (230, 28051), (244, 28099), (246, 28105), (251, 28132), (275, 28210), (294, 28261), (330, 28420), (337, 28453), (357, 28534), (395, 28702), (402, 28726), (477, 28963), (480, 28969), (494, 28999), (505, 29032), (518, 29089), (526, 29119), (528, 29128),

Gene: Moostard_21 Start: 19727, Stop: 22240, Start Num: 14

Candidate Starts for Moostard_21:

(Start: 14 @19727 has 19 MA's), (30, 19790), (53, 19862), (75, 19952), (77, 19958), (94, 20030), (144, 20222), (146, 20234), (152, 20252), (161, 20291), (168, 20321), (184, 20378), (191, 20408), (193, 20414), (202, 20468), (204, 20474), (239, 20621), (241, 20624), (244, 20633), (248, 20651), (261, 20711), (264, 20720), (268, 20732), (284, 20783), (287, 20786), (328, 20951), (341, 21008), (361, 21092), (365, 21110), (366, 21119), (378, 21182), (412, 21302), (431, 21347), (437, 21362), (441, 21380), (452, 21410), (482, 21500), (506, 21569), (513, 21602), (517, 21623), (527, 21659), (535, 21695), (545, 21740), (548, 21764), (549, 21770), (553, 21785), (556, 21803), (566, 21836), (579, 21890), (584, 21914), (593, 21950), (595, 21956), (602, 21980), (664, 22145), (666, 22154), (669, 22160),

Gene: MrWormie_27 Start: 34471, Stop: 36492, Start Num: 3

Candidate Starts for MrWormie_27:

(Start: 3 @34471 has 35 MA's), (11, 34519), (17, 34555), (21, 34573), (24, 34582), (33, 34612), (34, 34615), (67, 34726), (92, 34846), (208, 35323), (211, 35332), (240, 35431), (251, 35476), (272, 35542), (298, 35629), (330, 35764), (337, 35797), (389, 36022), (391, 36028), (441, 36187), (477, 36304), (480, 36310), (489, 36337), (505, 36370), (528, 36466),

Gene: MsGreen_21 Start: 19724, Stop: 22237, Start Num: 14

Candidate Starts for MsGreen_21:

(Start: 14 @19724 has 19 MA's), (30, 19787), (53, 19859), (75, 19949), (77, 19955), (94, 20027), (112, 20114), (144, 20219), (146, 20231), (152, 20249), (161, 20288), (168, 20318), (184, 20375), (191, 20405), (193, 20411), (202, 20465), (204, 20471), (239, 20618), (241, 20621), (244, 20630), (248, 20648), (261, 20708), (264, 20717), (268, 20729), (284, 20780), (287, 20783), (328, 20948), (341, 21005), (361, 21089), (365, 21107), (366, 21116), (378, 21179), (412, 21299), (425, 21323), (431, 21344), (437, 21359), (441, 21377), (452, 21407), (482, 21497), (506, 21566), (513, 21599), (517, 21620), (527, 21656), (535, 21692), (545, 21737), (548, 21761), (549, 21767), (553, 21782), (556, 21800), (579, 21887), (584, 21911), (593, 21947), (595, 21953), (602, 21977), (637, 22052), (638, 22055), (664, 22142), (666, 22151), (669, 22157),

Gene: Msay19_31 Start: 35256, Stop: 37253, Start Num: 3

Candidate Starts for Msay19_31:

(Start: 3 @35256 has 35 MA's), (16, 35331), (25, 35370), (34, 35400), (42, 35427), (Start: 43 @35430 has 1 MA's), (134, 35805), (136, 35814), (185, 36006), (200, 36084), (214, 36126), (234, 36195), (251, 36261), (254, 36279), (272, 36327), (330, 36549), (337, 36582), (353, 36648), (362, 36684), (370, 36720), (391, 36810), (399, 36840), (477, 37062), (480, 37068), (505, 37128), (518, 37185),

Gene: Muddy_24 Start: 19607, Stop: 21925, Start Num: 46

Candidate Starts for Muddy_24:

(Start: 46 @19607 has 2 MA's), (115, 19808), (130, 19853), (132, 19865), (150, 19931), (155, 19943), (162, 19976), (180, 20042), (210, 20183), (246, 20315), (256, 20366), (270, 20405), (277, 20423), (290, 20459), (299, 20519), (316, 20594), (324, 20621), (338, 20684), (353, 20741), (401, 20936), (426, 21005), (431, 21023), (434, 21029), (435, 21032), (436, 21035), (474, 21152), (476, 21158), (502, 21236), (514, 21284), (515, 21287), (532, 21365), (540, 21416), (546, 21431), (547, 21443), (564, 21506), (568, 21527), (574, 21548), (586, 21605), (589, 21626), (602, 21665), (621, 21707), (637, 21740), (639, 21746), (644, 21761), (669, 21845),

Gene: Mufasa_23 Start: 18681, Stop: 21020, Start Num: 19

Candidate Starts for Mufasa_23:

(Start: 19 @18681 has 60 MA's), (104, 18921), (135, 19029), (137, 19038), (145, 19059), (151, 19083), (186, 19212), (188, 19224), (202, 19293), (240, 19428), (246, 19446), (251, 19473), (292, 19575), (308, 19647), (318, 19689), (319, 19695), (321, 19704), (324, 19710), (340, 19791), (343, 19812), (355, 19854), (360, 19875), (366, 19905), (385, 19992), (388, 20001), (398, 20037), (416, 20091), (437, 20145), (439, 20157), (461, 20217), (482, 20277), (486, 20295), (499, 20322), (513, 20379), (554, 20568), (564, 20598), (580, 20676), (586, 20697), (598, 20739), (610, 20772), (613, 20781), (622, 20802), (636, 20829), (661, 20910), (668, 20934),

Gene: Mulch_25 Start: 20607, Stop: 23117, Start Num: 15

Candidate Starts for Mulch_25:

(Start: 15 @20607 has 14 MA's), (58, 20739), (62, 20754), (73, 20799), (78, 20817), (125, 20982), (138, 21036), (142, 21045), (160, 21123), (162, 21129), (198, 21294), (203, 21309), (216, 21345), (234, 21420), (236, 21432), (240, 21441), (242, 21447), (246, 21459), (248, 21471), (251, 21486), (254, 21504), (255, 21507), (267, 21543), (286, 21597), (314, 21720), (326, 21774), (330, 21795), (332, 21804), (354, 21906), (369, 21966), (376, 22014), (379, 22026), (391, 22071), (421, 22158), (430, 22197), (453, 22266), (456, 22278), (462, 22290), (537, 22578), (543, 22608), (559, 22689), (564, 22710), (569, 22737), (574, 22761), (617, 22926), (635, 22971), (663, 23070), (673, 23109),

Gene: Nadeem_25 Start: 20607, Stop: 23117, Start Num: 15

Candidate Starts for Nadeem_25:

(Start: 15 @20607 has 14 MA's), (58, 20739), (62, 20754), (73, 20799), (78, 20817), (125, 20982), (138, 21036), (142, 21045), (160, 21123), (162, 21129), (198, 21294), (203, 21309), (216, 21345), (234, 21420), (236, 21432), (240, 21441), (242, 21447), (246, 21459), (248, 21471), (251, 21486), (254, 21504), (255, 21507), (267, 21543), (286, 21597), (314, 21720), (326, 21774), (330, 21795), (332, 21804), (354, 21906), (369, 21966), (376, 22014), (379, 22026), (391, 22071), (421, 22158), (430, 22197), (453, 22266), (456, 22278), (462, 22290), (537, 22578), (543, 22608), (559, 22689), (564, 22710), (569, 22737), (574, 22761), (617, 22926), (635, 22971), (663, 23070), (673, 23109),

Gene: NancyRae_25 Start: 20613, Stop: 23123, Start Num: 15

Candidate Starts for NancyRae_25:

(Start: 15 @20613 has 14 MA's), (58, 20745), (62, 20760), (73, 20805), (78, 20823), (125, 20988), (138, 21042), (142, 21051), (160, 21129), (162, 21135), (198, 21300), (203, 21315), (216, 21351), (234, 21426), (236, 21438), (240, 21447), (242, 21453), (246, 21465), (248, 21477), (251, 21492), (254, 21510), (255, 21513), (267, 21549), (286, 21603), (309, 21708), (314, 21726), (326, 21780), (330, 21801), (332, 21810), (354, 21912), (369, 21972), (376, 22020), (379, 22032), (391, 22077), (397, 22095), (421, 22164), (430, 22203), (453, 22272), (456, 22284), (462, 22296), (537, 22584),

(543, 22614), (559, 22695), (574, 22767), (617, 22932), (635, 22977), (663, 23076), (673, 23115),

Gene: Neoevie_27 Start: 35583, Stop: 37607, Start Num: 3

Candidate Starts for Neoevie_27:

(Start: 3 @35583 has 35 MA's), (11, 35631), (17, 35667), (21, 35685), (24, 35694), (33, 35724), (34, 35727), (67, 35838), (92, 35958), (208, 36435), (211, 36444), (240, 36543), (251, 36588), (272, 36654), (298, 36741), (330, 36876), (337, 36909), (414, 37221), (437, 37287), (441, 37299), (466, 37380), (477, 37416), (480, 37422), (489, 37449), (505, 37482), (528, 37578),

Gene: Nettle_30 Start: 27002, Stop: 29008, Start Num: 1

Candidate Starts for Nettle_30:

(Start: 1 @27002 has 38 MA's), (23, 27116), (26, 27125), (29, 27134), (31, 27137), (34, 27146), (56, 27215), (101, 27401), (146, 27578), (165, 27653), (188, 27746), (197, 27785), (202, 27815), (214, 27851), (220, 27866), (230, 27905), (244, 27953), (246, 27959), (251, 27986), (275, 28064), (294, 28115), (330, 28274), (337, 28307), (402, 28580), (466, 28781), (477, 28817), (480, 28823), (505, 28883),

Gene: Newt_28 Start: 35810, Stop: 37834, Start Num: 3

Candidate Starts for Newt_28:

(Start: 3 @35810 has 35 MA's), (11, 35858), (17, 35894), (21, 35912), (24, 35921), (33, 35951), (34, 35954), (67, 36065), (92, 36185), (208, 36662), (211, 36671), (240, 36770), (251, 36815), (272, 36881), (298, 36968), (330, 37103), (337, 37136), (414, 37448), (437, 37514), (441, 37526), (466, 37607), (477, 37643), (480, 37649), (489, 37676), (505, 37709),

Gene: Nicholas_21 Start: 19724, Stop: 22237, Start Num: 14

Candidate Starts for Nicholas_21:

(Start: 14 @19724 has 19 MA's), (30, 19787), (53, 19859), (75, 19949), (77, 19955), (94, 20027), (112, 20114), (144, 20219), (146, 20231), (152, 20249), (161, 20288), (168, 20318), (184, 20375), (191, 20405), (193, 20411), (202, 20465), (204, 20471), (239, 20618), (241, 20621), (244, 20630), (248, 20648), (261, 20708), (264, 20717), (268, 20729), (284, 20780), (287, 20783), (328, 20948), (341, 21005), (361, 21089), (365, 21107), (366, 21116), (378, 21179), (412, 21299), (425, 21323), (431, 21344), (437, 21359), (441, 21377), (452, 21407), (482, 21497), (506, 21566), (513, 21599), (517, 21620), (527, 21656), (535, 21692), (545, 21737), (548, 21761), (549, 21767), (553, 21782), (556, 21800), (579, 21887), (584, 21911), (593, 21947), (595, 21953), (602, 21977), (637, 22052), (638, 22055), (664, 22142), (666, 22151), (669, 22157),

Gene: Nikao_23 Start: 20414, Stop: 22900, Start Num: 19

Candidate Starts for Nikao_23:

(Start: 19 @20414 has 60 MA's), (34, 20462), (104, 20642), (105, 20645), (124, 20708), (126, 20720), (162, 20852), (170, 20891), (185, 20948), (191, 20972), (194, 20984), (202, 21032), (203, 21035), (217, 21068), (225, 21107), (234, 21140), (236, 21152), (240, 21161), (242, 21167), (257, 21233), (262, 21248), (296, 21359), (300, 21392), (321, 21476), (326, 21491), (337, 21551), (351, 21620), (374, 21740), (395, 21833), (433, 21947), (459, 22025), (461, 22031), (468, 22055), (485, 22118), (486, 22121), (490, 22133), (510, 22199), (511, 22205), (521, 22247), (525, 22268), (527, 22277), (534, 22310), (536, 22328), (549, 22397), (575, 22496), (576, 22502), (579, 22520), (589, 22574), (594, 22589), (605, 22616), (631, 22673), (643, 22703),

Gene: Niklas_27 Start: 20233, Stop: 22734, Start Num: 19

Candidate Starts for Niklas_27:

(Start: 19 @20233 has 60 MA's), (34, 20281), (Start: 52 @20332 has 1 MA's), (69, 20404), (103, 20455), (107, 20473), (114, 20506), (124, 20527), (126, 20539), (143, 20593), (162, 20671), (170, 20710), (185, 20767), (194, 20803), (203, 20854), (217, 20884), (221, 20899), (225, 20923), (234, 20956), (240, 20977), (242, 20983), (251, 21022), (296, 21175), (300, 21208), (303, 21220), (319,

21283), (337, 21367), (373, 21550), (384, 21604), (395, 21646), (459, 21838), (461, 21844), (468, 21868), (485, 21931), (499, 21970), (515, 22033), (527, 22090), (534, 22123), (536, 22141), (545, 22180), (551, 22219), (553, 22225), (566, 22282), (591, 22396), (614, 22450), (621, 22465), (634, 22495), (638, 22507), (657, 22564), (661, 22582), (669, 22612), (672, 22630), (687, 22711),

Gene: Nimi13_27 Start: 35328, Stop: 37352, Start Num: 3

Candidate Starts for Nimi13_27:

(Start: 3 @35328 has 35 MA's), (11, 35376), (17, 35412), (21, 35430), (24, 35439), (33, 35469), (34, 35472), (67, 35583), (92, 35703), (208, 36180), (211, 36189), (240, 36288), (251, 36333), (272, 36399), (298, 36486), (330, 36621), (337, 36654), (414, 36966), (437, 37032), (441, 37044), (466, 37125), (477, 37161), (480, 37167), (489, 37194), (505, 37227),

Gene: NorManre_31 Start: 26355, Stop: 28355, Start Num: 1

Candidate Starts for NorManre_31:

(Start: 1 @26355 has 38 MA's), (23, 26469), (26, 26478), (29, 26487), (31, 26490), (34, 26499), (56, 26568), (146, 26931), (165, 27006), (197, 27138), (201, 27165), (202, 27168), (203, 27171), (230, 27258), (244, 27306), (246, 27312), (251, 27339), (275, 27417), (294, 27468), (330, 27627), (337, 27660), (402, 27933), (409, 27951), (477, 28167), (480, 28173), (486, 28191), (505, 28233), (518, 28290), (526, 28320), (528, 28329),

Gene: NosilaM_46 Start: 33220, Stop: 35778, Start Num: 64

Candidate Starts for NosilaM_46:

(Start: 64 @33220 has 15 MA's), (95, 33349), (178, 33688), (179, 33691), (194, 33748), (234, 33901), (251, 33967), (253, 33982), (358, 34423), (460, 34801), (485, 34906), (495, 34924), (503, 34957), (509, 34978), (522, 35032), (542, 35137), (548, 35164), (549, 35170), (567, 35260), (587, 35356), (588, 35359), (605, 35422), (616, 35455), (635, 35503), (643, 35536), (653, 35557), (673, 35644), (675, 35659), (692, 35749), (693, 35770),

Gene: NovaSharks_29 Start: 24347, Stop: 26347, Start Num: 1

Candidate Starts for NovaSharks_29:

(Start: 1 @24347 has 38 MA's), (23, 24461), (26, 24470), (29, 24479), (31, 24482), (34, 24491), (56, 24560), (101, 24746), (146, 24923), (197, 25130), (202, 25160), (214, 25196), (220, 25211), (230, 25250), (244, 25298), (246, 25304), (251, 25331), (272, 25397), (298, 25484), (330, 25619), (337, 25652), (342, 25664), (370, 25793), (389, 25877), (437, 26030), (441, 26042), (466, 26123), (477, 26159), (480, 26165), (505, 26225), (528, 26321),

Gene: November_25 Start: 21214, Stop: 23631, Start Num: 19

Candidate Starts for November_25:

(Start: 19 @21214 has 60 MA's), (22, 21223), (34, 21262), (69, 21385), (104, 21442), (107, 21454), (119, 21496), (184, 21742), (203, 21835), (220, 21877), (221, 21880), (224, 21901), (240, 21961), (242, 21967), (267, 22063), (296, 22159), (321, 22276), (343, 22384), (353, 22402), (356, 22414), (388, 22558), (434, 22693), (435, 22696), (436, 22699), (450, 22738), (468, 22792), (475, 22825), (483, 22846), (510, 22933), (515, 22954), (516, 22966), (540, 23083), (542, 23089), (572, 23218), (575, 23230), (578, 23251), (589, 23305), (599, 23335), (608, 23356), (621, 23383), (623, 23389), (654, 23458), (677, 23563), (691, 23623),

Gene: Nutello_23 Start: 20414, Stop: 22900, Start Num: 19

Candidate Starts for Nutello_23:

(Start: 19 @20414 has 60 MA's), (34, 20462), (104, 20642), (105, 20645), (124, 20708), (126, 20720), (162, 20852), (170, 20891), (185, 20948), (191, 20972), (194, 20984), (202, 21032), (203, 21035), (217, 21068), (225, 21107), (234, 21140), (236, 21152), (240, 21161), (242, 21167), (257, 21233), (262, 21248), (296, 21359), (300, 21392), (321, 21476), (326, 21491), (337, 21551), (351, 21620), (374, 21740), (395, 21833), (433, 21947), (459, 22025), (461, 22031), (468, 22055), (485, 22118),

(486, 22121), (490, 22133), (510, 22199), (511, 22205), (521, 22247), (525, 22268), (527, 22277), (534, 22310), (536, 22328), (549, 22397), (575, 22496), (576, 22502), (579, 22520), (589, 22574), (594, 22589), (605, 22616), (631, 22673),

Gene: OmniCritical_28 Start: 22181, Stop: 24490, Start Num: 49

Candidate Starts for OmniCritical_28:

(Start: 49 @22181 has 18 MA's), (79, 22292), (105, 22316), (137, 22433), (170, 22562), (184, 22613), (186, 22622), (199, 22694), (202, 22703), (220, 22760), (223, 22769), (234, 22820), (236, 22832), (242, 22847), (244, 22853), (251, 22886), (265, 22934), (291, 22988), (308, 23060), (317, 23099), (320, 23111), (325, 23126), (334, 23171), (345, 23240), (367, 23321), (404, 23474), (436, 23573), (438, 23585), (468, 23690), (486, 23756), (492, 23771), (517, 23867), (549, 24020), (553, 24035), (554, 24041), (557, 24065), (568, 24104), (591, 24212), (612, 24263), (613, 24266), (659, 24374), (665, 24404), (688, 24482),

Gene: OtterstedtS21_30 Start: 26433, Stop: 28433, Start Num: 1

Candidate Starts for OtterstedtS21_30:

(Start: 1 @26433 has 38 MA's), (23, 26547), (26, 26556), (29, 26565), (31, 26568), (34, 26577), (56, 26646), (70, 26703), (146, 27009), (165, 27084), (197, 27216), (201, 27243), (202, 27246), (203, 27249), (230, 27336), (244, 27384), (246, 27390), (251, 27417), (255, 27438), (298, 27570), (328, 27693), (330, 27705), (337, 27738), (342, 27750), (402, 28011), (466, 28212), (477, 28248), (480, 28254), (505, 28314),

Gene: Outis_44 Start: 33201, Stop: 35759, Start Num: 64

Candidate Starts for Outis_44:

(Start: 64 @33201 has 15 MA's), (66, 33210), (95, 33330), (178, 33669), (179, 33672), (194, 33729), (234, 33882), (253, 33963), (284, 34053), (341, 34320), (358, 34404), (426, 34674), (460, 34782), (485, 34887), (495, 34905), (503, 34938), (507, 34947), (528, 35037), (536, 35082), (541, 35115), (542, 35118), (549, 35151), (573, 35271), (577, 35295), (578, 35298), (587, 35337), (588, 35340), (616, 35436), (650, 35532), (653, 35538), (670, 35610), (675, 35640), (680, 35667), (689, 35712), (692, 35730),

Gene: P3MA_22 Start: 17958, Stop: 20483, Start Num: 47

Candidate Starts for P3MA_22:

(Start: 47 @17958 has 1 MA's), (82, 18096), (88, 18129), (117, 18255), (126, 18291), (139, 18339), (146, 18366), (149, 18378), (159, 18417), (166, 18450), (167, 18453), (178, 18510), (179, 18513), (185, 18534), (245, 18771), (262, 18852), (269, 18873), (285, 18930), (301, 19011), (312, 19062), (318, 19086), (323, 19113), (331, 19155), (337, 19188), (344, 19230), (352, 19260), (387, 19434), (444, 19617), (490, 19773), (515, 19857), (531, 19932), (546, 19998), (552, 20034), (581, 20184), (582, 20190), (642, 20385), (660, 20442), (662, 20451),

Gene: Panchino_20 Start: 17533, Stop: 20178, Start Num: 5

Candidate Starts for Panchino_20:

(2, 17521), (Start: 5 @17533 has 17 MA's), (7, 17545), (35, 17656), (Start: 43 @17680 has 1 MA's), (45, 17683), (48, 17692), (61, 17740), (116, 17965), (120, 17977), (127, 17998), (140, 18043), (156, 18097), (171, 18175), (179, 18205), (188, 18241), (194, 18262), (196, 18277), (205, 18319), (215, 18352), (234, 18427), (240, 18451), (242, 18457), (246, 18469), (253, 18511), (255, 18517), (283, 18616), (310, 18736), (315, 18754), (322, 18787), (328, 18814), (337, 18865), (377, 19075), (394, 19141), (406, 19177), (439, 19288), (461, 19351), (511, 19513), (515, 19528), (527, 19579), (549, 19696), (558, 19741), (572, 19783), (579, 19819), (590, 19873), (608, 19921), (664, 20065), (677, 20122), (685, 20161), (688, 20170),

Gene: Parada_25 Start: 20607, Stop: 23117, Start Num: 15

Candidate Starts for Parada_25:

(Start: 15 @20607 has 14 MA's), (58, 20739), (62, 20754), (73, 20799), (78, 20817), (125, 20982), (138, 21036), (142, 21045), (160, 21123), (162, 21129), (198, 21294), (203, 21309), (216, 21345), (234, 21420), (236, 21432), (240, 21441), (242, 21447), (246, 21459), (248, 21471), (251, 21486), (254, 21504), (255, 21507), (267, 21543), (286, 21597), (314, 21720), (326, 21774), (330, 21795), (332, 21804), (354, 21906), (369, 21966), (376, 22014), (379, 22026), (391, 22071), (421, 22158), (430, 22197), (453, 22266), (456, 22278), (462, 22290), (537, 22578), (543, 22608), (559, 22689), (564, 22710), (569, 22737), (574, 22761), (617, 22926), (635, 22971), (663, 23070), (673, 23109),

Gene: ParvusTarda_30 Start: 25915, Stop: 27891, Start Num: 1

Candidate Starts for ParvusTarda_30:

(Start: 1 @25915 has 38 MA's), (23, 26029), (26, 26038), (29, 26047), (31, 26050), (34, 26059), (56, 26128), (74, 26194), (86, 26233), (90, 26254), (101, 26308), (146, 26485), (165, 26560), (197, 26692), (202, 26722), (203, 26725), (230, 26812), (244, 26860), (246, 26866), (251, 26893), (275, 26971), (294, 27022), (330, 27181), (337, 27214), (370, 27349), (464, 27655), (477, 27700), (480, 27706), (505, 27766),

Gene: Patio_46 Start: 33460, Stop: 36018, Start Num: 64

Candidate Starts for Patio_46:

(12, 33262), (51, 33409), (Start: 64 @33460 has 15 MA's), (95, 33589), (122, 33709), (178, 33928), (179, 33931), (196, 34003), (209, 34060), (219, 34081), (242, 34168), (251, 34207), (341, 34579), (358, 34663), (460, 35041), (485, 35146), (495, 35164), (503, 35197), (509, 35218), (522, 35272), (528, 35296), (542, 35377), (548, 35404), (549, 35410), (567, 35500), (587, 35596), (588, 35599), (605, 35662), (616, 35695), (622, 35713), (623, 35716), (637, 35752), (643, 35776), (653, 35797), (674, 35887), (675, 35899),

Gene: Patos_31 Start: 26355, Stop: 28355, Start Num: 1

Candidate Starts for Patos_31:

(Start: 1 @26355 has 38 MA's), (23, 26469), (26, 26478), (29, 26487), (31, 26490), (34, 26499), (56, 26568), (146, 26931), (165, 27006), (197, 27138), (201, 27165), (202, 27168), (203, 27171), (230, 27258), (244, 27306), (246, 27312), (251, 27339), (275, 27417), (294, 27468), (330, 27627), (337, 27660), (402, 27933), (409, 27951), (477, 28167), (480, 28173), (486, 28191), (505, 28233), (518, 28290), (526, 28320), (528, 28329),

Gene: Patt_28 Start: 22014, Stop: 24320, Start Num: 49

Candidate Starts for Patt_28:

(Start: 49 @22014 has 18 MA's), (58, 22044), (63, 22062), (79, 22125), (137, 22266), (157, 22332), (170, 22395), (184, 22446), (186, 22455), (194, 22488), (202, 22536), (220, 22593), (234, 22653), (236, 22665), (242, 22680), (244, 22686), (251, 22719), (265, 22767), (291, 22821), (308, 22893), (345, 23073), (367, 23154), (404, 23307), (418, 23349), (436, 23406), (438, 23418), (464, 23505), (468, 23523), (486, 23589), (492, 23604), (549, 23853), (553, 23868), (554, 23874), (557, 23898), (568, 23937), (572, 23949), (591, 24045), (604, 24081), (612, 24096), (613, 24099), (622, 24120), (628, 24135), (659, 24204), (665, 24234), (688, 24312),

Gene: Peanam_27 Start: 20230, Stop: 22731, Start Num: 19

Candidate Starts for Peanam_27:

(Start: 19 @20230 has 60 MA's), (34, 20278), (Start: 52 @20329 has 1 MA's), (69, 20401), (103, 20452), (107, 20470), (114, 20503), (124, 20524), (126, 20536), (143, 20590), (162, 20668), (170, 20707), (185, 20764), (194, 20800), (203, 20851), (217, 20881), (221, 20896), (225, 20920), (234, 20953), (240, 20974), (242, 20980), (251, 21019), (296, 21172), (300, 21205), (303, 21217), (319, 21280), (337, 21364), (373, 21547), (384, 21601), (395, 21643), (459, 21835), (461, 21841), (468, 21865), (485, 21928), (499, 21967), (515, 22030), (527, 22087), (534, 22120), (536, 22138), (545, 22177), (551, 22216), (553, 22222), (566, 22279), (591, 22393), (614, 22447), (621, 22462), (634, 22492), (638, 22504), (657, 22561), (661, 22579), (669, 22609), (672, 22627), (687, 22708),

Gene: Phalm_21 Start: 18926, Stop: 21559, Start Num: 5

Candidate Starts for Phalm_21:

(Start: 5 @18926 has 17 MA's), (6, 18935), (45, 19079), (116, 19352), (120, 19364), (127, 19385), (134, 19409), (156, 19484), (171, 19556), (179, 19586), (188, 19622), (200, 19685), (205, 19700), (213, 19727), (215, 19733), (234, 19808), (240, 19832), (242, 19838), (246, 19850), (253, 19892), (255, 19898), (281, 19985), (289, 20006), (293, 20030), (305, 20096), (310, 20117), (315, 20135), (322, 20168), (327, 20192), (328, 20195), (337, 20246), (358, 20351), (366, 20393), (406, 20558), (436, 20654), (461, 20732), (465, 20744), (496, 20834), (511, 20894), (513, 20903), (525, 20951), (527, 20960), (549, 21077), (558, 21122), (572, 21164), (586, 21230), (590, 21254), (608, 21302), (612, 21308), (615, 21314), (656, 21413), (659, 21422), (665, 21452), (685, 21542), (688, 21551),

Gene: Pharb_26 Start: 21154, Stop: 23529, Start Num: 19

Candidate Starts for Pharb_26:

(Start: 19 @21154 has 60 MA's), (27, 21181), (38, 21214), (55, 21274), (60, 21289), (103, 21379), (107, 21397), (143, 21523), (144, 21529), (147, 21544), (157, 21577), (169, 21634), (170, 21637), (177, 21655), (188, 21703), (202, 21772), (219, 21823), (240, 21910), (251, 21955), (267, 22012), (293, 22057), (300, 22102), (308, 22129), (318, 22171), (319, 22177), (321, 22186), (356, 22324), (375, 22414), (436, 22609), (510, 22840), (511, 22846), (513, 22855), (515, 22861), (525, 22903), (530, 22933), (540, 22990), (542, 22996), (568, 23101), (578, 23146), (589, 23200), (591, 23209), (603, 23239), (661, 23389), (673, 23431), (679, 23464), (688, 23509),

Gene: PhelpsODU_26 Start: 20093, Stop: 22432, Start Num: 19

Candidate Starts for PhelpsODU_26:

(Start: 19 @20093 has 60 MA's), (36, 20150), (69, 20264), (71, 20282), (107, 20333), (111, 20354), (135, 20432), (162, 20531), (164, 20543), (188, 20642), (191, 20651), (213, 20744), (234, 20825), (242, 20855), (246, 20867), (247, 20876), (251, 20894), (253, 20909), (268, 20933), (292, 20993), (300, 21038), (308, 21065), (321, 21122), (325, 21131), (340, 21200), (341, 21203), (343, 21221), (355, 21263), (360, 21284), (366, 21314), (385, 21401), (404, 21464), (412, 21497), (439, 21569), (455, 21617), (461, 21629), (483, 21698), (497, 21722), (513, 21791), (554, 21980), (575, 22055), (579, 22079), (610, 22184), (613, 22193), (621, 22211), (655, 22298), (661, 22322), (675, 22364), (691, 22424),

Gene: Phineas_21 Start: 19035, Stop: 21668, Start Num: 5

Candidate Starts for Phineas_21:

(Start: 5 @19035 has 17 MA's), (6, 19044), (45, 19188), (116, 19461), (120, 19473), (127, 19494), (134, 19518), (156, 19593), (171, 19665), (179, 19695), (188, 19731), (200, 19794), (205, 19809), (215, 19842), (234, 19917), (240, 19941), (242, 19947), (246, 19959), (253, 20001), (255, 20007), (281, 20094), (289, 20115), (293, 20139), (305, 20205), (310, 20226), (315, 20244), (322, 20277), (327, 20301), (328, 20304), (337, 20355), (358, 20460), (366, 20502), (406, 20667), (436, 20763), (461, 20841), (465, 20853), (496, 20943), (511, 21003), (513, 21012), (525, 21060), (527, 21069), (549, 21186), (558, 21231), (572, 21273), (586, 21339), (590, 21363), (608, 21411), (612, 21417), (615, 21423), (656, 21522), (659, 21531), (665, 21561), (685, 21651), (688, 21660),

Gene: Phloss_20 Start: 17556, Stop: 20201, Start Num: 5

Candidate Starts for Phloss_20:

(2, 17544), (Start: 5 @17556 has 17 MA's), (7, 17568), (9, 17580), (Start: 20 @17634 has 6 MA's), (Start: 43 @17703 has 1 MA's), (45, 17706), (48, 17715), (53, 17730), (93, 17907), (116, 17988), (118, 17997), (136, 18054), (141, 18069), (172, 18201), (185, 18249), (188, 18264), (194, 18285), (200, 18327), (205, 18342), (207, 18351), (215, 18378), (217, 18384), (234, 18453), (240, 18474), (242, 18480), (245, 18489), (250, 18516), (266, 18582), (271, 18594), (281, 18627), (283, 18639), (310, 18759), (315, 18777), (322, 18810), (337, 18888), (358, 18993), (366, 19035), (423, 19254), (435, 19293), (436, 19296), (439, 19311), (461, 19374), (476, 19422), (511, 19536), (517, 19566), (525,

19593), (527, 19602), (549, 19719), (558, 19764), (572, 19806), (586, 19872), (590, 19896), (608, 19944), (612, 19950), (615, 19956), (621, 19971), (656, 20055), (665, 20094), (685, 20184), (688, 20193),

Gene: Phrank_26 Start: 20046, Stop: 22382, Start Num: 19

Candidate Starts for Phrank_26:

(Start: 19 @20046 has 60 MA's), (34, 20094), (36, 20103), (69, 20217), (71, 20235), (107, 20286), (135, 20382), (137, 20391), (162, 20481), (164, 20493), (188, 20592), (191, 20601), (213, 20694), (234, 20775), (242, 20805), (246, 20817), (251, 20844), (253, 20859), (268, 20883), (292, 20943), (300, 20988), (308, 21015), (317, 21054), (321, 21072), (325, 21081), (340, 21150), (341, 21153), (343, 21171), (355, 21213), (360, 21234), (366, 21264), (385, 21351), (404, 21414), (412, 21447), (420, 21456), (439, 21519), (455, 21567), (461, 21579), (483, 21648), (497, 21672), (503, 21702), (513, 21741), (554, 21930), (575, 22005), (586, 22059), (613, 22143), (621, 22161), (655, 22248), (661, 22272), (675, 22314), (691, 22374),

Gene: Pixie_26 Start: 21086, Stop: 23437, Start Num: 19

Candidate Starts for Pixie_26:

(Start: 19 @21086 has 60 MA's), (27, 21113), (38, 21146), (68, 21251), (129, 21410), (143, 21455), (152, 21491), (157, 21509), (177, 21587), (188, 21635), (222, 21767), (234, 21821), (237, 21836), (276, 21944), (308, 22061), (318, 22103), (319, 22109), (321, 22118), (325, 22127), (341, 22208), (343, 22226), (355, 22268), (360, 22289), (365, 22310), (366, 22319), (385, 22406), (411, 22499), (412, 22502), (439, 22574), (485, 22709), (486, 22712), (503, 22757), (513, 22796), (516, 22814), (539, 22913), (542, 22931), (554, 22985), (564, 23015), (567, 23033), (575, 23060), (576, 23066), (586, 23114), (610, 23189), (613, 23198), (622, 23219), (625, 23228), (661, 23327), (675, 23369),

Gene: Poland_31 Start: 35235, Stop: 37232, Start Num: 3

Candidate Starts for Poland_31:

(Start: 3 @35235 has 35 MA's), (16, 35310), (25, 35349), (34, 35379), (42, 35406), (Start: 43 @35409 has 1 MA's), (134, 35784), (136, 35793), (185, 35985), (200, 36063), (214, 36105), (234, 36174), (251, 36240), (254, 36258), (272, 36306), (330, 36528), (337, 36561), (353, 36627), (362, 36663), (370, 36699), (391, 36789), (399, 36819), (477, 37041), (480, 37047), (505, 37107), (518, 37164),

Gene: Pywacket_29 Start: 27263, Stop: 29245, Start Num: 1

Candidate Starts for Pywacket_29:

(Start: 1 @27263 has 38 MA's), (23, 27377), (26, 27386), (29, 27395), (31, 27398), (34, 27407), (56, 27476), (101, 27662), (146, 27839), (165, 27914), (188, 28007), (197, 28046), (202, 28076), (214, 28112), (220, 28127), (230, 28166), (244, 28214), (246, 28220), (251, 28247), (275, 28325), (294, 28376), (330, 28535), (337, 28568), (370, 28703), (464, 29009), (477, 29054), (480, 29060), (505, 29120),

Gene: Qhanda_29 Start: 22292, Stop: 24601, Start Num: 49

Candidate Starts for Qhanda_29:

(Start: 49 @22292 has 18 MA's), (79, 22403), (105, 22427), (137, 22544), (170, 22673), (184, 22724), (186, 22733), (194, 22766), (199, 22805), (202, 22814), (220, 22871), (223, 22880), (234, 22931), (236, 22943), (242, 22958), (244, 22964), (251, 22997), (265, 23045), (291, 23099), (308, 23171), (317, 23210), (320, 23222), (325, 23237), (334, 23282), (345, 23351), (367, 23432), (404, 23585), (436, 23684), (438, 23696), (468, 23801), (486, 23867), (492, 23882), (517, 23978), (549, 24131), (553, 24146), (554, 24152), (557, 24176), (568, 24215), (572, 24227), (591, 24323), (613, 24377), (622, 24398), (659, 24485), (665, 24515), (688, 24593),

Gene: Ranch_30 Start: 25269, Stop: 27248, Start Num: 1

Candidate Starts for Ranch_30:

(Start: 1 @25269 has 38 MA's), (23, 25383), (26, 25392), (29, 25401), (31, 25404), (34, 25413), (56, 25482), (73, 25545), (74, 25548), (86, 25587), (90, 25608), (101, 25662), (146, 25839), (165, 25914), (197, 26046), (201, 26073), (202, 26076), (203, 26079), (230, 26166), (244, 26214), (246, 26220), (251, 26247), (275, 26325), (294, 26376), (330, 26535), (337, 26568), (362, 26670), (370, 26706), (464, 27012), (477, 27057), (480, 27063), (505, 27123),

Gene: RazorC_28 Start: 24739, Stop: 26739, Start Num: 1

Candidate Starts for RazorC_28:

(Start: 1 @24739 has 38 MA's), (23, 24853), (26, 24862), (29, 24871), (31, 24874), (34, 24883), (56, 24952), (101, 25138), (146, 25315), (197, 25522), (202, 25552), (214, 25588), (220, 25603), (230, 25642), (244, 25690), (246, 25696), (251, 25723), (272, 25789), (298, 25876), (330, 26011), (337, 26044), (342, 26056), (370, 26185), (389, 26269), (437, 26422), (441, 26434), (466, 26515), (477, 26551), (480, 26557), (505, 26617), (528, 26713),

Gene: Red305_21 Start: 19724, Stop: 22237, Start Num: 14

Candidate Starts for Red305_21:

(Start: 14 @19724 has 19 MA's), (30, 19787), (53, 19859), (75, 19949), (77, 19955), (94, 20027), (112, 20114), (144, 20219), (146, 20231), (152, 20249), (161, 20288), (168, 20318), (184, 20375), (191, 20405), (193, 20411), (202, 20465), (204, 20471), (239, 20618), (241, 20621), (244, 20630), (248, 20648), (261, 20708), (264, 20717), (268, 20729), (284, 20780), (287, 20783), (328, 20948), (341, 21005), (361, 21089), (365, 21107), (366, 21116), (378, 21179), (412, 21299), (425, 21323), (431, 21344), (437, 21359), (441, 21377), (452, 21407), (482, 21497), (506, 21566), (513, 21599), (517, 21620), (527, 21656), (535, 21692), (545, 21737), (548, 21761), (549, 21767), (553, 21782), (556, 21800), (579, 21887), (584, 21911), (593, 21947), (595, 21953), (602, 21977), (637, 22052), (638, 22055), (664, 22142), (666, 22151), (669, 22157),

Gene: RedRaider_50 Start: 35482, Stop: 38040, Start Num: 64

Candidate Starts for RedRaider_50:

(Start: 64 @35482 has 15 MA's), (95, 35611), (178, 35950), (179, 35953), (209, 36082), (242, 36190), (251, 36229), (286, 36337), (321, 36493), (341, 36601), (368, 36733), (460, 37063), (485, 37168), (495, 37186), (503, 37219), (522, 37294), (536, 37363), (542, 37399), (549, 37432), (567, 37522), (577, 37576), (578, 37579), (587, 37618), (588, 37621), (616, 37717), (643, 37798), (650, 37813), (653, 37819), (670, 37891), (675, 37921), (680, 37948), (692, 38011),

Gene: Reptar3000_28 Start: 22013, Stop: 24316, Start Num: 49

Candidate Starts for Reptar3000_28:

(Start: 49 @22013 has 18 MA's), (63, 22061), (65, 22070), (79, 22124), (107, 22157), (137, 22265), (170, 22394), (184, 22445), (186, 22454), (202, 22535), (220, 22592), (234, 22652), (236, 22664), (242, 22679), (244, 22685), (251, 22718), (265, 22766), (291, 22820), (308, 22892), (345, 23072), (367, 23153), (404, 23303), (418, 23345), (436, 23402), (438, 23414), (468, 23519), (486, 23585), (492, 23600), (517, 23696), (549, 23849), (553, 23864), (554, 23870), (557, 23894), (568, 23933), (572, 23945), (591, 24041), (604, 24077), (612, 24092), (613, 24095), (622, 24116), (628, 24131), (659, 24200), (665, 24230), (688, 24308),

Gene: Richo_27 Start: 20230, Stop: 22731, Start Num: 19

Candidate Starts for Richo_27:

(Start: 19 @20230 has 60 MA's), (34, 20278), (Start: 52 @20329 has 1 MA's), (69, 20401), (103, 20452), (107, 20470), (114, 20503), (124, 20524), (126, 20536), (143, 20590), (162, 20668), (170, 20707), (185, 20764), (194, 20800), (203, 20851), (217, 20881), (221, 20896), (225, 20920), (234, 20953), (240, 20974), (242, 20980), (251, 21019), (296, 21172), (300, 21205), (303, 21217), (319, 21280), (337, 21364), (373, 21547), (384, 21601), (395, 21643), (459, 21835), (461, 21841), (468, 21865), (485, 21928), (499, 21967), (515, 22030), (527, 22087), (534, 22120), (536, 22138), (545, 22177), (551, 22216), (553, 22222), (566, 22279), (591, 22393), (614, 22447), (621, 22462), (634,

22492), (638, 22504), (657, 22561), (661, 22579), (669, 22609), (672, 22627), (687, 22708),

Gene: Riduram_27 Start: 24317, Stop: 26317, Start Num: 1

Candidate Starts for Riduram_27:

(Start: 1 @24317 has 38 MA's), (23, 24431), (26, 24440), (29, 24449), (31, 24452), (34, 24461), (56, 24530), (101, 24716), (146, 24893), (197, 25100), (202, 25130), (214, 25166), (220, 25181), (230, 25220), (244, 25268), (246, 25274), (251, 25301), (272, 25367), (298, 25454), (330, 25589), (337, 25622), (342, 25634), (370, 25763), (389, 25847), (437, 26000), (441, 26012), (466, 26093), (477, 26129), (480, 26135), (505, 26195), (528, 26291),

Gene: Rota_29 Start: 26622, Stop: 28628, Start Num: 1

Candidate Starts for Rota_29:

(Start: 1 @26622 has 38 MA's), (23, 26736), (26, 26745), (29, 26754), (31, 26757), (34, 26766), (56, 26835), (146, 27198), (165, 27273), (173, 27306), (200, 27429), (202, 27435), (246, 27579), (249, 27597), (251, 27606), (298, 27759), (328, 27882), (330, 27894), (337, 27927), (402, 28200), (466, 28401), (477, 28437), (480, 28443), (505, 28503),

Gene: Rukungu_30 Start: 26971, Stop: 28950, Start Num: 1

Candidate Starts for Rukungu_30:

(Start: 1 @26971 has 38 MA's), (23, 27085), (26, 27094), (29, 27103), (31, 27106), (34, 27115), (56, 27184), (70, 27241), (146, 27547), (165, 27622), (197, 27754), (201, 27781), (202, 27784), (203, 27787), (230, 27874), (244, 27922), (246, 27928), (251, 27955), (275, 28033), (294, 28084), (330, 28243), (337, 28276), (370, 28411), (464, 28717), (477, 28762), (480, 28768), (505, 28828), (526, 28915), (528, 28924),

Gene: Rumi_29 Start: 24350, Stop: 26350, Start Num: 1

Candidate Starts for Rumi_29:

(Start: 1 @24350 has 38 MA's), (23, 24464), (26, 24473), (29, 24482), (31, 24485), (34, 24494), (56, 24563), (101, 24749), (146, 24926), (197, 25133), (202, 25163), (214, 25199), (220, 25214), (230, 25253), (244, 25301), (246, 25307), (251, 25334), (272, 25400), (298, 25487), (330, 25622), (337, 25655), (342, 25667), (370, 25796), (414, 25967), (437, 26033), (441, 26045), (466, 26126), (477, 26162), (480, 26168), (505, 26228), (528, 26324),

Gene: Sadboi_30 Start: 27111, Stop: 29111, Start Num: 1

Candidate Starts for Sadboi_30:

(Start: 1 @27111 has 38 MA's), (23, 27225), (26, 27234), (29, 27243), (31, 27246), (34, 27255), (56, 27324), (101, 27510), (146, 27687), (197, 27894), (201, 27921), (202, 27924), (203, 27927), (230, 28014), (244, 28062), (246, 28068), (251, 28095), (275, 28173), (294, 28224), (328, 28371), (330, 28383), (337, 28416), (342, 28428), (402, 28689), (466, 28890), (477, 28926), (480, 28932), (505, 28992),

Gene: Salvus_25 Start: 19700, Stop: 22018, Start Num: 46

Candidate Starts for Salvus_25:

(Start: 46 @19700 has 2 MA's), (115, 19901), (130, 19946), (132, 19958), (162, 20069), (180, 20135), (204, 20249), (210, 20276), (270, 20498), (277, 20516), (290, 20552), (299, 20612), (316, 20687), (324, 20714), (329, 20741), (338, 20777), (353, 20834), (401, 21029), (426, 21098), (431, 21116), (434, 21122), (435, 21125), (436, 21128), (474, 21245), (476, 21251), (502, 21329), (514, 21377), (515, 21380), (532, 21458), (540, 21509), (546, 21524), (547, 21536), (564, 21599), (568, 21620), (574, 21641), (586, 21698), (589, 21719), (602, 21758), (621, 21800), (637, 21833), (639, 21839), (644, 21854), (669, 21938),

Gene: Sampudon_30 Start: 27278, Stop: 29284, Start Num: 1

Candidate Starts for Sampudon_30:

(Start: 1 @27278 has 38 MA's), (23, 27392), (26, 27401), (29, 27410), (31, 27413), (34, 27422), (56, 27491), (146, 27854), (165, 27929), (197, 28061), (201, 28088), (202, 28091), (203, 28094), (230, 28181), (244, 28229), (246, 28235), (251, 28262), (275, 28340), (294, 28391), (330, 28550), (337, 28583), (357, 28664), (395, 28832), (402, 28856), (477, 29093), (480, 29099), (494, 29129), (505, 29162), (528, 29258),

Gene: Samty_21 Start: 19727, Stop: 22240, Start Num: 14

Candidate Starts for Samty_21:

(Start: 14 @19727 has 19 MA's), (30, 19790), (53, 19862), (75, 19952), (77, 19958), (94, 20030), (144, 20222), (146, 20234), (152, 20252), (161, 20291), (168, 20321), (184, 20378), (191, 20408), (193, 20414), (202, 20468), (204, 20474), (239, 20621), (241, 20624), (244, 20633), (248, 20651), (261, 20711), (264, 20720), (268, 20732), (284, 20783), (287, 20786), (328, 20951), (341, 21008), (361, 21092), (365, 21110), (366, 21119), (378, 21182), (412, 21302), (431, 21347), (437, 21362), (441, 21380), (452, 21410), (482, 21500), (506, 21569), (513, 21602), (517, 21623), (527, 21659), (535, 21695), (545, 21740), (548, 21764), (549, 21770), (553, 21785), (556, 21803), (566, 21836), (579, 21890), (584, 21914), (593, 21950), (595, 21956), (602, 21980), (664, 22145), (666, 22154), (669, 22160),

Gene: Scitech_20 Start: 17553, Stop: 20192, Start Num: 5

Candidate Starts for Scitech_20:

(2, 17541), (Start: 5 @17553 has 17 MA's), (7, 17565), (35, 17676), (Start: 43 @17700 has 1 MA's), (45, 17703), (48, 17712), (81, 17850), (89, 17892), (90, 17895), (116, 17985), (118, 17994), (120, 17997), (127, 18018), (131, 18030), (140, 18063), (156, 18117), (171, 18189), (179, 18219), (188, 18255), (200, 18318), (205, 18333), (213, 18360), (215, 18366), (234, 18441), (240, 18465), (242, 18471), (246, 18483), (253, 18525), (255, 18531), (281, 18618), (310, 18750), (315, 18768), (322, 18801), (328, 18828), (337, 18879), (377, 19089), (394, 19155), (406, 19191), (437, 19290), (439, 19302), (461, 19365), (511, 19527), (515, 19542), (527, 19593), (549, 19710), (558, 19755), (572, 19797), (579, 19833), (590, 19887), (608, 19935), (664, 20079), (677, 20136), (685, 20175), (688, 20184),

Gene: SgtBeansprout_23 Start: 20414, Stop: 22900, Start Num: 19

Candidate Starts for SgtBeansprout_23:

(Start: 19 @20414 has 60 MA's), (34, 20462), (104, 20642), (105, 20645), (124, 20708), (126, 20720), (162, 20852), (170, 20891), (185, 20948), (191, 20972), (194, 20984), (202, 21032), (203, 21035), (217, 21068), (225, 21107), (234, 21140), (236, 21152), (240, 21161), (242, 21167), (257, 21233), (262, 21248), (296, 21359), (300, 21392), (321, 21476), (326, 21491), (337, 21551), (351, 21620), (374, 21740), (395, 21833), (433, 21947), (459, 22025), (461, 22031), (468, 22055), (485, 22118), (486, 22121), (490, 22133), (510, 22199), (511, 22205), (521, 22247), (525, 22268), (527, 22277), (534, 22310), (536, 22328), (549, 22397), (575, 22496), (576, 22502), (579, 22520), (589, 22574), (594, 22589), (605, 22616), (631, 22673),

Gene: Shadow1_25 Start: 19919, Stop: 22255, Start Num: 19

Candidate Starts for Shadow1_25:

(13, 19886), (Start: 19 @19919 has 60 MA's), (22, 19928), (36, 19976), (38, 19979), (78, 20120), (107, 20159), (135, 20255), (137, 20264), (162, 20354), (188, 20465), (213, 20567), (234, 20648), (242, 20678), (246, 20690), (251, 20717), (253, 20732), (268, 20756), (292, 20816), (308, 20888), (325, 20954), (343, 21044), (355, 21086), (360, 21107), (362, 21119), (366, 21137), (385, 21224), (404, 21287), (412, 21320), (439, 21392), (483, 21521), (513, 21614), (516, 21632), (575, 21878), (580, 21911), (613, 22016), (621, 22034), (655, 22121), (661, 22145), (675, 22187), (691, 22247),

Gene: Shaobing_27 Start: 20230, Stop: 22731, Start Num: 19

Candidate Starts for Shaobing_27:

(Start: 19 @20230 has 60 MA's), (34, 20278), (Start: 52 @20329 has 1 MA's), (69, 20401), (103, 20452), (107, 20470), (114, 20503), (124, 20524), (126, 20536), (143, 20590), (162, 20668), (170, 20707), (185, 20764), (194, 20800), (203, 20851), (217, 20881), (221, 20896), (225, 20920), (234, 20953), (240, 20974), (242, 20980), (251, 21019), (296, 21172), (300, 21205), (303, 21217), (319, 21280), (337, 21364), (373, 21547), (384, 21601), (395, 21643), (459, 21835), (461, 21841), (468, 21865), (485, 21928), (486, 21931), (499, 21967), (515, 22030), (527, 22087), (534, 22120), (536, 22138), (545, 22177), (551, 22216), (553, 22222), (566, 22279), (591, 22393), (614, 22447), (621, 22462), (634, 22492), (638, 22504), (657, 22561), (661, 22579), (669, 22609), (672, 22627), (687, 22708),

Gene: ShedlockHolmes_26 Start: 21295, Stop: 23643, Start Num: 19

Candidate Starts for ShedlockHolmes_26:

(Start: 19 @21295 has 60 MA's), (27, 21322), (38, 21355), (53, 21400), (129, 21619), (143, 21664), (152, 21700), (157, 21718), (177, 21796), (188, 21844), (222, 21976), (234, 22030), (237, 22045), (276, 22153), (308, 22270), (318, 22312), (319, 22318), (321, 22327), (325, 22336), (335, 22381), (341, 22417), (343, 22435), (355, 22477), (360, 22498), (365, 22519), (366, 22528), (385, 22615), (411, 22708), (412, 22711), (439, 22783), (503, 22966), (516, 23023), (539, 23122), (542, 23140), (554, 23194), (564, 23224), (566, 23239), (567, 23242), (571, 23251), (575, 23269), (576, 23275), (580, 23302), (586, 23323), (592, 23353), (610, 23398), (613, 23407), (661, 23536), (675, 23575), (678, 23578),

Gene: Shelley_27 Start: 34795, Stop: 36816, Start Num: 3

Candidate Starts for Shelley_27:

(Start: 3 @34795 has 35 MA's), (11, 34843), (17, 34879), (21, 34897), (24, 34906), (33, 34936), (34, 34939), (67, 35050), (92, 35170), (208, 35647), (211, 35656), (240, 35755), (251, 35800), (272, 35866), (298, 35953), (330, 36088), (337, 36121), (389, 36346), (391, 36352), (441, 36511), (477, 36628), (480, 36634), (489, 36661), (505, 36694), (528, 36790),

Gene: Shweta_20 Start: 17560, Stop: 20199, Start Num: 5

Candidate Starts for Shweta_20:

(2, 17548), (Start: 5 @17560 has 17 MA's), (7, 17572), (35, 17683), (Start: 43 @17707 has 1 MA's), (45, 17710), (48, 17719), (81, 17857), (89, 17899), (90, 17902), (116, 17992), (118, 18001), (120, 18004), (127, 18025), (131, 18037), (140, 18070), (156, 18124), (171, 18196), (179, 18226), (188, 18262), (200, 18325), (205, 18340), (213, 18367), (215, 18373), (234, 18448), (240, 18472), (242, 18478), (246, 18490), (253, 18532), (255, 18538), (283, 18637), (310, 18757), (315, 18775), (322, 18808), (328, 18835), (337, 18886), (377, 19096), (394, 19162), (406, 19198), (437, 19297), (439, 19309), (461, 19372), (511, 19534), (515, 19549), (527, 19600), (549, 19717), (558, 19762), (572, 19804), (579, 19840), (590, 19894), (608, 19942), (664, 20086), (677, 20143), (685, 20182), (688, 20191),

Gene: SkinnyPete_20 Start: 17557, Stop: 20202, Start Num: 5

Candidate Starts for SkinnyPete_20:

(2, 17545), (Start: 5 @17557 has 17 MA's), (7, 17569), (35, 17680), (Start: 43 @17704 has 1 MA's), (45, 17707), (48, 17716), (61, 17764), (116, 17989), (120, 18001), (127, 18022), (140, 18067), (156, 18121), (171, 18199), (179, 18229), (188, 18265), (194, 18286), (196, 18301), (205, 18343), (215, 18376), (234, 18451), (240, 18475), (242, 18481), (246, 18493), (253, 18535), (255, 18541), (283, 18640), (310, 18760), (315, 18778), (322, 18811), (328, 18838), (337, 18889), (377, 19099), (394, 19165), (406, 19201), (439, 19312), (461, 19375), (511, 19537), (515, 19552), (527, 19603), (549, 19720), (558, 19765), (572, 19807), (579, 19843), (590, 19897), (608, 19945), (664, 20089), (677, 20146), (685, 20185), (688, 20194),

Gene: Skysand_45 Start: 33680, Stop: 36238, Start Num: 64

Candidate Starts for Skysand_45:

(Start: 64 @33680 has 15 MA's), (122, 33929), (178, 34148), (179, 34151), (196, 34223), (209, 34280), (219, 34301), (242, 34388), (251, 34427), (341, 34799), (358, 34883), (460, 35261), (485, 35366), (495, 35384), (503, 35417), (509, 35438), (522, 35492), (528, 35516), (536, 35561), (542, 35597), (546, 35606), (549, 35630), (567, 35720), (588, 35819), (605, 35882), (616, 35915), (622, 35933), (623, 35936), (637, 35972), (643, 35996), (653, 36017), (674, 36107), (675, 36119),

Gene: Slarp_28 Start: 22283, Stop: 24592, Start Num: 49

Candidate Starts for Slarp_28:

(Start: 49 @22283 has 18 MA's), (79, 22394), (105, 22418), (137, 22535), (170, 22664), (184, 22715), (186, 22724), (194, 22757), (199, 22796), (202, 22805), (220, 22862), (223, 22871), (234, 22922), (236, 22934), (242, 22949), (244, 22955), (251, 22988), (265, 23036), (291, 23090), (308, 23162), (317, 23201), (320, 23213), (325, 23228), (334, 23273), (345, 23342), (367, 23423), (404, 23576), (436, 23675), (438, 23687), (468, 23792), (486, 23858), (492, 23873), (517, 23969), (549, 24122), (553, 24137), (554, 24143), (557, 24167), (568, 24206), (572, 24218), (591, 24314), (613, 24368), (622, 24389), (659, 24476), (665, 24506), (688, 24584),

Gene: Snenia_21 Start: 19725, Stop: 22238, Start Num: 14

Candidate Starts for Snenia_21:

(Start: 14 @19725 has 19 MA's), (30, 19788), (53, 19860), (75, 19950), (77, 19956), (94, 20028), (112, 20115), (144, 20220), (146, 20232), (152, 20250), (161, 20289), (168, 20319), (184, 20376), (191, 20406), (193, 20412), (202, 20466), (204, 20472), (239, 20619), (241, 20622), (244, 20631), (248, 20649), (261, 20709), (264, 20718), (268, 20730), (284, 20781), (287, 20784), (328, 20949), (341, 21006), (361, 21090), (365, 21108), (366, 21117), (378, 21180), (412, 21300), (425, 21324), (431, 21345), (437, 21360), (441, 21378), (452, 21408), (482, 21498), (506, 21567), (513, 21600), (517, 21621), (527, 21657), (535, 21693), (545, 21738), (548, 21762), (549, 21768), (553, 21783), (556, 21801), (579, 21888), (584, 21912), (593, 21948), (595, 21954), (602, 21978), (637, 22053), (638, 22056), (664, 22143), (666, 22152), (669, 22158),

Gene: Squirty_19 Start: 17305, Stop: 19920, Start Num: 4

Candidate Starts for Squirty_19:

(Start: 4 @17305 has 1 MA's), (7, 17326), (10, 17347), (18, 17386), (40, 17455), (Start: 43 @17464 has 1 MA's), (45, 17467), (50, 17485), (61, 17518), (66, 17533), (97, 17635), (111, 17692), (118, 17716), (136, 17773), (158, 17848), (172, 17920), (188, 17983), (193, 17998), (197, 18022), (200, 18046), (205, 18061), (207, 18070), (215, 18097), (217, 18103), (229, 18148), (234, 18172), (240, 18193), (242, 18199), (245, 18208), (250, 18235), (266, 18301), (271, 18313), (281, 18346), (283, 18358), (310, 18478), (315, 18496), (322, 18529), (337, 18607), (358, 18712), (366, 18754), (423, 18973), (435, 19012), (436, 19015), (439, 19030), (461, 19093), (476, 19141), (511, 19255), (517, 19285), (525, 19312), (527, 19321), (549, 19438), (558, 19483), (572, 19525), (586, 19591), (590, 19615), (608, 19663), (612, 19669), (615, 19675), (621, 19690), (656, 19774), (665, 19813), (685, 19903), (688, 19912),

Gene: StarStruck_44 Start: 33201, Stop: 35759, Start Num: 64

Candidate Starts for StarStruck_44:

(Start: 64 @33201 has 15 MA's), (66, 33210), (95, 33330), (178, 33669), (179, 33672), (194, 33729), (234, 33882), (253, 33963), (284, 34053), (341, 34320), (358, 34404), (426, 34674), (460, 34782), (485, 34887), (495, 34905), (503, 34938), (507, 34947), (528, 35037), (536, 35082), (541, 35115), (542, 35118), (549, 35151), (573, 35271), (577, 35295), (578, 35298), (587, 35337), (588, 35340), (616, 35436), (650, 35532), (653, 35538), (670, 35610), (675, 35640), (680, 35667), (689, 35712), (692, 35730),

Gene: Sticker17_27 Start: 35319, Stop: 37343, Start Num: 3

Candidate Starts for Sticker17_27:

(Start: 3 @35319 has 35 MA's), (11, 35367), (17, 35403), (21, 35421), (24, 35430), (33, 35460), (34, 35463), (67, 35574), (92, 35694), (208, 36171), (211, 36180), (240, 36279), (251, 36324), (272, 36390), (298, 36477), (330, 36612), (337, 36645), (414, 36957), (437, 37023), (441, 37035), (466, 37116), (477, 37152), (480, 37158), (489, 37185), (505, 37218),

Gene: Stormer_28 Start: 24350, Stop: 26353, Start Num: 1

Candidate Starts for Stormer_28:

(Start: 1 @24350 has 38 MA's), (23, 24464), (26, 24473), (29, 24482), (31, 24485), (34, 24494), (56, 24563), (101, 24749), (146, 24926), (197, 25133), (202, 25163), (214, 25199), (220, 25214), (230, 25253), (244, 25301), (246, 25307), (251, 25334), (272, 25400), (298, 25487), (330, 25622), (337, 25655), (342, 25667), (370, 25796), (441, 26048), (477, 26165), (480, 26171), (505, 26231), (528, 26327),

Gene: StressBall_21 Start: 18926, Stop: 21559, Start Num: 5

Candidate Starts for StressBall_21:

(Start: 5 @18926 has 17 MA's), (6, 18935), (45, 19079), (116, 19352), (120, 19364), (127, 19385), (134, 19409), (156, 19484), (171, 19556), (179, 19586), (188, 19622), (200, 19685), (205, 19700), (213, 19727), (215, 19733), (234, 19808), (240, 19832), (242, 19838), (246, 19850), (253, 19892), (255, 19898), (281, 19985), (289, 20006), (293, 20030), (305, 20096), (310, 20117), (315, 20135), (322, 20168), (327, 20192), (328, 20195), (337, 20246), (358, 20351), (366, 20393), (406, 20558), (436, 20654), (461, 20732), (465, 20744), (496, 20834), (511, 20894), (513, 20903), (525, 20951), (527, 20960), (549, 21077), (558, 21122), (572, 21164), (586, 21230), (590, 21254), (608, 21302), (612, 21308), (615, 21314), (656, 21413), (659, 21422), (665, 21452), (685, 21542), (688, 21551),

Gene: Strobilo_23 Start: 18661, Stop: 21000, Start Num: 19

Candidate Starts for Strobilo_23:

(Start: 19 @18661 has 60 MA's), (69, 18832), (71, 18850), (104, 18901), (137, 19018), (147, 19051), (183, 19180), (185, 19189), (188, 19204), (192, 19216), (194, 19225), (202, 19273), (230, 19369), (234, 19387), (240, 19408), (251, 19453), (292, 19555), (308, 19627), (318, 19669), (321, 19684), (340, 19771), (343, 19792), (355, 19834), (360, 19855), (385, 19972), (388, 19981), (398, 20017), (412, 20068), (416, 20071), (437, 20125), (439, 20137), (448, 20161), (482, 20257), (486, 20275), (499, 20302), (513, 20359), (554, 20548), (564, 20578), (576, 20629), (579, 20647), (586, 20677), (600, 20731), (613, 20761), (622, 20782), (668, 20914),

Gene: Sunflower1121_25 Start: 19931, Stop: 22267, Start Num: 19

Candidate Starts for Sunflower1121_25:

(13, 19898), (Start: 19 @19931 has 60 MA's), (22, 19940), (36, 19988), (38, 19991), (78, 20132), (107, 20171), (135, 20267), (162, 20366), (188, 20477), (213, 20579), (234, 20660), (242, 20690), (246, 20702), (251, 20729), (253, 20744), (268, 20768), (292, 20828), (308, 20900), (325, 20966), (343, 21056), (355, 21098), (360, 21119), (366, 21149), (385, 21236), (404, 21299), (412, 21332), (439, 21404), (483, 21533), (513, 21626), (516, 21644), (575, 21890), (580, 21923), (613, 22028), (621, 22046), (655, 22133), (661, 22157), (675, 22199), (691, 22259),

Gene: SuperSulley_44 Start: 33387, Stop: 35945, Start Num: 64

Candidate Starts for SuperSulley_44:

(26, 33258), (Start: 64 @33387 has 15 MA's), (95, 33516), (178, 33855), (179, 33858), (194, 33915), (234, 34068), (251, 34134), (253, 34149), (358, 34590), (460, 34968), (485, 35073), (495, 35091), (503, 35124), (509, 35145), (522, 35199), (528, 35223), (542, 35304), (548, 35331), (549, 35337), (567, 35427), (587, 35523), (588, 35526), (605, 35589), (616, 35622), (622, 35640), (623, 35643), (637, 35679), (643, 35703), (653, 35724), (674, 35814), (675, 35826), (693, 35937),

Gene: Syra333_26 Start: 20027, Stop: 22357, Start Num: 19

Candidate Starts for Syra333_26:

(Start: 19 @20027 has 60 MA's), (38, 20087), (71, 20216), (78, 20228), (107, 20267), (135, 20363), (137, 20372), (162, 20462), (170, 20501), (183, 20549), (188, 20573), (191, 20582), (213, 20675), (218, 20690), (234, 20756), (242, 20786), (246, 20798), (251, 20825), (253, 20840), (268, 20864), (292, 20924), (300, 20969), (308, 20996), (317, 21035), (321, 21053), (325, 21062), (340, 21131), (341, 21134), (343, 21152), (355, 21194), (360, 21215), (365, 21236), (366, 21245), (373, 21281), (385, 21332), (412, 21428), (439, 21497), (461, 21557), (483, 21626), (486, 21635), (503, 21680), (513, 21719), (516, 21737), (525, 21767), (554, 21908), (566, 21953), (575, 21983), (579, 22007), (580, 22016), (586, 22037), (592, 22067), (661, 22250), (671, 22277), (675, 22289), (691, 22349),

Gene: TBond007_26 Start: 21085, Stop: 23436, Start Num: 19

Candidate Starts for TBond007_26:

(Start: 19 @21085 has 60 MA's), (27, 21112), (38, 21145), (68, 21250), (129, 21409), (143, 21454), (152, 21490), (157, 21508), (177, 21586), (188, 21634), (222, 21766), (234, 21820), (237, 21835), (276, 21943), (308, 22060), (318, 22102), (319, 22108), (321, 22117), (325, 22126), (341, 22207), (343, 22225), (355, 22267), (360, 22288), (365, 22309), (366, 22318), (385, 22405), (411, 22498), (412, 22501), (439, 22573), (485, 22708), (486, 22711), (503, 22756), (513, 22795), (516, 22813), (539, 22912), (542, 22930), (554, 22984), (564, 23014), (567, 23032), (575, 23059), (576, 23065), (586, 23113), (610, 23188), (613, 23197), (622, 23218), (625, 23227), (661, 23326), (675, 23368),

Gene: TClif_26 Start: 20078, Stop: 22420, Start Num: 19

Candidate Starts for TClif_26:

(Start: 19 @20078 has 60 MA's), (34, 20126), (Start: 52 @20177 has 1 MA's), (69, 20249), (72, 20270), (135, 20417), (137, 20426), (151, 20471), (188, 20627), (191, 20636), (213, 20729), (218, 20744), (230, 20792), (234, 20810), (236, 20825), (242, 20840), (251, 20879), (253, 20894), (268, 20918), (292, 20978), (303, 21035), (308, 21050), (321, 21107), (340, 21188), (343, 21209), (355, 21251), (360, 21272), (365, 21293), (381, 21377), (385, 21389), (404, 21452), (412, 21485), (425, 21509), (433, 21533), (439, 21557), (461, 21617), (476, 21665), (503, 21740), (513, 21779), (516, 21797), (542, 21914), (554, 21968), (575, 22043), (586, 22097), (610, 22172), (622, 22202), (640, 22247), (691, 22412),

Gene: TM4_23 Start: 18727, Stop: 21081, Start Num: 19

Candidate Starts for TM4_23:

(Start: 19 @18727 has 60 MA's), (60, 18859), (137, 19084), (151, 19129), (188, 19270), (194, 19291), (202, 19339), (240, 19474), (246, 19492), (251, 19519), (253, 19534), (292, 19621), (308, 19693), (318, 19735), (319, 19741), (324, 19756), (325, 19759), (335, 19795), (360, 19912), (365, 19933), (408, 20104), (412, 20125), (446, 20221), (452, 20242), (464, 20275), (486, 20350), (488, 20356), (503, 20395), (508, 20407), (513, 20434), (516, 20452), (541, 20566), (548, 20596), (549, 20602), (562, 20647), (566, 20668), (578, 20719), (591, 20782), (618, 20848), (626, 20869), (637, 20890), (651, 20926), (691, 21073),

Gene: TPA4_24 Start: 21615, Stop: 23492, Start Num: 19

Candidate Starts for TPA4_24:

(Start: 19 @21615 has 60 MA's), (44, 21693), (Start: 49 @21708 has 18 MA's), (62, 21753), (69, 21783), (98, 21870), (106, 21912), (136, 22029), (181, 22218), (185, 22236), (201, 22320), (213, 22350), (223, 22380), (226, 22398), (234, 22428), (246, 22467), (258, 22524), (260, 22533), (306, 22689), (329, 22788), (372, 22992), (392, 23073), (393, 23082), (418, 23157), (422, 23169), (424, 23175), (429, 23196), (433, 23202), (436, 23211), (455, 23274), (461, 23286), (478, 23325), (484, 23346), (498, 23376), (504, 23403), (508, 23412), (519, 23466), (520, 23469), (524, 23484),

Gene: Teal_27 Start: 35787, Stop: 37811, Start Num: 3

Candidate Starts for Teal_27:

(Start: 3 @35787 has 35 MA's), (11, 35835), (17, 35871), (21, 35889), (24, 35898), (33, 35928), (34, 35931), (67, 36042), (92, 36162), (208, 36639), (211, 36648), (240, 36747), (251, 36792), (272,

36858), (298, 36945), (330, 37080), (337, 37113), (414, 37425), (437, 37491), (441, 37503), (466, 37584), (477, 37620), (480, 37626), (489, 37653), (505, 37686),

Gene: Teejan_23 Start: 20414, Stop: 22900, Start Num: 19

Candidate Starts for Teejan_23:

(Start: 19 @20414 has 60 MA's), (34, 20462), (104, 20642), (105, 20645), (124, 20708), (126, 20720), (162, 20852), (170, 20891), (185, 20948), (191, 20972), (194, 20984), (202, 21032), (203, 21035), (217, 21068), (225, 21107), (234, 21140), (236, 21152), (240, 21161), (242, 21167), (257, 21233), (262, 21248), (296, 21359), (300, 21392), (321, 21476), (326, 21491), (337, 21551), (351, 21620), (374, 21740), (395, 21833), (433, 21947), (459, 22025), (461, 22031), (468, 22055), (485, 22118), (486, 22121), (490, 22133), (510, 22199), (511, 22205), (521, 22247), (525, 22268), (527, 22277), (534, 22310), (536, 22328), (549, 22397), (575, 22496), (576, 22502), (579, 22520), (589, 22574), (594, 22589), (605, 22616), (631, 22673),

Gene: Tierra_26 Start: 20767, Stop: 23103, Start Num: 19

Candidate Starts for Tierra_26:

(Start: 19 @20767 has 60 MA's), (34, 20815), (36, 20824), (69, 20938), (71, 20956), (107, 21007), (135, 21103), (137, 21112), (162, 21202), (164, 21214), (188, 21313), (191, 21322), (213, 21415), (234, 21496), (242, 21526), (246, 21538), (251, 21565), (253, 21580), (268, 21604), (292, 21664), (300, 21709), (308, 21736), (317, 21775), (321, 21793), (325, 21802), (340, 21871), (341, 21874), (343, 21892), (355, 21934), (360, 21955), (366, 21985), (404, 22135), (412, 22168), (420, 22177), (439, 22240), (455, 22288), (461, 22300), (483, 22369), (497, 22393), (503, 22423), (513, 22462), (554, 22651), (575, 22726), (586, 22780), (613, 22864), (621, 22882), (655, 22969), (661, 22993), (675, 23035), (691, 23095),

Gene: Tigress9_26 Start: 20014, Stop: 22350, Start Num: 19

Candidate Starts for Tigress9_26:

(13, 19981), (Start: 19 @20014 has 60 MA's), (22, 20023), (36, 20071), (38, 20074), (71, 20203), (107, 20254), (135, 20350), (137, 20359), (162, 20449), (170, 20488), (188, 20560), (191, 20569), (213, 20662), (234, 20743), (242, 20773), (251, 20812), (253, 20827), (268, 20851), (292, 20911), (300, 20956), (308, 20983), (317, 21022), (321, 21040), (325, 21049), (340, 21118), (341, 21121), (343, 21139), (355, 21181), (360, 21202), (364, 21217), (366, 21232), (385, 21319), (411, 21412), (412, 21415), (439, 21487), (455, 21535), (483, 21616), (497, 21640), (502, 21664), (503, 21670), (513, 21709), (554, 21898), (575, 21973), (586, 22027), (613, 22111), (621, 22129), (655, 22216), (661, 22240), (675, 22282), (691, 22342),

Gene: Tillicus_29 Start: 25684, Stop: 27684, Start Num: 1

Candidate Starts for Tillicus_29:

(Start: 1 @25684 has 38 MA's), (23, 25798), (26, 25807), (29, 25816), (31, 25819), (34, 25828), (56, 25897), (70, 25954), (165, 26335), (173, 26368), (200, 26491), (202, 26497), (246, 26641), (251, 26668), (294, 26797), (298, 26821), (330, 26956), (337, 26989), (402, 27262), (410, 27286), (477, 27496), (480, 27502), (494, 27532), (505, 27565),

Gene: TingHuaYa_27 Start: 20178, Stop: 22490, Start Num: 49

Candidate Starts for TingHuaYa_27:

(Start: 49 @20178 has 18 MA's), (110, 20328), (116, 20349), (133, 20406), (153, 20472), (163, 20517), (174, 20559), (176, 20571), (187, 20616), (212, 20727), (220, 20748), (235, 20814), (240, 20829), (262, 20910), (274, 20940), (291, 20979), (297, 20994), (307, 21054), (328, 21138), (340, 21210), (418, 21519), (435, 21573), (436, 21576), (438, 21588), (449, 21615), (454, 21633), (455, 21639), (492, 21771), (549, 22020), (553, 22035), (557, 22065), (568, 22104), (591, 22212), (601, 22242), (621, 22284), (629, 22305), (649, 22347), (658, 22371), (659, 22374), (664, 22398), (665, 22404), (684, 22467), (688, 22482),

Gene: Torres_23 Start: 20414, Stop: 22900, Start Num: 19

Candidate Starts for Torres_23:

(Start: 19 @20414 has 60 MA's), (34, 20462), (104, 20642), (105, 20645), (124, 20708), (126, 20720), (162, 20852), (170, 20891), (185, 20948), (191, 20972), (194, 20984), (202, 21032), (203, 21035), (217, 21068), (225, 21107), (234, 21140), (236, 21152), (240, 21161), (242, 21167), (257, 21233), (262, 21248), (296, 21359), (300, 21392), (321, 21476), (326, 21491), (337, 21551), (351, 21620), (374, 21740), (395, 21833), (433, 21947), (459, 22025), (461, 22031), (468, 22055), (485, 22118), (486, 22121), (490, 22133), (510, 22199), (511, 22205), (521, 22247), (525, 22268), (527, 22277), (534, 22310), (536, 22328), (549, 22397), (575, 22496), (576, 22502), (579, 22520), (589, 22574), (594, 22589), (605, 22616), (631, 22673),

Gene: TriFive_21 Start: 19724, Stop: 22237, Start Num: 14

Candidate Starts for TriFive_21:

(Start: 14 @19724 has 19 MA's), (30, 19787), (53, 19859), (75, 19949), (77, 19955), (94, 20027), (112, 20114), (144, 20219), (146, 20231), (152, 20249), (161, 20288), (168, 20318), (184, 20375), (191, 20405), (193, 20411), (202, 20465), (204, 20471), (239, 20618), (241, 20621), (244, 20630), (248, 20648), (261, 20708), (264, 20717), (268, 20729), (284, 20780), (287, 20783), (328, 20948), (341, 21005), (361, 21089), (365, 21107), (366, 21116), (378, 21179), (412, 21299), (425, 21323), (431, 21344), (437, 21359), (441, 21377), (452, 21407), (482, 21497), (506, 21566), (513, 21599), (517, 21620), (527, 21656), (535, 21692), (545, 21737), (548, 21761), (549, 21767), (553, 21782), (556, 21800), (579, 21887), (584, 21911), (593, 21947), (595, 21953), (602, 21977), (637, 22052), (638, 22055), (664, 22142), (666, 22151), (669, 22157),

Gene: TribbleTrouble_25 Start: 21122, Stop: 23572, Start Num: 19

Candidate Starts for TribbleTrouble_25:

(Start: 19 @21122 has 60 MA's), (27, 21149), (34, 21170), (38, 21182), (53, 21227), (60, 21257), (68, 21287), (102, 21449), (107, 21470), (129, 21548), (143, 21593), (152, 21629), (157, 21647), (177, 21725), (186, 21761), (234, 21959), (237, 21974), (251, 22025), (276, 22082), (308, 22199), (318, 22241), (321, 22256), (325, 22265), (341, 22346), (343, 22364), (355, 22406), (360, 22427), (365, 22448), (366, 22457), (385, 22544), (412, 22640), (437, 22700), (439, 22712), (454, 22754), (483, 22841), (503, 22895), (513, 22934), (516, 22952), (539, 23051), (542, 23069), (554, 23123), (566, 23168), (571, 23180), (576, 23204), (580, 23231), (610, 23327), (613, 23336), (661, 23465), (669, 23492), (675, 23504),

Gene: Trice_23 Start: 20414, Stop: 22900, Start Num: 19

Candidate Starts for Trice_23:

(Start: 19 @20414 has 60 MA's), (34, 20462), (104, 20642), (105, 20645), (124, 20708), (126, 20720), (162, 20852), (170, 20891), (185, 20948), (191, 20972), (194, 20984), (202, 21032), (203, 21035), (217, 21068), (225, 21107), (234, 21140), (236, 21152), (240, 21161), (242, 21167), (257, 21233), (262, 21248), (296, 21359), (300, 21392), (321, 21476), (326, 21491), (337, 21551), (351, 21620), (374, 21740), (395, 21833), (433, 21947), (459, 22025), (461, 22031), (468, 22055), (485, 22118), (486, 22121), (490, 22133), (510, 22199), (511, 22205), (521, 22247), (525, 22268), (527, 22277), (534, 22310), (536, 22328), (549, 22397), (575, 22496), (576, 22502), (579, 22520), (589, 22574), (594, 22589), (605, 22616), (631, 22673),

Gene: Typha_27 Start: 23429, Stop: 26023, Start Num: 20

Candidate Starts for Typha_27:

(Start: 20 @23429 has 6 MA's), (32, 23468), (54, 23543), (78, 23645), (80, 23654), (97, 23732), (116, 23813), (118, 23822), (132, 23867), (134, 23870), (136, 23879), (140, 23891), (141, 23894), (147, 23918), (156, 23945), (158, 23954), (171, 24017), (188, 24083), (196, 24119), (197, 24122), (215, 24194), (217, 24200), (234, 24269), (253, 24353), (278, 24434), (282, 24455), (322, 24629), (328, 24656), (337, 24707), (344, 24752), (355, 24803), (358, 24812), (373, 24890), (403, 25013), (405, 25016), (406, 25019), (439, 25130), (461, 25193), (476, 25241), (504, 25328), (511, 25355), (513,

25364), (515, 25370), (527, 25421), (549, 25538), (550, 25541), (572, 25625), (579, 25661), (586, 25691), (590, 25715), (608, 25766), (612, 25772), (615, 25778), (657, 25880), (665, 25916), (685, 26006), (688, 26015),

Gene: Unicorn_26 Start: 20093, Stop: 22432, Start Num: 19

Candidate Starts for Unicorn_26:

(Start: 19 @20093 has 60 MA's), (36, 20150), (69, 20264), (71, 20282), (107, 20333), (111, 20354), (135, 20432), (162, 20531), (164, 20543), (188, 20642), (191, 20651), (213, 20744), (234, 20825), (242, 20855), (246, 20867), (247, 20876), (251, 20894), (253, 20909), (268, 20933), (292, 20993), (300, 21038), (308, 21065), (321, 21122), (325, 21131), (340, 21200), (341, 21203), (343, 21221), (355, 21263), (360, 21284), (366, 21314), (385, 21401), (404, 21464), (412, 21497), (439, 21569), (455, 21617), (461, 21629), (483, 21698), (497, 21722), (513, 21791), (554, 21980), (575, 22055), (579, 22079), (610, 22184), (613, 22193), (621, 22211), (655, 22298), (661, 22322), (675, 22364), (691, 22424),

Gene: Validus_27 Start: 20168, Stop: 22669, Start Num: 19

Candidate Starts for Validus_27:

(Start: 19 @20168 has 60 MA's), (Start: 52 @20267 has 1 MA's), (55, 20285), (69, 20339), (103, 20390), (107, 20408), (126, 20474), (143, 20528), (162, 20606), (170, 20645), (185, 20702), (194, 20738), (203, 20789), (221, 20834), (233, 20888), (234, 20891), (240, 20912), (242, 20918), (251, 20957), (296, 21110), (303, 21155), (321, 21227), (333, 21281), (337, 21302), (339, 21314), (358, 21407), (361, 21422), (373, 21485), (395, 21581), (459, 21773), (461, 21779), (468, 21803), (485, 21866), (511, 21953), (527, 22025), (534, 22058), (536, 22076), (545, 22115), (591, 22331), (638, 22442), (657, 22499), (661, 22517), (669, 22547),

Gene: Vanisoa_30 Start: 22263, Stop: 24611, Start Num: 59

Candidate Starts for Vanisoa_30:

(57, 22257), (Start: 59 @22263 has 2 MA's), (84, 22362), (91, 22395), (123, 22530), (148, 22620), (175, 22722), (182, 22749), (190, 22785), (204, 22854), (206, 22860), (256, 23070), (268, 23112), (298, 23202), (302, 23229), (336, 23343), (341, 23376), (360, 23457), (366, 23487), (368, 23493), (392, 23595), (412, 23673), (437, 23733), (452, 23781), (455, 23793), (508, 23946), (513, 23973), (516, 23991), (527, 24030), (533, 24060), (549, 24141), (550, 24144), (584, 24285), (602, 24351), (622, 24396), (631, 24417), (637, 24426), (669, 24531), (683, 24576), (685, 24588),

Gene: Vordorf_29 Start: 24001, Stop: 26601, Start Num: 8

Candidate Starts for Vordorf_29:

(Start: 8 @24001 has 1 MA's), (37, 24115), (39, 24124), (160, 24601), (194, 24736), (198, 24772), (216, 24823), (217, 24826), (234, 24898), (248, 24949), (251, 24964), (254, 24982), (263, 25006), (343, 25336), (348, 25348), (363, 25420), (396, 25567), (407, 25597), (430, 25678), (445, 25720), (463, 25783), (503, 25909), (544, 26092), (559, 26173), (583, 26296), (603, 26371), (622, 26425), (641, 26485), (648, 26497),

Gene: WheatThin_25 Start: 20607, Stop: 23117, Start Num: 15

Candidate Starts for WheatThin_25:

(Start: 15 @20607 has 14 MA's), (58, 20739), (62, 20754), (73, 20799), (78, 20817), (125, 20982), (138, 21036), (142, 21045), (160, 21123), (162, 21129), (198, 21294), (203, 21309), (216, 21345), (234, 21420), (236, 21432), (240, 21441), (242, 21447), (246, 21459), (248, 21471), (251, 21486), (254, 21504), (255, 21507), (267, 21543), (286, 21597), (314, 21720), (326, 21774), (330, 21795), (332, 21804), (354, 21906), (369, 21966), (376, 22014), (379, 22026), (391, 22071), (421, 22158), (430, 22197), (453, 22266), (456, 22278), (462, 22290), (537, 22578), (543, 22608), (559, 22689), (564, 22710), (569, 22737), (574, 22761), (617, 22926), (635, 22971), (663, 23070), (673, 23109),

Gene: Whirlwind_22 Start: 19481, Stop: 21994, Start Num: 14

Candidate Starts for Whirlwind_22:

(Start: 14 @19481 has 19 MA's), (30, 19544), (53, 19616), (100, 19814), (137, 19958), (144, 19976), (146, 19988), (152, 20006), (161, 20045), (164, 20060), (168, 20075), (184, 20132), (191, 20162), (193, 20168), (202, 20222), (204, 20228), (218, 20285), (239, 20375), (241, 20378), (244, 20387), (248, 20405), (261, 20465), (284, 20537), (287, 20540), (322, 20684), (328, 20705), (341, 20762), (361, 20846), (365, 20864), (366, 20873), (412, 21056), (431, 21101), (437, 21116), (441, 21134), (452, 21164), (472, 21224), (482, 21254), (506, 21323), (513, 21356), (517, 21377), (527, 21413), (533, 21443), (548, 21518), (549, 21524), (553, 21539), (556, 21557), (566, 21590), (578, 21641), (579, 21644), (585, 21671), (593, 21704), (602, 21734), (637, 21809), (651, 21845), (666, 21908), (669, 21914), (690, 21986),

Gene: Willsammy_21 Start: 18930, Stop: 21569, Start Num: 5

Candidate Starts for Willsammy_21:

(Start: 5 @18930 has 17 MA's), (6, 18939), (45, 19083), (116, 19356), (118, 19365), (120, 19368), (127, 19389), (131, 19401), (132, 19410), (140, 19434), (156, 19488), (171, 19566), (179, 19596), (188, 19632), (194, 19653), (196, 19668), (205, 19710), (215, 19743), (234, 19818), (240, 19842), (242, 19848), (246, 19860), (253, 19902), (255, 19908), (281, 19995), (310, 20127), (315, 20145), (322, 20178), (328, 20205), (337, 20256), (377, 20466), (394, 20532), (406, 20568), (437, 20667), (439, 20679), (461, 20742), (511, 20904), (515, 20919), (527, 20970), (549, 21087), (558, 21132), (572, 21174), (579, 21210), (590, 21264), (608, 21312), (664, 21456), (677, 21513), (685, 21552), (688, 21561),

Gene: Wintermute_28 Start: 22272, Stop: 24581, Start Num: 49

Candidate Starts for Wintermute_28:

(Start: 49 @22272 has 18 MA's), (70, 22362), (79, 22383), (105, 22407), (137, 22524), (170, 22653), (186, 22713), (199, 22785), (202, 22794), (219, 22845), (220, 22851), (223, 22860), (234, 22911), (236, 22923), (242, 22938), (244, 22944), (251, 22977), (265, 23025), (291, 23079), (308, 23151), (317, 23190), (320, 23202), (325, 23217), (334, 23262), (345, 23331), (367, 23412), (404, 23565), (418, 23607), (459, 23736), (468, 23781), (486, 23847), (492, 23862), (517, 23958), (549, 24111), (553, 24126), (554, 24132), (557, 24156), (560, 24162), (562, 24168), (563, 24171), (568, 24195), (572, 24207), (591, 24303), (612, 24354), (613, 24357), (643, 24426), (658, 24462), (665, 24495), (682, 24549), (684, 24558), (688, 24573),

Gene: Woes_27 Start: 35829, Stop: 37850, Start Num: 3

Candidate Starts for Woes_27:

(Start: 3 @35829 has 35 MA's), (11, 35877), (17, 35913), (21, 35931), (24, 35940), (33, 35970), (34, 35973), (67, 36084), (92, 36204), (208, 36681), (211, 36690), (240, 36789), (251, 36834), (272, 36900), (298, 36987), (330, 37122), (337, 37155), (390, 37383), (399, 37416), (400, 37419), (414, 37467), (437, 37533), (441, 37545), (466, 37626), (477, 37662), (480, 37668), (489, 37695), (505, 37728), (528, 37824),

Gene: Wojtek_29 Start: 25988, Stop: 27967, Start Num: 1

Candidate Starts for Wojtek_29:

(Start: 1 @25988 has 38 MA's), (23, 26102), (26, 26111), (29, 26120), (31, 26123), (34, 26132), (56, 26201), (74, 26267), (86, 26306), (90, 26327), (101, 26381), (146, 26558), (165, 26633), (197, 26765), (201, 26792), (203, 26798), (230, 26885), (244, 26933), (246, 26939), (251, 26966), (275, 27044), (294, 27095), (330, 27254), (337, 27287), (362, 27389), (370, 27425), (464, 27731), (477, 27776), (480, 27782), (505, 27842), (518, 27899),

Gene: Xeno_20 Start: 17553, Stop: 20198, Start Num: 5

Candidate Starts for Xeno_20:

(2, 17541), (Start: 5 @17553 has 17 MA's), (7, 17565), (9, 17577), (Start: 20 @17631 has 6 MA's), (Start: 43 @17700 has 1 MA's), (45, 17703), (48, 17712), (53, 17727), (93, 17904), (116, 17985), (118,

17994), (136, 18051), (141, 18066), (172, 18198), (185, 18246), (188, 18261), (194, 18282), (200, 18324), (205, 18339), (207, 18348), (215, 18375), (217, 18381), (234, 18450), (240, 18471), (242, 18477), (245, 18486), (250, 18513), (281, 18624), (289, 18645), (293, 18669), (305, 18735), (310, 18756), (315, 18774), (322, 18807), (327, 18831), (328, 18834), (337, 18885), (358, 18990), (366, 19032), (406, 19197), (436, 19293), (461, 19371), (465, 19383), (496, 19473), (511, 19533), (513, 19542), (525, 19590), (527, 19599), (549, 19716), (558, 19761), (572, 19803), (586, 19869), (590, 19893), (608, 19941), (612, 19947), (615, 19953), (656, 20052), (659, 20061), (665, 20091), (685, 20181), (688, 20190),

Gene: Ximenita_27 Start: 20205, Stop: 22535, Start Num: 19

Candidate Starts for Ximenita_27:

(Start: 19 @20205 has 60 MA's), (38, 20265), (71, 20394), (78, 20406), (107, 20445), (135, 20541), (137, 20550), (162, 20640), (170, 20679), (183, 20727), (188, 20751), (191, 20760), (213, 20853), (218, 20868), (234, 20934), (242, 20964), (246, 20976), (251, 21003), (253, 21018), (268, 21042), (292, 21102), (300, 21147), (308, 21174), (317, 21213), (321, 21231), (325, 21240), (340, 21309), (341, 21312), (343, 21330), (355, 21372), (360, 21393), (365, 21414), (366, 21423), (373, 21459), (385, 21510), (439, 21675), (470, 21765), (483, 21804), (486, 21813), (503, 21858), (510, 21882), (513, 21897), (516, 21915), (525, 21945), (554, 22086), (566, 22131), (575, 22161), (579, 22185), (580, 22194), (586, 22215), (592, 22245), (661, 22428), (671, 22455), (675, 22467), (691, 22527),

Gene: Y10_28 Start: 22272, Stop: 24581, Start Num: 49

Candidate Starts for Y10_28:

(Start: 49 @22272 has 18 MA's), (70, 22362), (79, 22383), (105, 22407), (137, 22524), (170, 22653), (186, 22713), (199, 22785), (202, 22794), (219, 22845), (220, 22851), (223, 22860), (234, 22911), (236, 22923), (242, 22938), (244, 22944), (251, 22977), (265, 23025), (291, 23079), (308, 23151), (317, 23190), (320, 23202), (325, 23217), (334, 23262), (345, 23331), (367, 23412), (404, 23565), (418, 23607), (459, 23736), (468, 23781), (486, 23847), (492, 23862), (517, 23958), (549, 24111), (553, 24126), (554, 24132), (557, 24156), (560, 24162), (562, 24168), (563, 24171), (568, 24195), (572, 24207), (591, 24303), (612, 24354), (613, 24357), (643, 24426), (658, 24462), (665, 24495), (682, 24549), (684, 24558), (688, 24573),

Gene: Y2_28 Start: 22272, Stop: 24581, Start Num: 49

Candidate Starts for Y2_28:

(Start: 49 @22272 has 18 MA's), (70, 22362), (79, 22383), (105, 22407), (137, 22524), (170, 22653), (186, 22713), (199, 22785), (202, 22794), (219, 22845), (220, 22851), (223, 22860), (234, 22911), (236, 22923), (242, 22938), (244, 22944), (251, 22977), (265, 23025), (291, 23079), (308, 23151), (317, 23190), (320, 23202), (325, 23217), (334, 23262), (345, 23331), (367, 23412), (404, 23565), (418, 23607), (459, 23736), (468, 23781), (486, 23847), (492, 23862), (517, 23958), (549, 24111), (553, 24126), (554, 24132), (557, 24156), (560, 24162), (562, 24168), (563, 24171), (568, 24195), (572, 24207), (591, 24303), (612, 24354), (613, 24357), (643, 24426), (658, 24462), (665, 24495), (682, 24549), (684, 24558), (688, 24573),

Gene: YasnayaPolyana_28 Start: 22273, Stop: 24582, Start Num: 49

Candidate Starts for YasnayaPolyana_28:

(Start: 49 @22273 has 18 MA's), (70, 22363), (79, 22384), (105, 22408), (137, 22525), (170, 22654), (186, 22714), (199, 22786), (202, 22795), (219, 22846), (220, 22852), (223, 22861), (234, 22912), (236, 22924), (242, 22939), (244, 22945), (251, 22978), (265, 23026), (291, 23080), (308, 23152), (317, 23191), (320, 23203), (325, 23218), (334, 23263), (345, 23332), (367, 23413), (404, 23566), (418, 23608), (459, 23737), (468, 23782), (486, 23848), (492, 23863), (517, 23959), (549, 24112), (553, 24127), (554, 24133), (557, 24157), (560, 24163), (562, 24169), (563, 24172), (568, 24196), (572, 24208), (591, 24304), (612, 24355), (613, 24358), (643, 24427), (658, 24463), (665, 24496), (682, 24550), (684, 24559), (688, 24574),

Gene: Yikes_31 Start: 27363, Stop: 29363, Start Num: 1

Candidate Starts for Yikes_31:

(Start: 1 @27363 has 38 MA's), (23, 27477), (26, 27486), (29, 27495), (31, 27498), (34, 27507), (56, 27576), (146, 27939), (165, 28014), (197, 28146), (201, 28173), (202, 28176), (203, 28179), (230, 28266), (244, 28314), (246, 28320), (251, 28347), (275, 28425), (294, 28476), (330, 28635), (337, 28668), (402, 28941), (409, 28959), (477, 29175), (480, 29181), (486, 29199), (505, 29241), (518, 29298), (528, 29337),

Gene: Yuna_28 Start: 20819, Stop: 23209, Start Num: 19

Candidate Starts for Yuna_28:

(Start: 19 @20819 has 60 MA's), (34, 20867), (48, 20906), (Start: 52 @20918 has 1 MA's), (107, 21059), (124, 21113), (126, 21125), (143, 21179), (147, 21200), (160, 21251), (162, 21257), (184, 21347), (185, 21353), (203, 21440), (220, 21482), (221, 21485), (232, 21533), (234, 21542), (242, 21569), (245, 21578), (251, 21608), (267, 21665), (296, 21761), (298, 21773), (321, 21878), (338, 21947), (343, 21986), (356, 22016), (383, 22139), (388, 22160), (416, 22244), (434, 22295), (435, 22298), (436, 22301), (450, 22340), (468, 22394), (484, 22451), (515, 22553), (516, 22565), (540, 22682), (542, 22688), (551, 22730), (578, 22838), (591, 22901), (657, 23054), (658, 23057), (686, 23183),

Gene: Zany_29 Start: 26884, Stop: 28890, Start Num: 1

Candidate Starts for Zany_29:

(Start: 1 @26884 has 38 MA's), (23, 26998), (26, 27007), (29, 27016), (31, 27019), (34, 27028), (56, 27097), (146, 27460), (165, 27535), (197, 27667), (201, 27694), (202, 27697), (203, 27700), (230, 27787), (244, 27835), (246, 27841), (251, 27868), (275, 27946), (294, 27997), (330, 28156), (337, 28189), (357, 28270), (402, 28462), (427, 28540), (428, 28546), (477, 28699), (480, 28705), (494, 28735), (505, 28768), (528, 28864),

Gene: ZoeJ_23 Start: 18602, Stop: 20941, Start Num: 19

Candidate Starts for ZoeJ_23:

(Start: 19 @18602 has 60 MA's), (135, 18953), (137, 18962), (151, 19007), (188, 19151), (195, 19175), (234, 19334), (240, 19358), (242, 19364), (246, 19376), (251, 19403), (292, 19502), (308, 19574), (318, 19616), (319, 19622), (321, 19631), (340, 19712), (343, 19733), (355, 19775), (366, 19826), (385, 19913), (388, 19922), (416, 20012), (437, 20066), (439, 20078), (461, 20138), (482, 20198), (486, 20216), (513, 20300), (525, 20348), (539, 20417), (541, 20432), (554, 20489), (562, 20513), (567, 20537), (571, 20546), (579, 20588), (580, 20597), (606, 20684), (613, 20702), (655, 20807), (661, 20831),