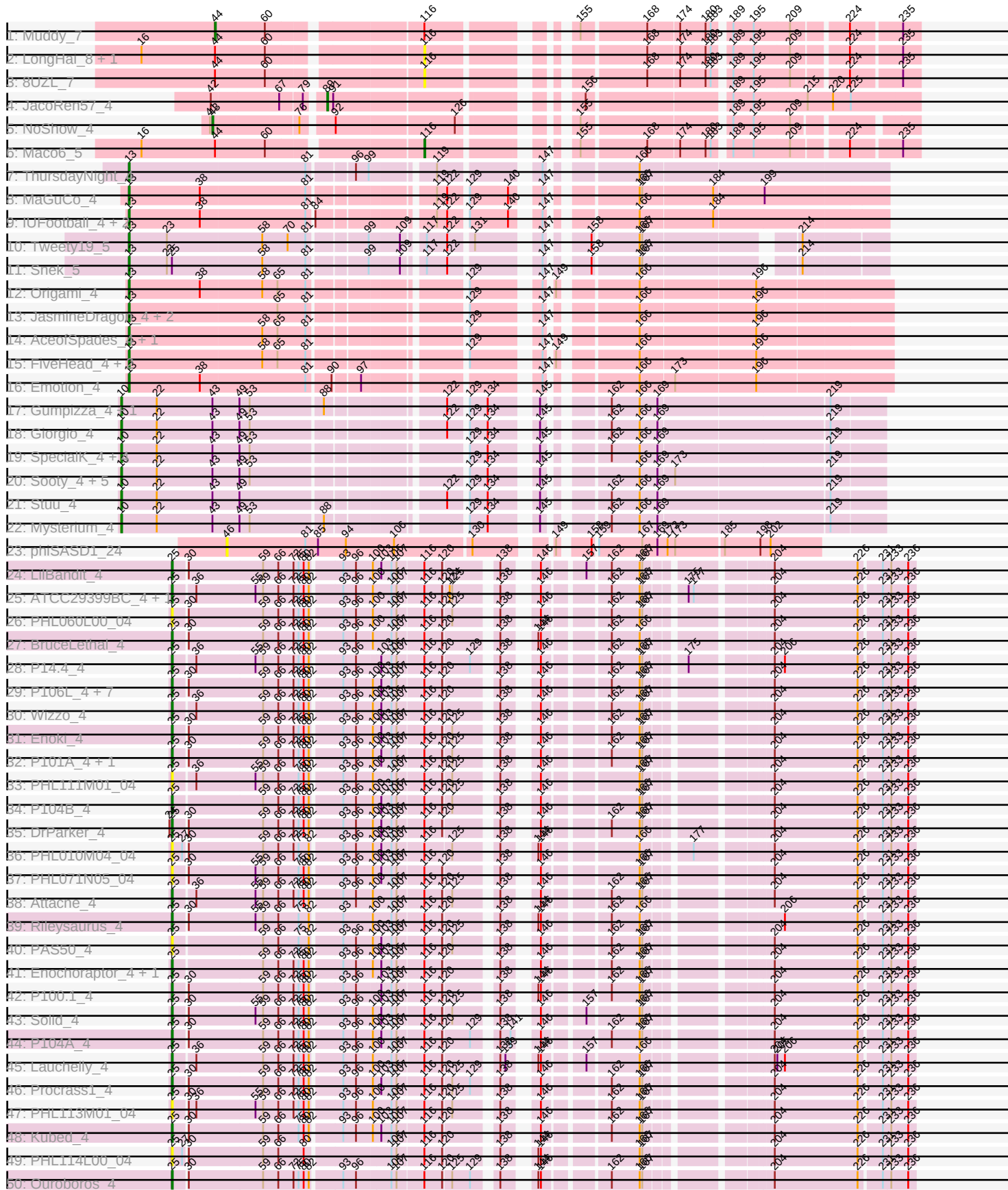
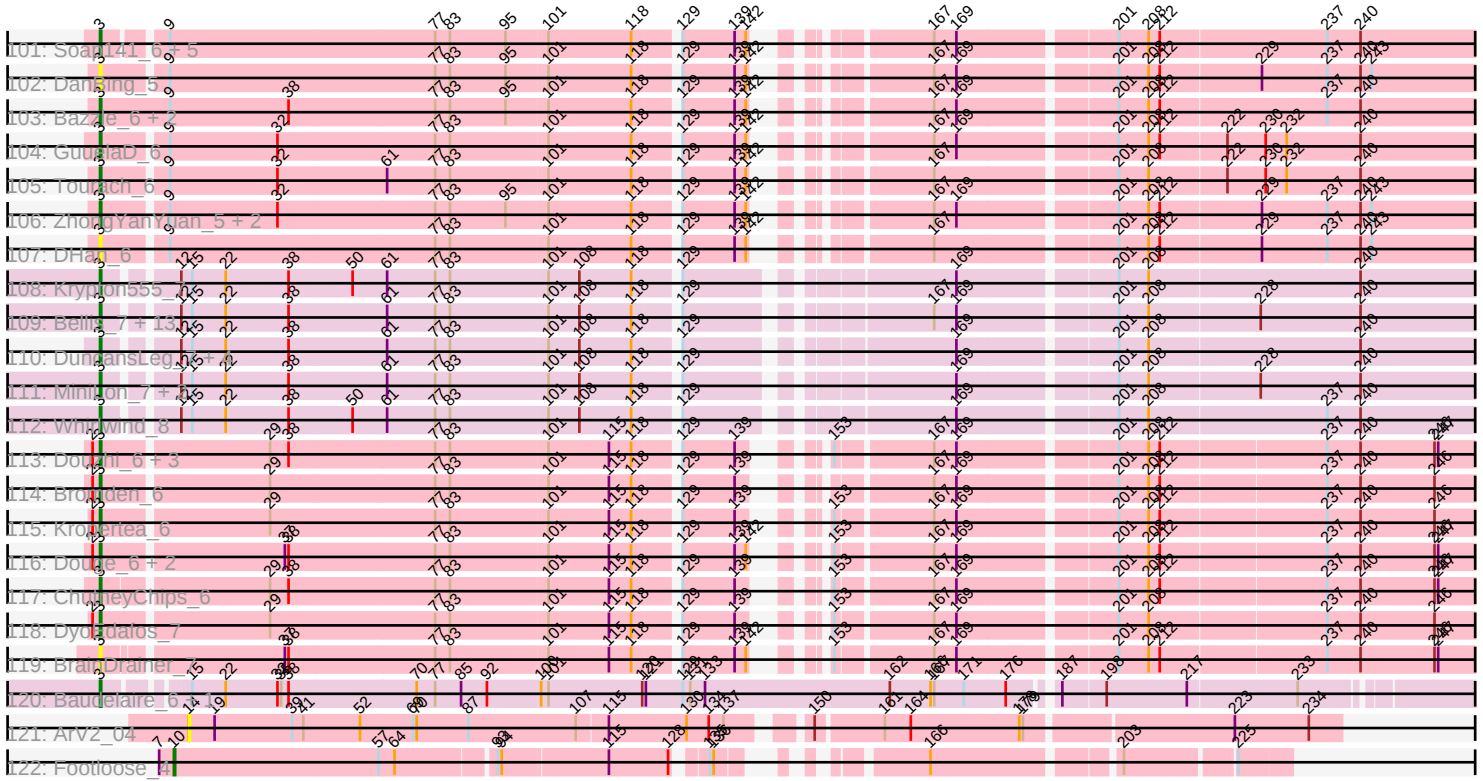




Index	Label	Value
51	Keiki_4 + 1	35
52	PI00A_4	35
53	PI08C_4	35
54	PHC112N00_04	35
55	Storm00m_4 + 1	35
56	PI11_4	35
57	QueenBey_4	35
58	ATCCZ9399BT_4	35
59	PI07A_4	35
60	PA6_4	35
61	Levi05a_4	35
62	Moyashi_4	35
63	Supernova_4	35
64	MEAK_4	35
65	PI05_4	35
66	PADZU_4	35
67	PHC037M02_04	35
68	Aquarius_4	35
69	PhorbesPmower_4 + 3	35
70	Lucky10_4	35
71	BearBQ_4 + 5	35
72	Budski_5 + 4	35
73	Ecliptus_5 + 1	35
74	Asapag_5 + 2	35
75	Lutum_5 + 3	35
76	Leroy_5 + 2	35
77	Phistory_5	35
78	Whitney_5	35
79	Phabuloso_5	35
80	ShawBrad_5	35
81	Spooky_5	35
82	Squiddy_6	35
83	Kudeire_16 + 4	35
84	October14_15	35
85	Neville_4	35
86	Rabbitrui_16	35
87	LilJank_14 + 1	35
88	Honk_4	35
89	Cent1621_4	35
90	Flood_4	35
91	Zeta1847_4	35
92	Stm00_4	35
93	Blarby_6 + 1	35
94	Ogopogo_6	35
95	Che90_5 + 3	35
96	Sou22_5	35
97	Avani_5	35
98	Pr00k_4	35
99	Iyson_6 + 18	35
100	Nicholas3_6 + 27	35

Pham 330437



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 330437 Report

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

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 330437 has 258 members, 46 are drafts.

Phages represented in each track:

- Track 1 : Muddy_7
- Track 2 : LongHai_8, Salvus_8
- Track 3 : 8UZL_7
- Track 4 : JacoRen57_4
- Track 5 : NoShow_4
- Track 6 : Maco6_5
- Track 7 : ThursdayNight_4
- Track 8 : MaGuCo_4
- Track 9 : IUFootball_4, Liebe_4, Maureen_4
- Track 10 : Tweety19_5
- Track 11 : Snek_5
- Track 12 : Origami_4
- Track 13 : JasmineDragon_4, ShakeltOph_4, MiniMommy_4
- Track 14 : AceofSpades_4, VroomVroom_4
- Track 15 : FiveHead_4, JohnThicc_4, LadyAstra_4
- Track 16 : Emotion_4
- Track 17 : Gumpizza_4, Beaupre_4
- Track 18 : Giorgio_4
- Track 19 : SpecialK_4, RockScotty_4, Moss_4, Halsey_4, Ashes_4
- Track 20 : Sooty_4, Gambol_4, Cappuccino_4, Donkey_4, Kalimba_4, Sabourin_4
- Track 21 : Stuu_4
- Track 22 : Mysterium_4
- Track 23 : phiSASD1_24
- Track 24 : LilBandit_4
- Track 25 : ATCC29399BC_4, P107C_4
- Track 26 : PHL060L00_04
- Track 27 : BruceLethal_4
- Track 28 : P14.4_4
- Track 29 : P106L_4, P9.1_4, P106I_4, P106M_4, MrAK_4, SKKY_4, P106C_4, P106A_4
- Track 30 : Wizzo_4
- Track 31 : Enoki_4
- Track 32 : P101A_4, P100D_4

- Track 33 : PHL111M01_04
- Track 34 : P104B_4
- Track 35 : DrParker_4
- Track 36 : PHL010M04_04
- Track 37 : PHL071N05_04
- Track 38 : Attacne_4
- Track 39 : Rileysaurus_4
- Track 40 : PAS50_4
- Track 41 : Enochoraptor_4, Pirate_4
- Track 42 : P100.1_4
- Track 43 : Solid_4
- Track 44 : P104A_4
- Track 45 : Lauchelly_4
- Track 46 : Procrass1_4
- Track 47 : PHL113M01_04
- Track 48 : Kubed_4
- Track 49 : PHL114L00_04
- Track 50 : Ouroboros_4
- Track 51 : Keiki_4, Cota_4
- Track 52 : P100A_4
- Track 53 : P108C_4
- Track 54 : PHL112N00_04
- Track 55 : Stormborn_4, PHL067M10_04
- Track 56 : P1.1_4
- Track 57 : QueenBey_4
- Track 58 : ATCC29399BT_4
- Track 59 : P107A_4
- Track 60 : PA6_4
- Track 61 : Leviösa_4
- Track 62 : Moyashi_4
- Track 63 : Supernova_4
- Track 64 : MEAK_4
- Track 65 : P105_4
- Track 66 : PAD20_4
- Track 67 : PHL037M02_04
- Track 68 : Aquarius_4
- Track 69 : PhorbesPhlower_4, InLimbo_4, Morkie_4
- Track 70 : Lucky10_4
- Track 71 : BearBQ_4, Kuwabara_4, Crater_4, Apricot_4, MortyNRick_4, Birdsong_4
- Track 72 : Budski_5, CheeseTouch_5, Kamaru_5, Holliday_5, LitninMcQueen_5
- Track 73 : Ecliptus_5, ODay_5
- Track 74 : Asapag_5, BENtherdunthat_5, BotCity_5
- Track 75 : Lutum_5, Getalong_5, Periwinkle_5, Kenna_5
- Track 76 : Leroy_5, Horus_5, Frickyeh_5
- Track 77 : Phistory_5
- Track 78 : Whitney_5
- Track 79 : Phabuloso_5
- Track 80 : ShawBrad_5
- Track 81 : Spooky_5
- Track 82 : Squiddly_6
- Track 83 : Kudrefre_14, Syleon_15, Sephiroth_15
- Track 84 : Octobien14_15
- Track 85 : Neville_14

- Track 86 : Rabbitrun_16
- Track 87 : LilJank_14, Trax_14
- Track 88 : Honk_4
- Track 89 : Cen1621_4
- Track 90 : Floof_4
- Track 91 : Zeta1847_4
- Track 92 : SuMoo_4
- Track 93 : Blarby_6, Demsculpinboyz_5
- Track 94 : Ogopogo_6
- Track 95 : Che9d_5, Jabbawokkie_6, Zapner_6, Yoshi_5
- Track 96 : Soul22_5
- Track 97 : Avani_5
- Track 98 : Pitbull_4
- Track 99 : Tyson_6, Wyatt2_6, Zaria_6, LeBron_6, AvadaKedavra_6, JoeDirt_6, UPIE_6, Appletree2_6, Wamburgxpress_6, MAckerman_6, Enceladus_6, DirkDirk_6, Poochiewood_6, Silverleaf_6, Rose5_6, Calm_6, Halena_6, CicholasNage_6, Acquire49_6, OhShagHennessy_6
- Track 100 : Nicholasp3_6, Underpass_6, Molivier_6, Vetrix_6, BobsGarage_6, Lynnae_6, Kahlid_6, Netyap_6, Miley16_6, Hiraya_6, LilDestine_6, Faith1_6, Gardann_6, Itos_6, BigCheese_6, Finemlucis_6, DrSeegs_6, Zakai_6, Lewan_6, Winky_6, Breezona_6, Wilder_6, Gabriela_6, SoJulia_6, ChengKai98_6, MkaliMitinis3_6, Crossroads_6, Rumpelstiltskin_6
- Track 101 : Soap141_6, Sarshaun_6, OverPar_6, Loadrie_6, Hafay_6, Wigglewiggles_6
- Track 102 : DanBing_5
- Track 103 : Bazzle_6, Archie_6, Rossetti_6
- Track 104 : GuuelaD_6
- Track 105 : Tourach_6
- Track 106 : ZhongYanYuan_5, Claus_6, Baoshan_5
- Track 107 : DHan_6
- Track 108 : Krypton555_7
- Track 109 : Bellis_7, Kingsolomon_7, Nicholas_7, Lumos_7, Jobypre_7, Moostard_7, Red305_7, TriFive_7, Snenia_7, Finnry_7, Jubie_7, MsGreen_7, Samty_7, Clautastrophe_7
- Track 110 : DuncansLeg_7, Ellson_7, BourbonZero_6, KirDoubleO7_5, LiyuLake_7
- Track 111 : MiniLon_7, Lolly9_7, MiniMac_7
- Track 112 : Whirlwind_8
- Track 113 : Douzhi_6, PYPDinur_6, Chaser_6, Sheng711_6
- Track 114 : Bromden_6
- Track 115 : Kropertea_6
- Track 116 : Douge_6, Quby_6, FarmResident_6
- Track 117 : ChutneyChips_6
- Track 118 : DyoEdafos_7
- Track 119 : BrainDrainer_7
- Track 120 : Baudelaire_6, Aegeus_6
- Track 121 : ArV2_04
- Track 122 : Footloose_4

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

The start number called the most often in the published annotations is 3, it was called in 78 of the 212 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acquire49_6, Aegeus_6, Appletree2_6, Archie_6, AvadaKedavra_6, Baoshan_5, Baudelaire_6, Bazzle_6, Bellis_7, BigCheese_6, BobsGarage_6, BourbonZero_6, BrainDrainer_7, Breezonia_6, Bromden_6, Calm_6, Chaser_6, ChengKai98_6, ChutneyChips_6, CicholasNage_6, Claus_6, Clautastrophe_7, Crossroads_6, DHan_6, DanBing_5, DirkDirk_6, Douge_6, Douzhi_6, DrSeegs_6, DuncansLeg_7, DyoEdafos_7, Ellison_7, Enceladus_6, Faith1_6, FarmResident_6, Finemlucis_6, Finnry_7, Gabriela_6, Gardann_6, GuuelaD_6, Hafay_6, Halena_6, Hiraya_6, Itos_6, Jobypre_7, JoeDirt_6, Jubie_7, Kahlid_6, Kingsolomon_7, KirDoubleO7_5, Kropertea_6, Krypton555_7, LeBron_6, Lewan_6, LilDestine_6, LiyuLake_7, Loadrie_6, Lolly9_7, Lumos_7, Lynnae_6, MACKerman_6, Miley16_6, MiniLon_7, MiniMac_7, MkaliMitinis3_6, Molivier_6, Moostard_7, MsGreen_7, Netyap_6, Nicholas_7, Nicholasp3_6, OhShagHennessy_6, OverPar_6, PYPDinur_6, Poochiewood_6, Quby_6, Red305_7, Rose5_6, Rossetti_6, Rumpelstiltskin_6, Samty_7, Sarshaun_6, Sheng711_6, Silverleaf_6, Snenia_7, SoJulia_6, Soap141_6, Tourach_6, TriFive_7, Tyson_6, UPIE_6, Underpass_6, Vetrix_6, Wamburgrxpress_6, Whirlwind_8, Wigglewiggle_6, Wilder_6, Winky_6, Wyatt2_6, Zakai_6, Zaria_6, ZhongYanYuan_5,

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

-

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

- 8UZL_7, ATCC29399BC_4, ATCC29399BT_4, AceofSpades_4, Apricot_4, Aquarius_4, ArV2_04, Asapag_5, Ashes_4, Attacne_4, Avani_5, BENtherdunthat_5, BearBQ_4, Beaupre_4, Birdsong_4, Blarby_6, BotCity_5, BruceLethal_4, Budski_5, Cappuccino_4, Cen1621_4, Che9d_5, CheeseTouch_5, Cota_4, Crater_4, Demsculpinboyz_5, Donkey_4, DrParker_4, Ecliptus_5, Emotion_4, Enochoraptor_4, Enoki_4, FiveHead_4, Floof_4, Footloose_4, Frickyeh_5, Gambol_4, Getalong_5, Giorgio_4, Gumpizza_4, Halsey_4, Holliday_5, Honk_4, Horus_5, IUFootball_4, InLimbo_4, Jabbawokkie_6, JacoRen57_4, JasmineDragon_4, JohnThicc_4, Kalimba_4, Kamaru_5, Keiki_4, Kenna_5, Kubed_4, Kudefre_14, Kuwabara_4, LadyAstra_4, Lauchelly_4, Leroy_5, Leviosa_4, Liebe_4, LilBandit_4, LilJank_14, LitninMcQueen_5, LongHai_8, Lucky10_4, Lutum_5, MEAK_4, MaGuCo_4, Maco6_5, Maureen_4, MiniMommy_4, Morkie_4, MortyNRick_4, Moss_4, Moyashi_4, MrAK_4, Muddy_7, Mysteryum_4, Neville_14, NoShow_4, ODay_5, Octobien14_15, Ogoopogo_6, Origami_4, Ouroboros_4, P1.1_4, P100.1_4, P100A_4, P100D_4, P101A_4, P104A_4, P104B_4, P105_4, P106A_4, P106C_4, P106I_4, P106L_4, P106M_4, P107A_4, P107C_4, P108C_4, P14.4_4, P9.1_4, PA6_4, PAD20_4, PAS50_4, PHL010M04_04, PHL037M02_04, PHL060L00_04, PHL067M10_04, PHL071N05_04, PHL111M01_04, PHL112N00_04, PHL113M01_04, PHL114L00_04, Periwinkle_5, Phabuloso_5, Phistory_5, PhorbesPhlower_4, Pirate_4, Pitbull_4, Procrass1_4, QueenBey_4, Rabbitrun_16, Rileysaurus_4, RockScotty_4, SKKY_4, Sabourin_4, Salvus_8, Sephiroth_15, ShakeltOph_4, ShawBrad_5, Snek_5, Solid_4, Sooty_4, Soul22_5, SpecialK_4, Spooky_5, Squiddly_6, Stormborn_4, Stuu_4, SuMoo_4, Supernova_4, Syleon_15, ThursdayNight_4, Trax_14, Tweety19_5, VroomVroom_4, Whitney_5, Wizzo_4, Yoshi_5, Zapner_6, Zeta1847_4, phiSASD1_24,

Summary by start number:

Start 3:

- Found in 102 of 258 (39.5%) of genes in pham
- Manual Annotations of this start: 78 of 212
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acquire49_6 (L1), Aegeus_6 (L5), Appletree2_6 (L1), Archie_6 (L2), AvadaKedavra_6 (L1), Baoshan_5 (L2), Baudelaire_6 (L5), Bazzle_6 (L2), Bellis_7 (L3), BigCheese_6 (L2), BobsGarage_6 (L2), BourbonZero_6 (L3), BrainDrainer_7 (L4), Breezona_6 (L2), Bromden_6 (L4), Calm_6 (L1), Chaser_6 (L4), ChengKai98_6 (L2), ChutneyChips_6 (L4), CicholasNage_6 (L1), Claus_6 (L2), Clautastrophe_7 (L3), Crossroads_6 (L2), DHan_6 (L2), DanBing_5 (L2), DirkDirk_6 (L1), Douge_6 (L4), Douzhi_6 (L4), DrSeegs_6 (L2), DuncansLeg_7 (L3), DyoEdafos_7 (L4), Ellson_7 (L3), Enceladus_6 (L1), Faith1_6 (L2), FarmResident_6 (L4), Finemlucis_6 (L2), Finnry_7 (L3), Gabriela_6 (L2), Gardann_6 (L2), GuuelaD_6 (L2), Hafay_6 (L2), Halena_6 (L1), Hiraya_6 (L2), Itos_6 (L2), Jobypre_7 (L3), JoeDirt_6 (L1), Jubie_7 (L3), Kahlid_6 (L2), Kingsolomon_7 (L3), KirDoubleO7_5 (L3), Kropertea_6 (L4), Krypton555_7 (L3), LeBron_6 (L1), Lewan_6 (L2), LilDestine_6 (L2), LiyuLake_7 (L3), Loadrie_6 (L2), Lolly9_7 (L3), Lumos_7 (L3), Lynnae_6 (L2), MAckerman_6 (L1), Miley16_6 (L2), MiniLon_7 (L3), MiniMac_7 (L3), MkaliMitinis3_6 (L2), Molivier_6 (L2), Moostard_7 (L3), MsGreen_7 (L3), Netyap_6 (L2), Nicholas_7 (L3), Nicholasp3_6 (L2), OhShagHennessy_6 (L1), OverPar_6 (L2), PYPDinur_6 (L4), Poochiewood_6 (L1), Quby_6 (L4), Red305_7 (L3), Rose5_6 (L1), Rossetti_6 (L2), Rumpelstiltskin_6 (L2), Samty_7 (L3), Sarshaun_6 (L2), Sheng711_6 (L4), Silverleaf_6 (L1), Snenia_7 (L3), SoJulia_6 (L2), Soap141_6 (L2), Tourach_6 (L2), TriFive_7 (L3), Tyson_6 (L1), UPIE_6 (L1), Underpass_6 (L2), Vetrix_6 (L2), Wamburggrxpress_6 (L1), Whirlwind_8 (L3), Wigglewiggle_6 (L2), Wilder_6 (L2), Winky_6 (L2), Wyatt2_6 (L1), Zakai_6 (L2), Zaria_6 (L1), ZhongYanYuan_5 (L2),

Start 4:

- Found in 4 of 258 (1.6%) of genes in pham
- Manual Annotations of this start: 4 of 212
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LilJank_14 (DU2), Neville_14 (DU2), Rabbitrun_16 (DU2), Trax_14 (DU2),

Start 5:

- Found in 1 of 258 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 212
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Octobien14_15 (DU1),

Start 6:

- Found in 3 of 258 (1.2%) of genes in pham
- Manual Annotations of this start: 3 of 212
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kudrefre_14 (DU1), Sephiroth_15 (DU1), Syleon_15 (DU1),

Start 8:

- Found in 1 of 258 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 212
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Honk_4 (EH),

Start 9:

- Found in 45 of 258 (17.4%) of genes in pham
- Manual Annotations of this start: 1 of 212
- Called 2.2% of time when present
- Phage (with cluster) where this start called: Floof_4 (EH),

Start 10:

- Found in 20 of 258 (7.8%) of genes in pham
- Manual Annotations of this start: 18 of 212
- Called 90.0% of time when present
- Phage (with cluster) where this start called: Ashes_4 (AZ5), Beaupre_4 (AZ5), Cappuccino_4 (AZ5), Donkey_4 (AZ5), Footloose_4 (singleton), Gambol_4 (AZ5), Giorgio_4 (AZ5), Gumpizza_4 (AZ5), Halsey_4 (AZ5), Kalimba_4 (AZ5), Moss_4 (AZ5), Mysterium_4 (AZ5), RockScotty_4 (AZ5), Sabourin_4 (AZ5), Sooty_4 (AZ5), SpecialK_4 (AZ5), Stuu_4 (AZ5), SuMoo_4 (EH),

Start 11:

- Found in 6 of 258 (2.3%) of genes in pham
- Manual Annotations of this start: 2 of 212
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Cen1621_4 (EH), Zeta1847_4 (EH),

Start 13:

- Found in 17 of 258 (6.6%) of genes in pham
- Manual Annotations of this start: 15 of 212
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AceofSpades_4 (AZ4), Emotion_4 (AZ4), FiveHead_4 (AZ4), IUFootball_4 (AZ2), JasmineDragon_4 (AZ4), JohnThicc_4 (AZ4), LadyAstra_4 (AZ4), Liebe_4 (AZ2), MaGuCo_4 (AZ2), Maureen_4 (AZ2), MiniMommy_4 (AZ4), Origami_4 (AZ4), ShakeltOph_4 (AZ4), Snek_5 (AZ3), ThursdayNight_4 (AZ), Tweety19_5 (AZ3), VroomVroom_4 (AZ4),

Start 14:

- Found in 5 of 258 (1.9%) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: ArV2_04 (singleton),

Start 25:

- Found in 58 of 258 (22.5%) of genes in pham
- Manual Annotations of this start: 45 of 212
- Called 98.3% of time when present
- Phage (with cluster) where this start called: ATCC29399BC_4 (BU), ATCC29399BT_4 (BU), Aquarius_4 (BU), Attacne_4 (BU), BruceLethal_4 (BU), Cota_4 (BU), DrParker_4 (BU), Enochoraptor_4 (BU), Enoki_4 (BU), Keiki_4 (BU), Kubed_4 (BU), Lauchelly_4 (BU), Leviosa_4 (BU), LilBandit_4 (BU), MEAK_4 (BU), Moyashi_4 (BU), MrAK_4 (BU), Ouroboros_4 (BU), P1.1_4 (BU), P100.1_4 (BU), P100A_4 (BU), P100D_4 (BU), P101A_4 (BU), P104A_4 (BU), P104B_4 (BU), P105_4 (BU), P106A_4 (BU), P106C_4 (BU), P106I_4 (BU), P106L_4 (BU), P106M_4 (BU), P107A_4 (BU), P107C_4 (BU), P108C_4 (BU), P14.4_4 (BU), P9.1_4 (BU), PA6_4 (BU), PAD20_4 (BU), PAS50_4 (BU), PHL010M04_04 (BU),

PHL037M02_04 (BU), PHL060L00_04 (BU), PHL067M10_04 (BU), PHL071N05_04 (BU), PHL111M01_04 (BU), PHL112N00_04 (BU), PHL113M01_04 (BU), PHL114L00_04 (BU), Pirate_4 (BU), Procrass1_4 (BU), QueenBey_4 (BU), Rileysaurus_4 (BU), SKKY_4 (BU), Solid_4 (BU), Stormborn_4 (BU), Supernova_4 (BU), Wizzo_4 (BU),

Start 27:

- Found in 33 of 258 (12.8%) of genes in pham
- Manual Annotations of this start: 22 of 212
- Called 72.7% of time when present
- Phage (with cluster) where this start called: Asapag_5 (DN1), BENTherdunthat_5 (DN1), BotCity_5 (DN), Budski_5 (DN), CheeseTouch_5 (DN1), Frickyeh_5 (DN1), Getalong_5 (DN1), Holliday_5 (DN1), Horus_5 (DN1), InLimbo_4 (DH), Kamaru_5 (DN1), Kenna_5 (DN1), Leroy_5 (DN1), LitninMcQueen_5 (DN1), Lucky10_4 (DH), Lutum_5 (DN1), Morkie_4 (DH), Periwinkle_5 (DN1), Phabuloso_5 (DN1), Phistory_5 (DN1), PhorbesPhlower_4 (DH), ShawBrad_5 (DN1), Spooky_5 (DN2), Squiddly_6 (DN2),

Start 28:

- Found in 8 of 258 (3.1%) of genes in pham
- Manual Annotations of this start: 8 of 212
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Apricot_4 (DN3), BearBQ_4 (DN), Birdsong_4 (DN), Crater_4 (DN3), Ecliptus_5 (DN), Kuwabara_4 (DN4), MortyNRick_4 (DN), ODay_5 (DN),

Start 31:

- Found in 9 of 258 (3.5%) of genes in pham
- Manual Annotations of this start: 7 of 212
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Avani_5 (F2), Blarby_6 (F), Che9d_5 (F2), Demsculpinboyz_5 (F2), Jabbawokkie_6 (F2), Ogopogo_6 (F1), Yoshi_5 (F2), Zapner_6 (F2),

Start 34:

- Found in 1 of 258 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 212
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pitbull_4 (FQ1),

Start 43:

- Found in 17 of 258 (6.6%) of genes in pham
- Manual Annotations of this start: 1 of 212
- Called 5.9% of time when present
- Phage (with cluster) where this start called: NoShow_4 (AB),

Start 44:

- Found in 5 of 258 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 212
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Muddy_7 (AB),

Start 45:

- Found in 9 of 258 (3.5%) of genes in pham
- Manual Annotations of this start: 1 of 212
- Called 11.1% of time when present
- Phage (with cluster) where this start called: Soul22_5 (F2),

Start 46:

- Found in 1 of 258 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: phiSASD1_24 (BJ),

Start 70:

- Found in 44 of 258 (17.1%) of genes in pham
- Manual Annotations of this start: 1 of 212
- Called 2.3% of time when present
- Phage (with cluster) where this start called: Whitney_5 (DN1),

Start 89:

- Found in 10 of 258 (3.9%) of genes in pham
- Manual Annotations of this start: 1 of 212
- Called 10.0% of time when present
- Phage (with cluster) where this start called: JacoRen57_4 (AB),

Start 116:

- Found in 61 of 258 (23.6%) of genes in pham
- Manual Annotations of this start: 1 of 212
- Called 6.6% of time when present
- Phage (with cluster) where this start called: 8UZL_7 (AB), LongHai_8 (AB), Maco6_5 (AB), Salvus_8 (AB),

Summary by clusters:

There are 27 clusters represented in this pham: DN, singleton, DH, BJ, BU, DN4, DN1, DN3, DN2, DU1, DU2, AB, EH, F, L4, L5, L2, L3, L1, AZ, F1, F2, AZ3, AZ2, FQ1, AZ4, AZ5,

Info for manual annotations of cluster AB:

- Start number 43 was manually annotated 1 time for cluster AB.
- Start number 44 was manually annotated 1 time for cluster AB.
- Start number 89 was manually annotated 1 time for cluster AB.
- Start number 116 was manually annotated 1 time for cluster AB.

Info for manual annotations of cluster AZ:

- Start number 13 was manually annotated 1 time for cluster AZ.

Info for manual annotations of cluster AZ2:

- Start number 13 was manually annotated 4 times for cluster AZ2.

Info for manual annotations of cluster AZ3:

- Start number 13 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster AZ4:

- Start number 13 was manually annotated 8 times for cluster AZ4.

Info for manual annotations of cluster AZ5:

- Start number 10 was manually annotated 16 times for cluster AZ5.

Info for manual annotations of cluster BU:

- Start number 25 was manually annotated 45 times for cluster BU.

Info for manual annotations of cluster DH:

- Start number 27 was manually annotated 3 times for cluster DH.

Info for manual annotations of cluster DN:

- Start number 27 was manually annotated 2 times for cluster DN.
- Start number 28 was manually annotated 5 times for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 27 was manually annotated 15 times for cluster DN1.
- Start number 70 was manually annotated 1 time for cluster DN1.

Info for manual annotations of cluster DN2:

- Start number 27 was manually annotated 2 times for cluster DN2.

Info for manual annotations of cluster DN3:

- Start number 28 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:

- Start number 28 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster DU1:

- Start number 5 was manually annotated 1 time for cluster DU1.
- Start number 6 was manually annotated 3 times for cluster DU1.

Info for manual annotations of cluster DU2:

- Start number 4 was manually annotated 4 times for cluster DU2.

Info for manual annotations of cluster EH:

- Start number 8 was manually annotated 1 time for cluster EH.
- Start number 9 was manually annotated 1 time for cluster EH.
- Start number 10 was manually annotated 1 time for cluster EH.
- Start number 11 was manually annotated 2 times for cluster EH.

Info for manual annotations of cluster F1:

- Start number 31 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster F2:

- Start number 31 was manually annotated 6 times for cluster F2.
- Start number 45 was manually annotated 1 time for cluster F2.

Info for manual annotations of cluster FQ1:

- Start number 34 was manually annotated 1 time for cluster FQ1.

Info for manual annotations of cluster L1:

- Start number 3 was manually annotated 19 times for cluster L1.

Info for manual annotations of cluster L2:

- Start number 3 was manually annotated 32 times for cluster L2.

Info for manual annotations of cluster L3:

- Start number 3 was manually annotated 19 times for cluster L3.

Info for manual annotations of cluster L4:

- Start number 3 was manually annotated 6 times for cluster L4.

Info for manual annotations of cluster L5:

- Start number 3 was manually annotated 2 times for cluster L5.

Gene Information:

Gene: 8UZL_7 Start: 5062, Stop: 5550, Start Num: 116

Candidate Starts for 8UZL_7:

(Start: 44 @4843 has 1 MA's), (60, 4900), (Start: 116 @5062 has 1 MA's), (168, 5263), (174, 5299), (180, 5329), (183, 5335), (189, 5350), (195, 5374), (209, 5416), (224, 5473), (235, 5530),

Gene: ATCC29399BC_4 Start: 3218, Stop: 3973, Start Num: 25

Candidate Starts for ATCC29399BC_4:

(Start: 25 @3218 has 45 MA's), (36, 3242), (55, 3311), (59, 3320), (66, 3338), (72, 3356), (75, 3362), (80, 3368), (82, 3374), (93, 3407), (96, 3422), (100, 3440), (105, 3461), (107, 3467), (Start: 116 @3497 has 1 MA's), (120, 3518), (124, 3524), (125, 3527), (138, 3569), (146, 3596), (162, 3659), (166, 3692), (167, 3695), (175, 3734), (177, 3740), (204, 3818), (226, 3914), (231, 3938), (233, 3947), (236, 3965),

Gene: ATCC29399BT_4 Start: 3225, Stop: 3980, Start Num: 25

Candidate Starts for ATCC29399BT_4:

(Start: 25 @3225 has 45 MA's), (59, 3327), (66, 3345), (72, 3363), (75, 3369), (82, 3381), (93, 3414), (103, 3456), (105, 3468), (107, 3474), (Start: 116 @3504 has 1 MA's), (125, 3534), (138, 3576), (144, 3600), (146, 3603), (151, 3624), (162, 3666), (166, 3699), (167, 3702), (204, 3825), (226, 3921), (231, 3945), (233, 3954), (236, 3972),

Gene: AceofSpades_4 Start: 3676, Stop: 4473, Start Num: 13

Candidate Starts for AceofSpades_4:

(Start: 13 @3676 has 15 MA's), (58, 3832), (65, 3850), (81, 3883), (129, 4036), (147, 4102), (166, 4186), (196, 4318),

Gene: Acquire49_6 Start: 4320, Stop: 5375, Start Num: 3

Candidate Starts for Acquire49_6:

(Start: 3 @4320 has 78 MA's), (38, 4458), (41, 4470), (77, 4575), (83, 4587), (93, 4626), (94, 4629), (101, 4665), (118, 4731), (123, 4746), (129, 4761), (139, 4803), (167, 4905), (201, 5040), (208, 5064), (237, 5205), (240, 5232), (243, 5241),

Gene: Aegeus_6 Start: 3860, Stop: 4954, Start Num: 3

Candidate Starts for Aegeus_6:

(Start: 3 @3860 has 78 MA's), (15, 3914), (22, 3941), (32, 3983), (35, 3986), (38, 3992), (Start: 70 @4094 has 1 MA's), (77, 4109), (85, 4130), (92, 4151), (100, 4193), (101, 4199), (120, 4274), (121, 4277), (129, 4307), (131, 4313), (133, 4325), (162, 4475), (166, 4508), (167, 4511), (171, 4535), (176,

4568), (187, 4598), (198, 4631), (217, 4694), (233, 4781),

Gene: Appletree2_6 Start: 4294, Stop: 5349, Start Num: 3

Candidate Starts for Appletree2_6:

(Start: 3 @4294 has 78 MA's), (38, 4432), (41, 4444), (77, 4549), (83, 4561), (93, 4600), (94, 4603), (101, 4639), (118, 4705), (123, 4720), (129, 4735), (139, 4777), (167, 4879), (201, 5014), (208, 5038), (237, 5179), (240, 5206), (243, 5215),

Gene: Apricot_4 Start: 3576, Stop: 4232, Start Num: 28

Candidate Starts for Apricot_4:

(Start: 27 @3573 has 22 MA's), (Start: 28 @3576 has 8 MA's), (Start: 70 @3696 has 1 MA's), (71, 3699), (91, 3741), (102, 3792), (112, 3822), (140, 3918), (141, 3921), (159, 3975), (160, 3984), (166, 4020), (169, 4041), (186, 4125), (188, 4128), (190, 4134),

Gene: Aquarius_4 Start: 3218, Stop: 3973, Start Num: 25

Candidate Starts for Aquarius_4:

(Start: 25 @3218 has 45 MA's), (36, 3242), (59, 3320), (66, 3338), (72, 3356), (75, 3362), (80, 3368), (82, 3374), (93, 3407), (96, 3422), (103, 3449), (105, 3461), (107, 3467), (Start: 116 @3497 has 1 MA's), (120, 3518), (124, 3524), (125, 3527), (129, 3548), (138, 3569), (146, 3596), (162, 3659), (166, 3692), (167, 3695), (204, 3818), (226, 3914), (231, 3938), (233, 3947), (236, 3965),

Gene: ArV2_04 Start: 3209, Stop: 4093, Start Num: 14

Candidate Starts for ArV2_04:

(14, 3209), (19, 3230), (39, 3293), (41, 3302), (52, 3347), (69, 3389), (Start: 70 @3392 has 1 MA's), (87, 3434), (107, 3521), (115, 3545), (130, 3608), (134, 3626), (137, 3638), (150, 3686), (161, 3737), (164, 3758), (178, 3845), (179, 3848), (223, 4007), (234, 4067),

Gene: Archie_6 Start: 4276, Stop: 5343, Start Num: 3

Candidate Starts for Archie_6:

(Start: 3 @4276 has 78 MA's), (Start: 9 @4333 has 1 MA's), (38, 4429), (77, 4546), (83, 4558), (95, 4603), (101, 4636), (118, 4702), (129, 4732), (139, 4774), (142, 4783), (167, 4876), (169, 4894), (201, 5011), (208, 5035), (212, 5044), (237, 5176), (240, 5203),

Gene: Asapag_5 Start: 3599, Stop: 4243, Start Num: 27

Candidate Starts for Asapag_5:

(Start: 27 @3599 has 22 MA's), (40, 3629), (41, 3632), (56, 3686), (Start: 70 @3722 has 1 MA's), (71, 3725), (78, 3737), (91, 3767), (99, 3809), (110, 3842), (140, 3944), (141, 3947), (142, 3950), (169, 4070), (191, 4154), (193, 4160),

Gene: Ashes_4 Start: 3879, Stop: 4673, Start Num: 10

Candidate Starts for Ashes_4:

(Start: 10 @3879 has 18 MA's), (22, 3921), (Start: 43 @3987 has 1 MA's), (49, 4017), (53, 4029), (129, 4248), (134, 4269), (145, 4311), (162, 4365), (166, 4398), (169, 4419), (219, 4611),

Gene: Attacne_4 Start: 3213, Stop: 3968, Start Num: 25

Candidate Starts for Attacne_4:

(Start: 25 @3213 has 45 MA's), (36, 3237), (55, 3306), (59, 3315), (66, 3333), (72, 3351), (75, 3357), (80, 3363), (82, 3369), (93, 3402), (96, 3417), (100, 3435), (105, 3456), (107, 3462), (Start: 116 @3492 has 1 MA's), (120, 3513), (125, 3522), (138, 3564), (146, 3591), (162, 3654), (166, 3687), (167, 3690), (204, 3813), (226, 3909), (231, 3933), (233, 3942), (236, 3960),

Gene: AvadaKedavra_6 Start: 4320, Stop: 5375, Start Num: 3

Candidate Starts for AvadaKedavra_6:

(Start: 3 @4320 has 78 MA's), (38, 4458), (41, 4470), (77, 4575), (83, 4587), (93, 4626), (94, 4629), (101, 4665), (118, 4731), (123, 4746), (129, 4761), (139, 4803), (167, 4905), (201, 5040), (208, 5064), (237, 5205), (240, 5232), (243, 5241),

Gene: Avani_5 Start: 3585, Stop: 4229, Start Num: 31

Candidate Starts for Avani_5:

(26, 3570), (Start: 31 @3585 has 7 MA's), (Start: 45 @3618 has 1 MA's), (56, 3660), (63, 3675), (68, 3687), (Start: 70 @3696 has 1 MA's), (78, 3711), (Start: 89 @3735 has 1 MA's), (99, 3783), (121, 3864), (129, 3885), (134, 3906), (160, 3996), (166, 4035), (169, 4056), (191, 4137), (193, 4143), (211, 4197),

Gene: BENtherdunthat_5 Start: 3599, Stop: 4243, Start Num: 27

Candidate Starts for BENtherdunthat_5:

(Start: 27 @3599 has 22 MA's), (40, 3629), (41, 3632), (56, 3686), (Start: 70 @3722 has 1 MA's), (71, 3725), (78, 3737), (91, 3767), (99, 3809), (110, 3842), (140, 3944), (141, 3947), (142, 3950), (169, 4070), (191, 4154), (193, 4160),

Gene: Baoshan_5 Start: 4143, Stop: 5198, Start Num: 3

Candidate Starts for Baoshan_5:

(Start: 3 @4143 has 78 MA's), (Start: 9 @4191 has 1 MA's), (32, 4278), (77, 4404), (83, 4416), (95, 4461), (101, 4494), (118, 4560), (129, 4590), (139, 4632), (142, 4641), (167, 4734), (169, 4752), (201, 4869), (208, 4893), (212, 4902), (229, 4980), (237, 5031), (240, 5058), (243, 5067),

Gene: Baudelaire_6 Start: 3860, Stop: 4954, Start Num: 3

Candidate Starts for Baudelaire_6:

(Start: 3 @3860 has 78 MA's), (15, 3914), (22, 3941), (32, 3983), (35, 3986), (38, 3992), (Start: 70 @4094 has 1 MA's), (77, 4109), (85, 4130), (92, 4151), (100, 4193), (101, 4199), (120, 4274), (121, 4277), (129, 4307), (131, 4313), (133, 4325), (162, 4475), (166, 4508), (167, 4511), (171, 4535), (176, 4568), (187, 4598), (198, 4631), (217, 4694), (233, 4781),

Gene: Bazzle_6 Start: 4252, Stop: 5319, Start Num: 3

Candidate Starts for Bazzle_6:

(Start: 3 @4252 has 78 MA's), (Start: 9 @4309 has 1 MA's), (38, 4405), (77, 4522), (83, 4534), (95, 4579), (101, 4612), (118, 4678), (129, 4708), (139, 4750), (142, 4759), (167, 4852), (169, 4870), (201, 4987), (208, 5011), (212, 5020), (237, 5152), (240, 5179),

Gene: BearBQ_4 Start: 3576, Stop: 4232, Start Num: 28

Candidate Starts for BearBQ_4:

(Start: 27 @3573 has 22 MA's), (Start: 28 @3576 has 8 MA's), (Start: 70 @3696 has 1 MA's), (71, 3699), (91, 3741), (102, 3792), (112, 3822), (140, 3918), (141, 3921), (159, 3975), (160, 3984), (166, 4020), (169, 4041), (186, 4125), (188, 4128), (190, 4134),

Gene: Beaupre_4 Start: 3879, Stop: 4673, Start Num: 10

Candidate Starts for Beaupre_4:

(Start: 10 @3879 has 18 MA's), (22, 3921), (Start: 43 @3987 has 1 MA's), (49, 4017), (53, 4029), (88, 4110), (122, 4230), (129, 4248), (134, 4269), (145, 4311), (162, 4365), (166, 4398), (169, 4419), (219, 4611),

Gene: Bellis_7 Start: 4412, Stop: 5482, Start Num: 3

Candidate Starts for Bellis_7:

(Start: 3 @4412 has 78 MA's), (12, 4460), (15, 4469), (22, 4496), (38, 4547), (61, 4625), (77, 4664), (83, 4676), (101, 4754), (108, 4778), (118, 4820), (129, 4850), (167, 5018), (169, 5036), (201, 5153), (208, 5177), (228, 5264), (240, 5345),

Gene: BigCheese_6 Start: 4311, Stop: 5369, Start Num: 3

Candidate Starts for BigCheese_6:

(Start: 3 @4311 has 78 MA's), (Start: 9 @4359 has 1 MA's), (77, 4572), (83, 4584), (95, 4629), (101, 4662), (118, 4728), (129, 4758), (139, 4800), (142, 4809), (167, 4902), (169, 4920), (201, 5037), (208, 5061), (212, 5070), (237, 5202), (240, 5229),

Gene: Birdsong_4 Start: 3576, Stop: 4232, Start Num: 28

Candidate Starts for Birdsong_4:

(Start: 27 @3573 has 22 MA's), (Start: 28 @3576 has 8 MA's), (Start: 70 @3696 has 1 MA's), (71, 3699), (91, 3741), (102, 3792), (112, 3822), (140, 3918), (141, 3921), (159, 3975), (160, 3984), (166, 4020), (169, 4041), (186, 4125), (188, 4128), (190, 4134),

Gene: Blarby_6 Start: 4110, Stop: 4754, Start Num: 31

Candidate Starts for Blarby_6:

(26, 4095), (Start: 31 @4110 has 7 MA's), (Start: 45 @4143 has 1 MA's), (56, 4185), (63, 4200), (68, 4212), (Start: 70 @4221 has 1 MA's), (76, 4233), (78, 4236), (Start: 89 @4260 has 1 MA's), (99, 4308), (118, 4377), (121, 4389), (129, 4410), (134, 4431), (160, 4521), (166, 4560), (169, 4581), (191, 4662), (193, 4668), (211, 4722),

Gene: BobsGarage_6 Start: 4311, Stop: 5369, Start Num: 3

Candidate Starts for BobsGarage_6:

(Start: 3 @4311 has 78 MA's), (Start: 9 @4359 has 1 MA's), (77, 4572), (83, 4584), (95, 4629), (101, 4662), (118, 4728), (129, 4758), (139, 4800), (142, 4809), (167, 4902), (169, 4920), (201, 5037), (208, 5061), (212, 5070), (237, 5202), (240, 5229),

Gene: BotCity_5 Start: 3597, Stop: 4241, Start Num: 27

Candidate Starts for BotCity_5:

(Start: 27 @3597 has 22 MA's), (40, 3627), (41, 3630), (56, 3684), (Start: 70 @3720 has 1 MA's), (71, 3723), (78, 3735), (91, 3765), (99, 3807), (110, 3840), (140, 3942), (141, 3945), (142, 3948), (169, 4068), (191, 4152), (193, 4158),

Gene: BourbonZero_6 Start: 4417, Stop: 5487, Start Num: 3

Candidate Starts for BourbonZero_6:

(Start: 3 @4417 has 78 MA's), (12, 4465), (15, 4474), (22, 4501), (38, 4552), (61, 4630), (77, 4669), (83, 4681), (101, 4759), (108, 4783), (118, 4825), (129, 4855), (169, 5041), (201, 5158), (208, 5182), (240, 5350),

Gene: BrainDrainer_7 Start: 4133, Stop: 5182, Start Num: 3

Candidate Starts for BrainDrainer_7:

(Start: 3 @4133 has 78 MA's), (37, 4268), (38, 4271), (77, 4388), (83, 4400), (101, 4478), (115, 4526), (118, 4544), (129, 4574), (139, 4616), (142, 4625), (153, 4649), (167, 4718), (169, 4736), (201, 4853), (208, 4877), (212, 4886), (237, 5015), (240, 5042), (246, 5102), (247, 5105),

Gene: Breezona_6 Start: 4311, Stop: 5369, Start Num: 3

Candidate Starts for Breezona_6:

(Start: 3 @4311 has 78 MA's), (Start: 9 @4359 has 1 MA's), (77, 4572), (83, 4584), (95, 4629), (101, 4662), (118, 4728), (129, 4758), (139, 4800), (142, 4809), (167, 4902), (169, 4920), (201, 5037), (208, 5061), (212, 5070), (237, 5202), (240, 5229),

Gene: Bromden_6 Start: 4032, Stop: 5087, Start Num: 3

Candidate Starts for Bromden_6:

(2, 4026), (Start: 3 @4032 has 78 MA's), (29, 4161), (77, 4293), (83, 4305), (101, 4383), (115, 4431), (118, 4449), (129, 4479), (139, 4521), (167, 4623), (169, 4641), (201, 4758), (208, 4782), (212, 4791), (237, 4920), (240, 4947), (246, 5007),

Gene: BruceLethal_4 Start: 3210, Stop: 3965, Start Num: 25

Candidate Starts for BruceLethal_4:

(Start: 25 @3210 has 45 MA's), (30, 3225), (59, 3312), (66, 3330), (72, 3348), (75, 3354), (80, 3360), (82, 3366), (93, 3399), (96, 3414), (100, 3432), (105, 3453), (107, 3459), (Start: 116 @3489 has 1 MA's), (120, 3510), (138, 3561), (144, 3585), (146, 3588), (162, 3651), (166, 3684), (204, 3810), (226, 3906), (231, 3930), (233, 3939), (236, 3957),

Gene: Budski_5 Start: 3597, Stop: 4241, Start Num: 27

Candidate Starts for Budski_5:

(Start: 27 @3597 has 22 MA's), (40, 3627), (49, 3663), (56, 3684), (68, 3711), (Start: 70 @3720 has 1 MA's), (71, 3723), (78, 3735), (99, 3807), (137, 3930), (140, 3942), (141, 3945), (142, 3948), (169, 4068), (191, 4152), (193, 4158),

Gene: Calm_6 Start: 4321, Stop: 5376, Start Num: 3

Candidate Starts for Calm_6:

(Start: 3 @4321 has 78 MA's), (38, 4459), (41, 4471), (77, 4576), (83, 4588), (93, 4627), (94, 4630), (101, 4666), (118, 4732), (123, 4747), (129, 4762), (139, 4804), (167, 4906), (201, 5041), (208, 5065), (237, 5206), (240, 5233), (243, 5242),

Gene: Cappuccino_4 Start: 3875, Stop: 4669, Start Num: 10

Candidate Starts for Cappuccino_4:

(Start: 10 @3875 has 18 MA's), (22, 3917), (Start: 43 @3983 has 1 MA's), (49, 4013), (53, 4025), (129, 4244), (134, 4265), (145, 4307), (166, 4394), (169, 4415), (173, 4433), (219, 4607),

Gene: Cen1621_4 Start: 3740, Stop: 4483, Start Num: 11

Candidate Starts for Cen1621_4:

(Start: 11 @3740 has 2 MA's), (22, 3779), (61, 3908), (88, 3968), (96, 3998), (134, 4136), (140, 4160), (162, 4229), (166, 4262), (180, 4337), (184, 4346),

Gene: Chaser_6 Start: 4033, Stop: 5088, Start Num: 3

Candidate Starts for Chaser_6:

(2, 4027), (Start: 3 @4033 has 78 MA's), (29, 4162), (38, 4177), (77, 4294), (83, 4306), (101, 4384), (115, 4432), (118, 4450), (129, 4480), (139, 4522), (153, 4555), (167, 4624), (169, 4642), (201, 4759), (208, 4783), (212, 4792), (237, 4921), (240, 4948), (246, 5008), (247, 5011),

Gene: Che9d_5 Start: 3595, Stop: 4239, Start Num: 31

Candidate Starts for Che9d_5:

(Start: 31 @3595 has 7 MA's), (Start: 45 @3628 has 1 MA's), (56, 3670), (63, 3685), (68, 3697), (Start: 70 @3706 has 1 MA's), (76, 3718), (78, 3721), (Start: 89 @3745 has 1 MA's), (99, 3793), (118, 3862), (121, 3874), (129, 3895), (134, 3916), (160, 4006), (166, 4045), (169, 4066), (191, 4147), (193, 4153), (211, 4207),

Gene: CheeseTouch_5 Start: 3597, Stop: 4241, Start Num: 27

Candidate Starts for CheeseTouch_5:

(Start: 27 @3597 has 22 MA's), (40, 3627), (49, 3663), (56, 3684), (68, 3711), (Start: 70 @3720 has 1 MA's), (71, 3723), (78, 3735), (99, 3807), (137, 3930), (140, 3942), (141, 3945), (142, 3948), (169, 4068), (191, 4152), (193, 4158),

Gene: ChengKai98_6 Start: 4311, Stop: 5369, Start Num: 3

Candidate Starts for ChengKai98_6:

(Start: 3 @4311 has 78 MA's), (Start: 9 @4359 has 1 MA's), (77, 4572), (83, 4584), (95, 4629), (101, 4662), (118, 4728), (129, 4758), (139, 4800), (142, 4809), (167, 4902), (169, 4920), (201, 5037), (208, 5061), (212, 5070), (237, 5202), (240, 5229),

Gene: ChutneyChips_6 Start: 4033, Stop: 5085, Start Num: 3

Candidate Starts for ChutneyChips_6:

(Start: 3 @4033 has 78 MA's), (29, 4159), (38, 4174), (77, 4291), (83, 4303), (101, 4381), (115, 4429), (118, 4447), (129, 4477), (139, 4519), (153, 4552), (167, 4621), (169, 4639), (201, 4756), (208, 4780), (212, 4789), (237, 4918), (240, 4945), (246, 5005), (247, 5008),

Gene: CicholasNage_6 Start: 4321, Stop: 5376, Start Num: 3

Candidate Starts for CicholasNage_6:

(Start: 3 @4321 has 78 MA's), (38, 4459), (41, 4471), (77, 4576), (83, 4588), (93, 4627), (94, 4630), (101, 4666), (118, 4732), (123, 4747), (129, 4762), (139, 4804), (167, 4906), (201, 5041), (208, 5065), (237, 5206), (240, 5233), (243, 5242),

Gene: Claus_6 Start: 4323, Stop: 5378, Start Num: 3

Candidate Starts for Claus_6:

(Start: 3 @4323 has 78 MA's), (Start: 9 @4371 has 1 MA's), (32, 4458), (77, 4584), (83, 4596), (95, 4641), (101, 4674), (118, 4740), (129, 4770), (139, 4812), (142, 4821), (167, 4914), (169, 4932), (201, 5049), (208, 5073), (212, 5082), (229, 5160), (237, 5211), (240, 5238), (243, 5247),

Gene: Clautastrophe_7 Start: 4416, Stop: 5486, Start Num: 3

Candidate Starts for Clautastrophe_7:

(Start: 3 @4416 has 78 MA's), (12, 4464), (15, 4473), (22, 4500), (38, 4551), (61, 4629), (77, 4668), (83, 4680), (101, 4758), (108, 4782), (118, 4824), (129, 4854), (167, 5022), (169, 5040), (201, 5157), (208, 5181), (228, 5268), (240, 5349),

Gene: Cota_4 Start: 3218, Stop: 3973, Start Num: 25

Candidate Starts for Cota_4:

(Start: 25 @3218 has 45 MA's), (59, 3320), (66, 3338), (72, 3356), (75, 3362), (80, 3368), (82, 3374), (93, 3407), (96, 3422), (100, 3440), (105, 3461), (107, 3467), (Start: 116 @3497 has 1 MA's), (120, 3518), (138, 3569), (146, 3596), (162, 3659), (166, 3692), (167, 3695), (204, 3818), (226, 3914), (231, 3938), (233, 3947), (236, 3965),

Gene: Crater_4 Start: 3576, Stop: 4232, Start Num: 28

Candidate Starts for Crater_4:

(Start: 27 @3573 has 22 MA's), (Start: 28 @3576 has 8 MA's), (Start: 70 @3696 has 1 MA's), (71, 3699), (91, 3741), (102, 3792), (112, 3822), (140, 3918), (141, 3921), (159, 3975), (160, 3984), (166, 4020), (169, 4041), (186, 4125), (188, 4128), (190, 4134),

Gene: Crossroads_6 Start: 4311, Stop: 5369, Start Num: 3

Candidate Starts for Crossroads_6:

(Start: 3 @4311 has 78 MA's), (Start: 9 @4359 has 1 MA's), (77, 4572), (83, 4584), (95, 4629), (101, 4662), (118, 4728), (129, 4758), (139, 4800), (142, 4809), (167, 4902), (169, 4920), (201, 5037), (208, 5061), (212, 5070), (237, 5202), (240, 5229),

Gene: DHan_6 Start: 4259, Stop: 5314, Start Num: 3

Candidate Starts for DHan_6:

(Start: 3 @4259 has 78 MA's), (Start: 9 @4307 has 1 MA's), (77, 4520), (83, 4532), (101, 4610), (118, 4676), (129, 4706), (139, 4748), (142, 4757), (167, 4850), (201, 4985), (208, 5009), (212, 5018), (229, 5096), (237, 5147), (240, 5174), (243, 5183),

Gene: DanBing_5 Start: 4143, Stop: 5198, Start Num: 3

Candidate Starts for DanBing_5:

(Start: 3 @4143 has 78 MA's), (Start: 9 @4191 has 1 MA's), (77, 4404), (83, 4416), (95, 4461), (101, 4494), (118, 4560), (129, 4590), (139, 4632), (142, 4641), (167, 4734), (169, 4752), (201, 4869), (208, 4893), (212, 4902), (229, 4980), (237, 5031), (240, 5058), (243, 5067),

Gene: Demsculpinboyz_5 Start: 3586, Stop: 4230, Start Num: 31

Candidate Starts for Demsculpinboyz_5:

(26, 3571), (Start: 31 @3586 has 7 MA's), (Start: 45 @3619 has 1 MA's), (56, 3661), (63, 3676), (68, 3688), (Start: 70 @3697 has 1 MA's), (76, 3709), (78, 3712), (Start: 89 @3736 has 1 MA's), (99, 3784), (118, 3853), (121, 3865), (129, 3886), (134, 3907), (160, 3997), (166, 4036), (169, 4057), (191, 4138), (193, 4144), (211, 4198),

Gene: DirkDirk_6 Start: 4322, Stop: 5377, Start Num: 3

Candidate Starts for DirkDirk_6:

(Start: 3 @4322 has 78 MA's), (38, 4460), (41, 4472), (77, 4577), (83, 4589), (93, 4628), (94, 4631), (101, 4667), (118, 4733), (123, 4748), (129, 4763), (139, 4805), (167, 4907), (201, 5042), (208, 5066), (237, 5207), (240, 5234), (243, 5243),

Gene: Donkey_4 Start: 3875, Stop: 4669, Start Num: 10

Candidate Starts for Donkey_4:

(Start: 10 @3875 has 18 MA's), (22, 3917), (Start: 43 @3983 has 1 MA's), (49, 4013), (53, 4025), (129, 4244), (134, 4265), (145, 4307), (166, 4394), (169, 4415), (173, 4433), (219, 4607),

Gene: Douge_6 Start: 3988, Stop: 5043, Start Num: 3

Candidate Starts for Douge_6:

(2, 3982), (Start: 3 @3988 has 78 MA's), (37, 4129), (38, 4132), (77, 4249), (83, 4261), (101, 4339), (115, 4387), (118, 4405), (129, 4435), (139, 4477), (142, 4486), (153, 4510), (167, 4579), (169, 4597), (201, 4714), (208, 4738), (212, 4747), (237, 4876), (240, 4903), (246, 4963), (247, 4966),

Gene: Douzhi_6 Start: 3988, Stop: 5043, Start Num: 3

Candidate Starts for Douzhi_6:

(2, 3982), (Start: 3 @3988 has 78 MA's), (29, 4117), (38, 4132), (77, 4249), (83, 4261), (101, 4339), (115, 4387), (118, 4405), (129, 4435), (139, 4477), (153, 4510), (167, 4579), (169, 4597), (201, 4714), (208, 4738), (212, 4747), (237, 4876), (240, 4903), (246, 4963), (247, 4966),

Gene: DrParker_4 Start: 3218, Stop: 3973, Start Num: 25

Candidate Starts for DrParker_4:

(24, 3215), (Start: 25 @3218 has 45 MA's), (30, 3233), (59, 3320), (66, 3338), (72, 3356), (75, 3362), (80, 3368), (82, 3374), (93, 3407), (96, 3422), (100, 3440), (103, 3449), (105, 3461), (107, 3467), (Start: 116 @3497 has 1 MA's), (120, 3518), (138, 3569), (146, 3596), (162, 3659), (166, 3692), (167, 3695), (204, 3818), (226, 3914), (231, 3938), (233, 3947), (236, 3965),

Gene: DrSeegs_6 Start: 4311, Stop: 5369, Start Num: 3

Candidate Starts for DrSeegs_6:

(Start: 3 @4311 has 78 MA's), (Start: 9 @4359 has 1 MA's), (77, 4572), (83, 4584), (95, 4629), (101, 4662), (118, 4728), (129, 4758), (139, 4800), (142, 4809), (167, 4902), (169, 4920), (201, 5037), (208, 5061), (212, 5070), (237, 5202), (240, 5229),

Gene: DuncansLeg_7 Start: 4419, Stop: 5489, Start Num: 3

Candidate Starts for DuncansLeg_7:

(Start: 3 @4419 has 78 MA's), (12, 4467), (15, 4476), (22, 4503), (38, 4554), (61, 4632), (77, 4671), (83, 4683), (101, 4761), (108, 4785), (118, 4827), (129, 4857), (169, 5043), (201, 5160), (208, 5184), (240, 5352),

Gene: DyoEdafos_7 Start: 4176, Stop: 5231, Start Num: 3

Candidate Starts for DyoEdafos_7:

(2, 4170), (Start: 3 @4176 has 78 MA's), (29, 4305), (77, 4437), (83, 4449), (101, 4527), (115, 4575), (118, 4593), (129, 4623), (139, 4665), (153, 4698), (167, 4767), (169, 4785), (201, 4902), (208, 4926), (237, 5064), (240, 5091), (246, 5151),

Gene: Ecliptus_5 Start: 3608, Stop: 4267, Start Num: 28

Candidate Starts for Ecliptus_5:

(Start: 10 @3533 has 18 MA's), (Start: 28 @3608 has 8 MA's), (71, 3731), (78, 3743), (91, 3773), (98, 3809), (138, 3944), (141, 3956), (160, 4019), (166, 4055), (167, 4058), (194, 4184),

Gene: Ellson_7 Start: 4428, Stop: 5498, Start Num: 3

Candidate Starts for Ellson_7:

(Start: 3 @4428 has 78 MA's), (12, 4476), (15, 4485), (22, 4512), (38, 4563), (61, 4641), (77, 4680), (83, 4692), (101, 4770), (108, 4794), (118, 4836), (129, 4866), (169, 5052), (201, 5169), (208, 5193), (240, 5361),

Gene: Emotion_4 Start: 3677, Stop: 4474, Start Num: 13

Candidate Starts for Emotion_4:

(Start: 13 @3677 has 15 MA's), (38, 3761), (81, 3884), (90, 3908), (97, 3935), (147, 4103), (166, 4187), (173, 4226), (196, 4319),

Gene: Enceladus_6 Start: 4322, Stop: 5377, Start Num: 3

Candidate Starts for Enceladus_6:

(Start: 3 @4322 has 78 MA's), (38, 4460), (41, 4472), (77, 4577), (83, 4589), (93, 4628), (94, 4631), (101, 4667), (118, 4733), (123, 4748), (129, 4763), (139, 4805), (167, 4907), (201, 5042), (208, 5066), (237, 5207), (240, 5234), (243, 5243),

Gene: Enochoraptor_4 Start: 3225, Stop: 3980, Start Num: 25

Candidate Starts for Enochoraptor_4:

(Start: 25 @3225 has 45 MA's), (59, 3327), (66, 3345), (72, 3363), (75, 3369), (80, 3375), (82, 3381), (93, 3414), (96, 3429), (100, 3447), (103, 3456), (105, 3468), (107, 3474), (Start: 116 @3504 has 1 MA's), (120, 3525), (138, 3576), (146, 3603), (162, 3666), (166, 3699), (167, 3702), (204, 3825), (226, 3921), (231, 3945), (233, 3954), (236, 3972),

Gene: Enoki_4 Start: 3210, Stop: 3965, Start Num: 25

Candidate Starts for Enoki_4:

(Start: 25 @3210 has 45 MA's), (30, 3225), (59, 3312), (66, 3330), (72, 3348), (75, 3354), (80, 3360), (82, 3366), (93, 3399), (96, 3414), (100, 3432), (103, 3441), (105, 3453), (107, 3459), (Start: 116 @3489 has 1 MA's), (120, 3510), (125, 3519), (138, 3561), (146, 3588), (162, 3651), (166, 3684), (167, 3687), (204, 3810), (226, 3906), (231, 3930), (233, 3939), (236, 3957),

Gene: Faith1_6 Start: 4311, Stop: 5369, Start Num: 3

Candidate Starts for Faith1_6:

(Start: 3 @4311 has 78 MA's), (Start: 9 @4359 has 1 MA's), (77, 4572), (83, 4584), (95, 4629), (101, 4662), (118, 4728), (129, 4758), (139, 4800), (142, 4809), (167, 4902), (169, 4920), (201, 5037), (208, 5061), (212, 5070), (237, 5202), (240, 5229),

Gene: FarmResident_6 Start: 4027, Stop: 5082, Start Num: 3

Candidate Starts for FarmResident_6:

(2, 4021), (Start: 3 @4027 has 78 MA's), (37, 4168), (38, 4171), (77, 4288), (83, 4300), (101, 4378), (115, 4426), (118, 4444), (129, 4474), (139, 4516), (142, 4525), (153, 4549), (167, 4618), (169, 4636), (201, 4753), (208, 4777), (212, 4786), (237, 4915), (240, 4942), (246, 5002), (247, 5005),

Gene: Finemlucis_6 Start: 4311, Stop: 5369, Start Num: 3

Candidate Starts for Finemlucis_6:

(Start: 3 @4311 has 78 MA's), (Start: 9 @4359 has 1 MA's), (77, 4572), (83, 4584), (95, 4629), (101, 4662), (118, 4728), (129, 4758), (139, 4800), (142, 4809), (167, 4902), (169, 4920), (201, 5037), (208, 5061), (212, 5070), (237, 5202), (240, 5229),

Gene: Finnry_7 Start: 4413, Stop: 5483, Start Num: 3

Candidate Starts for Finnry_7:

(Start: 3 @4413 has 78 MA's), (12, 4461), (15, 4470), (22, 4497), (38, 4548), (61, 4626), (77, 4665), (83, 4677), (101, 4755), (108, 4779), (118, 4821), (129, 4851), (167, 5019), (169, 5037), (201, 5154), (208, 5178), (228, 5265), (240, 5346),

Gene: FiveHead_4 Start: 3658, Stop: 4455, Start Num: 13

Candidate Starts for FiveHead_4:

(Start: 13 @3658 has 15 MA's), (58, 3814), (65, 3832), (81, 3865), (129, 4018), (147, 4084), (149, 4090), (166, 4168), (196, 4300),

Gene: Floof_4 Start: 4029, Stop: 4892, Start Num: 9

Candidate Starts for Floof_4:

(Start: 9 @4029 has 1 MA's), (17, 4059), (56, 4191), (134, 4434), (166, 4563), (209, 4731), (227, 4815),

Gene: Footloose_4 Start: 3515, Stop: 4273, Start Num: 10

Candidate Starts for Footloose_4:

(7, 3503), (Start: 10 @3515 has 18 MA's), (57, 3680), (64, 3692), (93, 3767), (94, 3770), (115, 3851), (128, 3899), (135, 3917), (136, 3920), (166, 4019), (203, 4154), (225, 4232),

Gene: Frickyeh_5 Start: 3599, Stop: 4243, Start Num: 27

Candidate Starts for Frickyeh_5:

(Start: 27 @3599 has 22 MA's), (40, 3629), (41, 3632), (56, 3686), (Start: 70 @3722 has 1 MA's), (71, 3725), (78, 3737), (91, 3767), (99, 3809), (110, 3842), (114, 3854), (140, 3944), (141, 3947), (142, 3950), (169, 4070), (191, 4154), (193, 4160),

Gene: Gabriela_6 Start: 4311, Stop: 5369, Start Num: 3

Candidate Starts for Gabriela_6:

(Start: 3 @4311 has 78 MA's), (Start: 9 @4359 has 1 MA's), (77, 4572), (83, 4584), (95, 4629), (101, 4662), (118, 4728), (129, 4758), (139, 4800), (142, 4809), (167, 4902), (169, 4920), (201, 5037), (208, 5061), (212, 5070), (237, 5202), (240, 5229),

Gene: Gambol_4 Start: 3875, Stop: 4669, Start Num: 10

Candidate Starts for Gambol_4:

(Start: 10 @3875 has 18 MA's), (22, 3917), (Start: 43 @3983 has 1 MA's), (49, 4013), (53, 4025), (129, 4244), (134, 4265), (145, 4307), (166, 4394), (169, 4415), (173, 4433), (219, 4607),

Gene: Gardann_6 Start: 4311, Stop: 5369, Start Num: 3

Candidate Starts for Gardann_6:

(Start: 3 @4311 has 78 MA's), (Start: 9 @4359 has 1 MA's), (77, 4572), (83, 4584), (95, 4629), (101, 4662), (118, 4728), (129, 4758), (139, 4800), (142, 4809), (167, 4902), (169, 4920), (201, 5037), (208, 5061), (212, 5070), (237, 5202), (240, 5229),

Gene: Getalong_5 Start: 3599, Stop: 4243, Start Num: 27

Candidate Starts for Getalong_5:

(Start: 27 @3599 has 22 MA's), (40, 3629), (41, 3632), (56, 3686), (Start: 70 @3722 has 1 MA's), (71, 3725), (91, 3767), (99, 3809), (110, 3842), (140, 3944), (141, 3947), (142, 3950), (169, 4070), (191, 4154), (193, 4160),

Gene: Giorgio_4 Start: 3880, Stop: 4674, Start Num: 10

Candidate Starts for Giorgio_4:

(Start: 10 @3880 has 18 MA's), (22, 3922), (Start: 43 @3988 has 1 MA's), (49, 4018), (53, 4030), (122, 4231), (129, 4249), (134, 4270), (145, 4312), (162, 4366), (166, 4399), (169, 4420), (219, 4612),

Gene: Gumpizza_4 Start: 3879, Stop: 4673, Start Num: 10

Candidate Starts for Gumpizza_4:

(Start: 10 @3879 has 18 MA's), (22, 3921), (Start: 43 @3987 has 1 MA's), (49, 4017), (53, 4029), (88, 4110), (122, 4230), (129, 4248), (134, 4269), (145, 4311), (162, 4365), (166, 4398), (169, 4419), (219, 4611),

Gene: GuuelaD_6 Start: 4356, Stop: 5411, Start Num: 3

Candidate Starts for GuuelaD_6:

(Start: 3 @4356 has 78 MA's), (Start: 9 @4404 has 1 MA's), (32, 4491), (77, 4617), (83, 4629), (101, 4707), (118, 4773), (129, 4803), (139, 4845), (142, 4854), (167, 4947), (169, 4965), (201, 5082), (208, 5106), (212, 5115), (222, 5166), (230, 5196), (232, 5211), (240, 5271),

Gene: Hafay_6 Start: 4350, Stop: 5402, Start Num: 3

Candidate Starts for Hafay_6:

(Start: 3 @4350 has 78 MA's), (Start: 9 @4392 has 1 MA's), (77, 4605), (83, 4617), (95, 4662), (101, 4695), (118, 4761), (129, 4791), (139, 4833), (142, 4842), (167, 4935), (169, 4953), (201, 5070), (208, 5094), (212, 5103), (237, 5235), (240, 5262),

Gene: Halena_6 Start: 4321, Stop: 5376, Start Num: 3

Candidate Starts for Halena_6:

(Start: 3 @4321 has 78 MA's), (38, 4459), (41, 4471), (77, 4576), (83, 4588), (93, 4627), (94, 4630), (101, 4666), (118, 4732), (123, 4747), (129, 4762), (139, 4804), (167, 4906), (201, 5041), (208, 5065), (237, 5206), (240, 5233), (243, 5242),

Gene: Halsey_4 Start: 3879, Stop: 4673, Start Num: 10

Candidate Starts for Halsey_4:

(Start: 10 @3879 has 18 MA's), (22, 3921), (Start: 43 @3987 has 1 MA's), (49, 4017), (53, 4029), (129, 4248), (134, 4269), (145, 4311), (162, 4365), (166, 4398), (169, 4419), (219, 4611),

Gene: Hiraya_6 Start: 4311, Stop: 5369, Start Num: 3

Candidate Starts for Hiraya_6:

(Start: 3 @4311 has 78 MA's), (Start: 9 @4359 has 1 MA's), (77, 4572), (83, 4584), (95, 4629), (101, 4662), (118, 4728), (129, 4758), (139, 4800), (142, 4809), (167, 4902), (169, 4920), (201, 5037), (208, 5061), (212, 5070), (237, 5202), (240, 5229),

Gene: Holliday_5 Start: 3597, Stop: 4241, Start Num: 27

Candidate Starts for Holliday_5:

(Start: 27 @3597 has 22 MA's), (40, 3627), (49, 3663), (56, 3684), (68, 3711), (Start: 70 @3720 has 1 MA's), (71, 3723), (78, 3735), (99, 3807), (137, 3930), (140, 3942), (141, 3945), (142, 3948), (169, 4068), (191, 4152), (193, 4158),

Gene: Honk_4 Start: 3779, Stop: 4525, Start Num: 8

Candidate Starts for Honk_4:

(Start: 8 @3779 has 1 MA's), (Start: 11 @3788 has 2 MA's), (17, 3812), (22, 3827), (23, 3839), (24, 3842), (61, 3953), (88, 4013), (104, 4076), (129, 4160), (134, 4181), (162, 4274), (166, 4307), (173, 4346), (209, 4469), (213, 4478),

Gene: Horus_5 Start: 3599, Stop: 4243, Start Num: 27

Candidate Starts for Horus_5:

(Start: 27 @3599 has 22 MA's), (40, 3629), (41, 3632), (56, 3686), (Start: 70 @3722 has 1 MA's), (71, 3725), (78, 3737), (91, 3767), (99, 3809), (110, 3842), (114, 3854), (140, 3944), (141, 3947), (142, 3950), (169, 4070), (191, 4154), (193, 4160),

Gene: IUFootball_4 Start: 3813, Stop: 4607, Start Num: 13

Candidate Starts for IUFootball_4:

(Start: 13 @3813 has 15 MA's), (38, 3897), (81, 4020), (84, 4026), (119, 4143), (122, 4155), (129, 4173), (140, 4218), (147, 4239), (166, 4323), (184, 4407),

Gene: InLimbo_4 Start: 3159, Stop: 3800, Start Num: 27

Candidate Starts for InLimbo_4:

(Start: 27 @3159 has 22 MA's), (Start: 70 @3282 has 1 MA's), (71, 3285), (78, 3297), (91, 3327), (137, 3495), (138, 3498), (140, 3507), (148, 3531), (154, 3546), (166, 3609), (169, 3630), (179, 3681), (193, 3717), (197, 3732), (217, 3795),

Gene: Itos_6 Start: 4311, Stop: 5369, Start Num: 3

Candidate Starts for Itos_6:

(Start: 3 @4311 has 78 MA's), (Start: 9 @4359 has 1 MA's), (77, 4572), (83, 4584), (95, 4629), (101, 4662), (118, 4728), (129, 4758), (139, 4800), (142, 4809), (167, 4902), (169, 4920), (201, 5037), (208, 5061), (212, 5070), (237, 5202), (240, 5229),

Gene: Jabbawokkie_6 Start: 4109, Stop: 4753, Start Num: 31

Candidate Starts for Jabbawokkie_6:

(Start: 31 @4109 has 7 MA's), (Start: 45 @4142 has 1 MA's), (56, 4184), (63, 4199), (68, 4211), (Start: 70 @4220 has 1 MA's), (76, 4232), (78, 4235), (Start: 89 @4259 has 1 MA's), (99, 4307), (118, 4376), (121, 4388), (129, 4409), (134, 4430), (160, 4520), (166, 4559), (169, 4580), (191, 4661), (193, 4667), (211, 4721),

Gene: JacoRen57_4 Start: 3951, Stop: 4562, Start Num: 89

Candidate Starts for JacoRen57_4:

(42, 3834), (67, 3909), (79, 3933), (Start: 89 @3951 has 1 MA's), (91, 3957), (156, 4191), (189, 4344), (195, 4368), (215, 4431), (220, 4461), (225, 4482),

Gene: JasmineDragon_4 Start: 3667, Stop: 4464, Start Num: 13

Candidate Starts for JasmineDragon_4:

(Start: 13 @3667 has 15 MA's), (65, 3841), (81, 3874), (129, 4027), (147, 4093), (166, 4177), (196, 4309),

Gene: Jobypre_7 Start: 4416, Stop: 5486, Start Num: 3

Candidate Starts for Jobypre_7:

(Start: 3 @4416 has 78 MA's), (12, 4464), (15, 4473), (22, 4500), (38, 4551), (61, 4629), (77, 4668), (83, 4680), (101, 4758), (108, 4782), (118, 4824), (129, 4854), (167, 5022), (169, 5040), (201, 5157), (208, 5181), (228, 5268), (240, 5349),

Gene: JoeDirt_6 Start: 4321, Stop: 5376, Start Num: 3

Candidate Starts for JoeDirt_6:

(Start: 3 @4321 has 78 MA's), (38, 4459), (41, 4471), (77, 4576), (83, 4588), (93, 4627), (94, 4630), (101, 4666), (118, 4732), (123, 4747), (129, 4762), (139, 4804), (167, 4906), (201, 5041), (208, 5065), (237, 5206), (240, 5233), (243, 5242),

Gene: JohnThicc_4 Start: 3658, Stop: 4455, Start Num: 13

Candidate Starts for JohnThicc_4:

(Start: 13 @3658 has 15 MA's), (58, 3814), (65, 3832), (81, 3865), (129, 4018), (147, 4084), (149, 4090), (166, 4168), (196, 4300),

Gene: Jubie_7 Start: 4416, Stop: 5486, Start Num: 3

Candidate Starts for Jubie_7:

(Start: 3 @4416 has 78 MA's), (12, 4464), (15, 4473), (22, 4500), (38, 4551), (61, 4629), (77, 4668), (83, 4680), (101, 4758), (108, 4782), (118, 4824), (129, 4854), (167, 5022), (169, 5040), (201, 5157), (208, 5181), (228, 5268), (240, 5349),

Gene: Kahlid_6 Start: 4311, Stop: 5369, Start Num: 3

Candidate Starts for Kahlid_6:

(Start: 3 @4311 has 78 MA's), (Start: 9 @4359 has 1 MA's), (77, 4572), (83, 4584), (95, 4629), (101, 4662), (118, 4728), (129, 4758), (139, 4800), (142, 4809), (167, 4902), (169, 4920), (201, 5037), (208, 5061), (212, 5070), (237, 5202), (240, 5229),

Gene: Kalimba_4 Start: 3875, Stop: 4669, Start Num: 10

Candidate Starts for Kalimba_4:

(Start: 10 @3875 has 18 MA's), (22, 3917), (Start: 43 @3983 has 1 MA's), (49, 4013), (53, 4025), (129, 4244), (134, 4265), (145, 4307), (166, 4394), (169, 4415), (173, 4433), (219, 4607),

Gene: Kamaru_5 Start: 3597, Stop: 4241, Start Num: 27

Candidate Starts for Kamaru_5:

(Start: 27 @3597 has 22 MA's), (40, 3627), (49, 3663), (56, 3684), (68, 3711), (Start: 70 @3720 has 1 MA's), (71, 3723), (78, 3735), (99, 3807), (137, 3930), (140, 3942), (141, 3945), (142, 3948), (169, 4068), (191, 4152), (193, 4158),

Gene: Keiki_4 Start: 3218, Stop: 3973, Start Num: 25

Candidate Starts for Keiki_4:

(Start: 25 @3218 has 45 MA's), (59, 3320), (66, 3338), (72, 3356), (75, 3362), (80, 3368), (82, 3374), (93, 3407), (96, 3422), (100, 3440), (105, 3461), (107, 3467), (Start: 116 @3497 has 1 MA's), (120, 3518), (138, 3569), (146, 3596), (162, 3659), (166, 3692), (167, 3695), (204, 3818), (226, 3914), (231, 3938), (233, 3947), (236, 3965),

Gene: Kenna_5 Start: 3599, Stop: 4243, Start Num: 27

Candidate Starts for Kenna_5:

(Start: 27 @3599 has 22 MA's), (40, 3629), (41, 3632), (56, 3686), (Start: 70 @3722 has 1 MA's), (71, 3725), (91, 3767), (99, 3809), (110, 3842), (140, 3944), (141, 3947), (142, 3950), (169, 4070), (191, 4154), (193, 4160),

Gene: Kingsolomon_7 Start: 4416, Stop: 5486, Start Num: 3

Candidate Starts for Kingsolomon_7:

(Start: 3 @4416 has 78 MA's), (12, 4464), (15, 4473), (22, 4500), (38, 4551), (61, 4629), (77, 4668), (83, 4680), (101, 4758), (108, 4782), (118, 4824), (129, 4854), (167, 5022), (169, 5040), (201, 5157), (208, 5181), (228, 5268), (240, 5349),

Gene: KirDoubleO7_5 Start: 4428, Stop: 5498, Start Num: 3

Candidate Starts for KirDoubleO7_5:

(Start: 3 @4428 has 78 MA's), (12, 4476), (15, 4485), (22, 4512), (38, 4563), (61, 4641), (77, 4680), (83, 4692), (101, 4770), (108, 4794), (118, 4836), (129, 4866), (169, 5052), (201, 5169), (208, 5193), (240, 5361),

Gene: Kropertea_6 Start: 3983, Stop: 5038, Start Num: 3

Candidate Starts for Kropertea_6:

(2, 3977), (Start: 3 @3983 has 78 MA's), (29, 4112), (77, 4244), (83, 4256), (101, 4334), (115, 4382), (118, 4400), (129, 4430), (139, 4472), (153, 4505), (167, 4574), (169, 4592), (201, 4709), (208, 4733), (212, 4742), (237, 4871), (240, 4898), (246, 4958),

Gene: Krypton555_7 Start: 4408, Stop: 5478, Start Num: 3

Candidate Starts for Krypton555_7:

(Start: 3 @4408 has 78 MA's), (12, 4456), (15, 4465), (22, 4492), (38, 4543), (50, 4594), (61, 4621), (77, 4660), (83, 4672), (101, 4750), (108, 4774), (118, 4816), (129, 4846), (169, 5032), (201, 5149), (208, 5173), (240, 5341),

Gene: Kubed_4 Start: 3215, Stop: 3970, Start Num: 25

Candidate Starts for Kubed_4:

(Start: 25 @3215 has 45 MA's), (30, 3230), (59, 3317), (66, 3335), (75, 3359), (80, 3365), (82, 3371), (93, 3404), (96, 3419), (100, 3437), (103, 3446), (105, 3458), (107, 3464), (Start: 116 @3494 has 1 MA's), (120, 3515), (138, 3566), (146, 3593), (162, 3656), (166, 3689), (167, 3692), (204, 3815), (226, 3911), (231, 3935), (233, 3944), (236, 3962),

Gene: Kudetre_14 Start: 7918, Stop: 8928, Start Num: 6

Candidate Starts for Kudetre_14:

(Start: 6 @7918 has 3 MA's), (Start: 11 @7936 has 2 MA's), (14, 7945), (17, 7960), (33, 8017), (54, 8089), (77, 8143), (124, 8293), (132, 8329), (138, 8353), (146, 8401), (158, 8452), (159, 8455), (166, 8503), (177, 8566), (182, 8584), (208, 8668), (216, 8698), (221, 8728), (231, 8776), (238, 8824), (241, 8839), (242, 8845),

Gene: Kuwabara_4 Start: 3576, Stop: 4232, Start Num: 28

Candidate Starts for Kuwabara_4:

(Start: 27 @3573 has 22 MA's), (Start: 28 @3576 has 8 MA's), (Start: 70 @3696 has 1 MA's), (71, 3699), (91, 3741), (102, 3792), (112, 3822), (140, 3918), (141, 3921), (159, 3975), (160, 3984), (166, 4020), (169, 4041), (186, 4125), (188, 4128), (190, 4134),

Gene: LadyAstra_4 Start: 3658, Stop: 4455, Start Num: 13

Candidate Starts for LadyAstra_4:

(Start: 13 @3658 has 15 MA's), (58, 3814), (65, 3832), (81, 3865), (129, 4018), (147, 4084), (149, 4090), (166, 4168), (196, 4300),

Gene: Lauchelly_4 Start: 3218, Stop: 3973, Start Num: 25

Candidate Starts for Lauchelly_4:

(Start: 25 @3218 has 45 MA's), (36, 3242), (59, 3320), (66, 3338), (72, 3356), (75, 3362), (80, 3368), (82, 3374), (93, 3407), (96, 3422), (100, 3440), (105, 3461), (107, 3467), (Start: 116 @3497 has 1 MA's), (120, 3518), (138, 3569), (139, 3575), (144, 3593), (146, 3596), (157, 3635), (166, 3692), (204, 3818), (205, 3821), (206, 3830), (226, 3914), (231, 3938), (233, 3947), (236, 3965),

Gene: LeBron_6 Start: 4321, Stop: 5376, Start Num: 3

Candidate Starts for LeBron_6:

(Start: 3 @4321 has 78 MA's), (38, 4459), (41, 4471), (77, 4576), (83, 4588), (93, 4627), (94, 4630), (101, 4666), (118, 4732), (123, 4747), (129, 4762), (139, 4804), (167, 4906), (201, 5041), (208, 5065),

(237, 5206), (240, 5233), (243, 5242),

Gene: Leroy_5 Start: 3600, Stop: 4244, Start Num: 27

Candidate Starts for Leroy_5:

(Start: 27 @3600 has 22 MA's), (40, 3630), (41, 3633), (56, 3687), (Start: 70 @3723 has 1 MA's), (71, 3726), (78, 3738), (91, 3768), (99, 3810), (110, 3843), (114, 3855), (140, 3945), (141, 3948), (142, 3951), (169, 4071), (191, 4155), (193, 4161),

Gene: Leviosa_4 Start: 3217, Stop: 3972, Start Num: 25

Candidate Starts for Leviosa_4:

(Start: 25 @3217 has 45 MA's), (30, 3232), (59, 3319), (66, 3337), (75, 3361), (82, 3373), (93, 3406), (96, 3421), (100, 3439), (105, 3460), (107, 3466), (Start: 116 @3496 has 1 MA's), (120, 3517), (125, 3526), (138, 3568), (144, 3592), (146, 3595), (162, 3658), (166, 3691), (204, 3817), (226, 3913), (231, 3937), (233, 3946), (236, 3964),

Gene: Lewan_6 Start: 4311, Stop: 5369, Start Num: 3

Candidate Starts for Lewan_6:

(Start: 3 @4311 has 78 MA's), (Start: 9 @4359 has 1 MA's), (77, 4572), (83, 4584), (95, 4629), (101, 4662), (118, 4728), (129, 4758), (139, 4800), (142, 4809), (167, 4902), (169, 4920), (201, 5037), (208, 5061), (212, 5070), (237, 5202), (240, 5229),

Gene: Liebe_4 Start: 3813, Stop: 4607, Start Num: 13

Candidate Starts for Liebe_4:

(Start: 13 @3813 has 15 MA's), (38, 3897), (81, 4020), (84, 4026), (119, 4143), (122, 4155), (129, 4173), (140, 4218), (147, 4239), (166, 4323), (184, 4407),

Gene: LilBandit_4 Start: 3215, Stop: 3970, Start Num: 25

Candidate Starts for LilBandit_4:

(Start: 25 @3215 has 45 MA's), (30, 3230), (59, 3317), (66, 3335), (72, 3353), (75, 3359), (80, 3365), (82, 3371), (93, 3404), (96, 3419), (100, 3437), (103, 3446), (105, 3458), (107, 3464), (Start: 116 @3494 has 1 MA's), (120, 3515), (138, 3566), (146, 3593), (157, 3632), (162, 3656), (166, 3689), (167, 3692), (204, 3815), (226, 3911), (231, 3935), (233, 3944), (236, 3962),

Gene: LilDestine_6 Start: 4311, Stop: 5369, Start Num: 3

Candidate Starts for LilDestine_6:

(Start: 3 @4311 has 78 MA's), (Start: 9 @4359 has 1 MA's), (77, 4572), (83, 4584), (95, 4629), (101, 4662), (118, 4728), (129, 4758), (139, 4800), (142, 4809), (167, 4902), (169, 4920), (201, 5037), (208, 5061), (212, 5070), (237, 5202), (240, 5229),

Gene: LilJank_14 Start: 7803, Stop: 8822, Start Num: 4

Candidate Starts for LilJank_14:

(Start: 4 @7803 has 4 MA's), (18, 7872), (33, 7926), (48, 7977), (86, 8070), (125, 8217), (129, 8238), (132, 8250), (138, 8274), (141, 8286), (146, 8322), (152, 8346), (166, 8424), (167, 8427), (192, 8532), (201, 8562), (207, 8583), (218, 8634), (221, 8646), (244, 8769),

Gene: LitninMcQueen_5 Start: 3597, Stop: 4241, Start Num: 27

Candidate Starts for LitninMcQueen_5:

(Start: 27 @3597 has 22 MA's), (40, 3627), (49, 3663), (56, 3684), (68, 3711), (Start: 70 @3720 has 1 MA's), (71, 3723), (78, 3735), (99, 3807), (137, 3930), (140, 3942), (141, 3945), (142, 3948), (169, 4068), (191, 4152), (193, 4158),

Gene: LiyuLake_7 Start: 4419, Stop: 5489, Start Num: 3

Candidate Starts for LiyuLake_7:

(Start: 3 @4419 has 78 MA's), (12, 4467), (15, 4476), (22, 4503), (38, 4554), (61, 4632), (77, 4671), (83, 4683), (101, 4761), (108, 4785), (118, 4827), (129, 4857), (169, 5043), (201, 5160), (208, 5184), (240, 5352),

Gene: Loadrie_6 Start: 4350, Stop: 5402, Start Num: 3

Candidate Starts for Loadrie_6:

(Start: 3 @4350 has 78 MA's), (Start: 9 @4392 has 1 MA's), (77, 4605), (83, 4617), (95, 4662), (101, 4695), (118, 4761), (129, 4791), (139, 4833), (142, 4842), (167, 4935), (169, 4953), (201, 5070), (208, 5094), (212, 5103), (237, 5235), (240, 5262),

Gene: Lolly9_7 Start: 4422, Stop: 5492, Start Num: 3

Candidate Starts for Lolly9_7:

(Start: 3 @4422 has 78 MA's), (12, 4470), (15, 4479), (22, 4506), (38, 4557), (61, 4635), (77, 4674), (83, 4686), (101, 4764), (108, 4788), (118, 4830), (129, 4860), (169, 5046), (201, 5163), (208, 5187), (228, 5274), (240, 5355),

Gene: LongHai_8 Start: 5367, Stop: 5855, Start Num: 116

Candidate Starts for LongHai_8:

(16, 5064), (Start: 44 @5148 has 1 MA's), (60, 5205), (Start: 116 @5367 has 1 MA's), (168, 5568), (174, 5604), (180, 5634), (183, 5640), (189, 5655), (195, 5679), (209, 5721), (224, 5778), (235, 5835),

Gene: Lucky10_4 Start: 3151, Stop: 3789, Start Num: 27

Candidate Starts for Lucky10_4:

(26, 3145), (Start: 27 @3151 has 22 MA's), (Start: 70 @3271 has 1 MA's), (71, 3274), (91, 3316), (138, 3487), (154, 3535), (166, 3598), (173, 3637), (193, 3706), (197, 3721),

Gene: Lumos_7 Start: 4416, Stop: 5486, Start Num: 3

Candidate Starts for Lumos_7:

(Start: 3 @4416 has 78 MA's), (12, 4464), (15, 4473), (22, 4500), (38, 4551), (61, 4629), (77, 4668), (83, 4680), (101, 4758), (108, 4782), (118, 4824), (129, 4854), (167, 5022), (169, 5040), (201, 5157), (208, 5181), (228, 5268), (240, 5349),

Gene: Lutum_5 Start: 3599, Stop: 4243, Start Num: 27

Candidate Starts for Lutum_5:

(Start: 27 @3599 has 22 MA's), (40, 3629), (41, 3632), (56, 3686), (Start: 70 @3722 has 1 MA's), (71, 3725), (91, 3767), (99, 3809), (110, 3842), (140, 3944), (141, 3947), (142, 3950), (169, 4070), (191, 4154), (193, 4160),

Gene: Lynnae_6 Start: 4311, Stop: 5369, Start Num: 3

Candidate Starts for Lynnae_6:

(Start: 3 @4311 has 78 MA's), (Start: 9 @4359 has 1 MA's), (77, 4572), (83, 4584), (95, 4629), (101, 4662), (118, 4728), (129, 4758), (139, 4800), (142, 4809), (167, 4902), (169, 4920), (201, 5037), (208, 5061), (212, 5070), (237, 5202), (240, 5229),

Gene: MAckerman_6 Start: 4320, Stop: 5375, Start Num: 3

Candidate Starts for MAckerman_6:

(Start: 3 @4320 has 78 MA's), (38, 4458), (41, 4470), (77, 4575), (83, 4587), (93, 4626), (94, 4629), (101, 4665), (118, 4731), (123, 4746), (129, 4761), (139, 4803), (167, 4905), (201, 5040), (208, 5064), (237, 5205), (240, 5232), (243, 5241),

Gene: MEAK_4 Start: 3213, Stop: 3968, Start Num: 25

Candidate Starts for MEAK_4:

(Start: 25 @3213 has 45 MA's), (30, 3228), (59, 3315), (66, 3333), (75, 3357), (80, 3363), (82, 3369), (93, 3402), (96, 3417), (100, 3435), (103, 3444), (105, 3456), (107, 3462), (Start: 116 @3492 has 1 MA's), (138, 3564), (139, 3570), (146, 3591), (166, 3687), (167, 3690), (204, 3813), (226, 3909), (231, 3933), (233, 3942), (236, 3960),

Gene: MaGuCo_4 Start: 3672, Stop: 4466, Start Num: 13

Candidate Starts for MaGuCo_4:

(Start: 13 @3672 has 15 MA's), (38, 3756), (81, 3879), (119, 4002), (122, 4014), (129, 4032), (140, 4077), (147, 4098), (166, 4182), (167, 4185), (184, 4266), (199, 4323),

Gene: Maco6_5 Start: 4321, Stop: 4809, Start Num: 116

Candidate Starts for Maco6_5:

(16, 4018), (Start: 44 @4102 has 1 MA's), (60, 4159), (Start: 116 @4321 has 1 MA's), (155, 4450), (168, 4522), (174, 4558), (180, 4588), (183, 4594), (189, 4609), (195, 4633), (209, 4675), (224, 4732), (235, 4789),

Gene: Maureen_4 Start: 3813, Stop: 4607, Start Num: 13

Candidate Starts for Maureen_4:

(Start: 13 @3813 has 15 MA's), (38, 3897), (81, 4020), (84, 4026), (119, 4143), (122, 4155), (129, 4173), (140, 4218), (147, 4239), (166, 4323), (184, 4407),

Gene: Miley16_6 Start: 4311, Stop: 5369, Start Num: 3

Candidate Starts for Miley16_6:

(Start: 3 @4311 has 78 MA's), (Start: 9 @4359 has 1 MA's), (77, 4572), (83, 4584), (95, 4629), (101, 4662), (118, 4728), (129, 4758), (139, 4800), (142, 4809), (167, 4902), (169, 4920), (201, 5037), (208, 5061), (212, 5070), (237, 5202), (240, 5229),

Gene: MiniLon_7 Start: 4422, Stop: 5492, Start Num: 3

Candidate Starts for MiniLon_7:

(Start: 3 @4422 has 78 MA's), (12, 4470), (15, 4479), (22, 4506), (38, 4557), (61, 4635), (77, 4674), (83, 4686), (101, 4764), (108, 4788), (118, 4830), (129, 4860), (169, 5046), (201, 5163), (208, 5187), (228, 5274), (240, 5355),

Gene: MiniMac_7 Start: 4422, Stop: 5492, Start Num: 3

Candidate Starts for MiniMac_7:

(Start: 3 @4422 has 78 MA's), (12, 4470), (15, 4479), (22, 4506), (38, 4557), (61, 4635), (77, 4674), (83, 4686), (101, 4764), (108, 4788), (118, 4830), (129, 4860), (169, 5046), (201, 5163), (208, 5187), (228, 5274), (240, 5355),

Gene: MiniMommy_4 Start: 3667, Stop: 4464, Start Num: 13

Candidate Starts for MiniMommy_4:

(Start: 13 @3667 has 15 MA's), (65, 3841), (81, 3874), (129, 4027), (147, 4093), (166, 4177), (196, 4309),

Gene: MkaliMitinis3_6 Start: 4311, Stop: 5369, Start Num: 3

Candidate Starts for MkaliMitinis3_6:

(Start: 3 @4311 has 78 MA's), (Start: 9 @4359 has 1 MA's), (77, 4572), (83, 4584), (95, 4629), (101, 4662), (118, 4728), (129, 4758), (139, 4800), (142, 4809), (167, 4902), (169, 4920), (201, 5037), (208, 5061), (212, 5070), (237, 5202), (240, 5229),

Gene: Molivier_6 Start: 4317, Stop: 5375, Start Num: 3

Candidate Starts for Molivier_6:

(Start: 3 @4317 has 78 MA's), (Start: 9 @4365 has 1 MA's), (77, 4578), (83, 4590), (95, 4635), (101, 4668), (118, 4734), (129, 4764), (139, 4806), (142, 4815), (167, 4908), (169, 4926), (201, 5043), (208, 5067), (212, 5076), (237, 5208), (240, 5235),

Gene: Moostard_7 Start: 4412, Stop: 5482, Start Num: 3

Candidate Starts for Moostard_7:

(Start: 3 @4412 has 78 MA's), (12, 4460), (15, 4469), (22, 4496), (38, 4547), (61, 4625), (77, 4664), (83, 4676), (101, 4754), (108, 4778), (118, 4820), (129, 4850), (167, 5018), (169, 5036), (201, 5153), (208, 5177), (228, 5264), (240, 5345),

Gene: Morkie_4 Start: 3159, Stop: 3800, Start Num: 27

Candidate Starts for Morkie_4:

(Start: 27 @3159 has 22 MA's), (Start: 70 @3282 has 1 MA's), (71, 3285), (78, 3297), (91, 3327), (137, 3495), (138, 3498), (140, 3507), (148, 3531), (154, 3546), (166, 3609), (169, 3630), (179, 3681), (193, 3717), (197, 3732), (217, 3795),

Gene: MortyNRick_4 Start: 3576, Stop: 4232, Start Num: 28

Candidate Starts for MortyNRick_4:

(Start: 27 @3573 has 22 MA's), (Start: 28 @3576 has 8 MA's), (Start: 70 @3696 has 1 MA's), (71, 3699), (91, 3741), (102, 3792), (112, 3822), (140, 3918), (141, 3921), (159, 3975), (160, 3984), (166, 4020), (169, 4041), (186, 4125), (188, 4128), (190, 4134),

Gene: Moss_4 Start: 3879, Stop: 4673, Start Num: 10

Candidate Starts for Moss_4:

(Start: 10 @3879 has 18 MA's), (22, 3921), (Start: 43 @3987 has 1 MA's), (49, 4017), (53, 4029), (129, 4248), (134, 4269), (145, 4311), (162, 4365), (166, 4398), (169, 4419), (219, 4611),

Gene: Moyashi_4 Start: 3218, Stop: 3973, Start Num: 25

Candidate Starts for Moyashi_4:

(Start: 25 @3218 has 45 MA's), (30, 3233), (59, 3320), (66, 3338), (72, 3356), (75, 3362), (80, 3368), (82, 3374), (93, 3407), (96, 3422), (100, 3440), (103, 3449), (105, 3461), (107, 3467), (Start: 116 @3497 has 1 MA's), (120, 3518), (138, 3569), (146, 3596), (162, 3659), (166, 3692), (167, 3695), (204, 3818), (206, 3830), (226, 3914), (231, 3938), (233, 3947), (236, 3965),

Gene: MrAK_4 Start: 3218, Stop: 3973, Start Num: 25

Candidate Starts for MrAK_4:

(Start: 25 @3218 has 45 MA's), (30, 3233), (59, 3320), (66, 3338), (72, 3356), (75, 3362), (80, 3368), (82, 3374), (93, 3407), (96, 3422), (100, 3440), (103, 3449), (105, 3461), (107, 3467), (Start: 116 @3497 has 1 MA's), (120, 3518), (138, 3569), (146, 3596), (162, 3659), (166, 3692), (167, 3695), (204, 3818), (226, 3914), (231, 3938), (233, 3947), (236, 3965),

Gene: MsGreen_7 Start: 4416, Stop: 5486, Start Num: 3

Candidate Starts for MsGreen_7:

(Start: 3 @4416 has 78 MA's), (12, 4464), (15, 4473), (22, 4500), (38, 4551), (61, 4629), (77, 4668), (83, 4680), (101, 4758), (108, 4782), (118, 4824), (129, 4854), (167, 5022), (169, 5040), (201, 5157), (208, 5181), (228, 5268), (240, 5349),

Gene: Muddy_7 Start: 5056, Stop: 5763, Start Num: 44

Candidate Starts for Muddy_7:

(Start: 44 @5056 has 1 MA's), (60, 5113), (Start: 116 @5275 has 1 MA's), (155, 5404), (168, 5476), (174, 5512), (180, 5542), (183, 5548), (189, 5563), (195, 5587), (209, 5629), (224, 5686), (235, 5743),

Gene: Mysterium_4 Start: 3879, Stop: 4673, Start Num: 10

Candidate Starts for Mysterium_4:

(Start: 10 @3879 has 18 MA's), (22, 3921), (Start: 43 @3987 has 1 MA's), (49, 4017), (53, 4029), (88, 4110), (129, 4248), (134, 4269), (145, 4311), (162, 4365), (166, 4398), (169, 4419), (219, 4611),

Gene: Netyap_6 Start: 4311, Stop: 5369, Start Num: 3

Candidate Starts for Netyap_6:

(Start: 3 @4311 has 78 MA's), (Start: 9 @4359 has 1 MA's), (77, 4572), (83, 4584), (95, 4629), (101, 4662), (118, 4728), (129, 4758), (139, 4800), (142, 4809), (167, 4902), (169, 4920), (201, 5037), (208, 5061), (212, 5070), (237, 5202), (240, 5229),

Gene: Neville_14 Start: 7752, Stop: 8771, Start Num: 4

Candidate Starts for Neville_14:

(1, 7683), (Start: 4 @7752 has 4 MA's), (18, 7821), (33, 7875), (48, 7926), (86, 8019), (125, 8166), (129, 8187), (132, 8199), (138, 8223), (141, 8235), (146, 8271), (152, 8295), (166, 8373), (167, 8376), (192, 8481), (201, 8511), (207, 8532), (218, 8583), (221, 8595), (244, 8718),

Gene: Nicholas_7 Start: 4416, Stop: 5486, Start Num: 3

Candidate Starts for Nicholas_7:

(Start: 3 @4416 has 78 MA's), (12, 4464), (15, 4473), (22, 4500), (38, 4551), (61, 4629), (77, 4668), (83, 4680), (101, 4758), (108, 4782), (118, 4824), (129, 4854), (167, 5022), (169, 5040), (201, 5157), (208, 5181), (228, 5268), (240, 5349),

Gene: Nicholasp3_6 Start: 4311, Stop: 5369, Start Num: 3

Candidate Starts for Nicholasp3_6:

(Start: 3 @4311 has 78 MA's), (Start: 9 @4359 has 1 MA's), (77, 4572), (83, 4584), (95, 4629), (101, 4662), (118, 4728), (129, 4758), (139, 4800), (142, 4809), (167, 4902), (169, 4920), (201, 5037), (208, 5061), (212, 5070), (237, 5202), (240, 5229),

Gene: NoShow_4 Start: 3865, Stop: 4563, Start Num: 43

Candidate Starts for NoShow_4:

(41, 3862), (Start: 43 @3865 has 1 MA's), (76, 3958), (92, 3988), (126, 4123), (155, 4213), (189, 4372), (195, 4396), (209, 4438),

Gene: ODay_5 Start: 3606, Stop: 4265, Start Num: 28

Candidate Starts for ODay_5:

(Start: 10 @3531 has 18 MA's), (Start: 28 @3606 has 8 MA's), (71, 3729), (78, 3741), (91, 3771), (98, 3807), (138, 3942), (141, 3954), (160, 4017), (166, 4053), (167, 4056), (194, 4182),

Gene: Octobien14_15 Start: 8989, Stop: 9996, Start Num: 5

Candidate Starts for Octobien14_15:

(Start: 5 @8989 has 1 MA's), (14, 9022), (33, 9094), (42, 9115), (54, 9166), (86, 9238), (113, 9331), (132, 9406), (138, 9430), (146, 9478), (158, 9529), (167, 9583), (177, 9643), (210, 9748), (212, 9754), (216, 9772), (231, 9844), (236, 9874), (239, 9895), (241, 9907), (245, 9937),

Gene: Ogopogo_6 Start: 3847, Stop: 4491, Start Num: 31

Candidate Starts for Ogopogo_6:

(26, 3832), (Start: 31 @3847 has 7 MA's), (Start: 45 @3880 has 1 MA's), (56, 3922), (63, 3937), (68, 3949), (Start: 70 @3958 has 1 MA's), (76, 3970), (78, 3973), (Start: 89 @3997 has 1 MA's), (99, 4045), (121, 4126), (129, 4147), (134, 4168), (160, 4258), (166, 4297), (169, 4318), (191, 4399), (193, 4405), (211, 4459),

Gene: OhShagHennessy_6 Start: 4294, Stop: 5349, Start Num: 3

Candidate Starts for OhShagHennessy_6:

(Start: 3 @4294 has 78 MA's), (38, 4432), (41, 4444), (77, 4549), (83, 4561), (93, 4600), (94, 4603), (101, 4639), (118, 4705), (123, 4720), (129, 4735), (139, 4777), (167, 4879), (201, 5014), (208, 5038), (237, 5179), (240, 5206), (243, 5215),

Gene: Origami_4 Start: 3658, Stop: 4455, Start Num: 13

Candidate Starts for Origami_4:

(Start: 13 @3658 has 15 MA's), (38, 3742), (58, 3814), (65, 3832), (81, 3865), (129, 4018), (147, 4084), (149, 4090), (166, 4168), (196, 4300),

Gene: Ouroboros_4 Start: 3215, Stop: 3970, Start Num: 25

Candidate Starts for Ouroboros_4:

(Start: 25 @3215 has 45 MA's), (30, 3230), (59, 3317), (66, 3335), (72, 3353), (75, 3359), (80, 3365), (82, 3371), (93, 3404), (96, 3419), (105, 3458), (107, 3464), (Start: 116 @3494 has 1 MA's), (120, 3515), (125, 3524), (129, 3545), (138, 3566), (144, 3590), (146, 3593), (162, 3656), (166, 3689), (167, 3692), (204, 3815), (226, 3911), (231, 3935), (233, 3944), (236, 3962),

Gene: OverPar_6 Start: 4350, Stop: 5402, Start Num: 3

Candidate Starts for OverPar_6:

(Start: 3 @4350 has 78 MA's), (Start: 9 @4392 has 1 MA's), (77, 4605), (83, 4617), (95, 4662), (101, 4695), (118, 4761), (129, 4791), (139, 4833), (142, 4842), (167, 4935), (169, 4953), (201, 5070), (208, 5094), (212, 5103), (237, 5235), (240, 5262),

Gene: P1.1_4 Start: 3218, Stop: 3973, Start Num: 25

Candidate Starts for P1.1_4:

(Start: 25 @3218 has 45 MA's), (59, 3320), (66, 3338), (72, 3356), (75, 3362), (80, 3368), (82, 3374), (93, 3407), (96, 3422), (100, 3440), (103, 3449), (105, 3461), (107, 3467), (Start: 116 @3497 has 1 MA's), (120, 3518), (138, 3569), (146, 3596), (166, 3692), (167, 3695), (204, 3818), (226, 3914), (231, 3938), (233, 3947), (236, 3965),

Gene: P100.1_4 Start: 3218, Stop: 3973, Start Num: 25

Candidate Starts for P100.1_4:

(Start: 25 @3218 has 45 MA's), (30, 3233), (59, 3320), (66, 3338), (72, 3356), (75, 3362), (80, 3368), (82, 3374), (93, 3407), (96, 3422), (103, 3449), (105, 3461), (107, 3467), (Start: 116 @3497 has 1 MA's), (120, 3518), (138, 3569), (144, 3593), (146, 3596), (162, 3659), (166, 3692), (167, 3695), (204, 3818), (226, 3914), (231, 3938), (233, 3947), (236, 3965),

Gene: P100A_4 Start: 3223, Stop: 3978, Start Num: 25

Candidate Starts for P100A_4:

(Start: 25 @3223 has 45 MA's), (36, 3247), (59, 3325), (66, 3343), (72, 3361), (75, 3367), (82, 3379), (93, 3412), (96, 3427), (100, 3445), (105, 3466), (107, 3472), (Start: 116 @3502 has 1 MA's), (120, 3523), (138, 3574), (141, 3586), (144, 3598), (146, 3601), (162, 3664), (166, 3697), (167, 3700), (204, 3823), (206, 3835), (226, 3919), (231, 3943), (233, 3952), (236, 3970),

Gene: P100D_4 Start: 3213, Stop: 3968, Start Num: 25

Candidate Starts for P100D_4:

(Start: 25 @3213 has 45 MA's), (30, 3228), (59, 3315), (66, 3333), (72, 3351), (75, 3357), (80, 3363), (82, 3369), (93, 3402), (96, 3417), (100, 3435), (103, 3444), (105, 3456), (107, 3462), (Start: 116 @3492 has 1 MA's), (120, 3513), (125, 3522), (138, 3564), (146, 3591), (162, 3654), (166, 3687), (167, 3690), (204, 3813), (226, 3909), (231, 3933), (233, 3942), (236, 3960),

Gene: P101A_4 Start: 3218, Stop: 3973, Start Num: 25

Candidate Starts for P101A_4:

(Start: 25 @3218 has 45 MA's), (30, 3233), (59, 3320), (66, 3338), (72, 3356), (75, 3362), (80, 3368), (82, 3374), (93, 3407), (96, 3422), (100, 3440), (103, 3449), (105, 3461), (107, 3467), (Start: 116 @3497 has 1 MA's), (120, 3518), (125, 3527), (138, 3569), (146, 3596), (162, 3659), (166, 3692), (167, 3695), (204, 3818), (226, 3914), (231, 3938), (233, 3947), (236, 3965),

Gene: P104A_4 Start: 3215, Stop: 3970, Start Num: 25

Candidate Starts for P104A_4:

(Start: 25 @3215 has 45 MA's), (30, 3230), (59, 3317), (66, 3335), (72, 3353), (75, 3359), (80, 3365), (82, 3371), (93, 3404), (96, 3419), (100, 3437), (103, 3446), (105, 3458), (107, 3464), (Start: 116 @3494 has 1 MA's), (120, 3515), (129, 3545), (138, 3566), (141, 3578), (146, 3593), (162, 3656), (166, 3689), (167, 3692), (204, 3815), (226, 3911), (231, 3935), (233, 3944), (236, 3962),

Gene: P104B_4 Start: 3213, Stop: 3968, Start Num: 25

Candidate Starts for P104B_4:

(Start: 25 @3213 has 45 MA's), (59, 3315), (66, 3333), (72, 3351), (75, 3357), (80, 3363), (82, 3369), (93, 3402), (96, 3417), (100, 3435), (103, 3444), (105, 3456), (107, 3462), (Start: 116 @3492 has 1 MA's), (120, 3513), (125, 3522), (138, 3564), (146, 3591), (166, 3687), (167, 3690), (204, 3813), (226, 3909), (231, 3933), (233, 3942), (236, 3960),

Gene: P105_4 Start: 3210, Stop: 3965, Start Num: 25

Candidate Starts for P105_4:

(Start: 25 @3210 has 45 MA's), (30, 3225), (59, 3312), (66, 3330), (72, 3348), (75, 3354), (80, 3360), (82, 3366), (93, 3399), (96, 3414), (100, 3432), (103, 3441), (105, 3453), (107, 3459), (Start: 116 @3489 has 1 MA's), (120, 3510), (129, 3540), (138, 3561), (146, 3588), (162, 3651), (166, 3684), (167, 3687), (204, 3810), (226, 3906), (231, 3930), (233, 3939), (236, 3957),

Gene: P106A_4 Start: 3218, Stop: 3973, Start Num: 25

Candidate Starts for P106A_4:

(Start: 25 @3218 has 45 MA's), (30, 3233), (59, 3320), (66, 3338), (72, 3356), (75, 3362), (80, 3368), (82, 3374), (93, 3407), (96, 3422), (100, 3440), (103, 3449), (105, 3461), (107, 3467), (Start: 116 @3497 has 1 MA's), (120, 3518), (138, 3569), (146, 3596), (162, 3659), (166, 3692), (167, 3695), (204, 3818), (226, 3914), (231, 3938), (233, 3947), (236, 3965),

Gene: P106C_4 Start: 3218, Stop: 3973, Start Num: 25

Candidate Starts for P106C_4:

(Start: 25 @3218 has 45 MA's), (30, 3233), (59, 3320), (66, 3338), (72, 3356), (75, 3362), (80, 3368), (82, 3374), (93, 3407), (96, 3422), (100, 3440), (103, 3449), (105, 3461), (107, 3467), (Start: 116 @3497 has 1 MA's), (120, 3518), (138, 3569), (146, 3596), (162, 3659), (166, 3692), (167, 3695), (204, 3818), (226, 3914), (231, 3938), (233, 3947), (236, 3965),

Gene: P106I_4 Start: 3218, Stop: 3973, Start Num: 25

Candidate Starts for P106I_4:

(Start: 25 @3218 has 45 MA's), (30, 3233), (59, 3320), (66, 3338), (72, 3356), (75, 3362), (80, 3368), (82, 3374), (93, 3407), (96, 3422), (100, 3440), (103, 3449), (105, 3461), (107, 3467), (Start: 116 @3497 has 1 MA's), (120, 3518), (138, 3569), (146, 3596), (162, 3659), (166, 3692), (167, 3695), (204, 3818), (226, 3914), (231, 3938), (233, 3947), (236, 3965),

Gene: P106L_4 Start: 3218, Stop: 3973, Start Num: 25

Candidate Starts for P106L_4:

(Start: 25 @3218 has 45 MA's), (30, 3233), (59, 3320), (66, 3338), (72, 3356), (75, 3362), (80, 3368), (82, 3374), (93, 3407), (96, 3422), (100, 3440), (103, 3449), (105, 3461), (107, 3467), (Start: 116 @3497 has 1 MA's), (120, 3518), (138, 3569), (146, 3596), (162, 3659), (166, 3692), (167, 3695), (204, 3818), (226, 3914), (231, 3938), (233, 3947), (236, 3965),

Gene: P106M_4 Start: 3218, Stop: 3973, Start Num: 25

Candidate Starts for P106M_4:

(Start: 25 @3218 has 45 MA's), (30, 3233), (59, 3320), (66, 3338), (72, 3356), (75, 3362), (80, 3368), (82, 3374), (93, 3407), (96, 3422), (100, 3440), (103, 3449), (105, 3461), (107, 3467), (Start: 116 @3497 has 1 MA's), (120, 3518), (138, 3569), (146, 3596), (162, 3659), (166, 3692), (167, 3695), (204, 3818), (226, 3914), (231, 3938), (233, 3947), (236, 3965),

Gene: P107A_4 Start: 3223, Stop: 3978, Start Num: 25

Candidate Starts for P107A_4:

(Start: 25 @3223 has 45 MA's), (30, 3238), (55, 3316), (59, 3325), (66, 3343), (72, 3361), (75, 3367), (80, 3373), (82, 3379), (93, 3412), (96, 3427), (100, 3445), (105, 3466), (107, 3472), (Start: 116 @3502 has 1 MA's), (138, 3574), (141, 3586), (144, 3598), (146, 3601), (151, 3622), (162, 3664), (166, 3697), (167, 3700), (175, 3739), (204, 3823), (226, 3919), (231, 3943), (233, 3952), (236, 3970),

Gene: P107C_4 Start: 3218, Stop: 3973, Start Num: 25

Candidate Starts for P107C_4:

(Start: 25 @3218 has 45 MA's), (36, 3242), (55, 3311), (59, 3320), (66, 3338), (72, 3356), (75, 3362), (80, 3368), (82, 3374), (93, 3407), (96, 3422), (100, 3440), (105, 3461), (107, 3467), (Start: 116 @3497 has 1 MA's), (120, 3518), (124, 3524), (125, 3527), (138, 3569), (146, 3596), (162, 3659), (166, 3692), (167, 3695), (175, 3734), (177, 3740), (204, 3818), (226, 3914), (231, 3938), (233, 3947), (236, 3965),

Gene: P108C_4 Start: 3218, Stop: 3973, Start Num: 25

Candidate Starts for P108C_4:

(Start: 25 @3218 has 45 MA's), (59, 3320), (66, 3338), (72, 3356), (75, 3362), (80, 3368), (82, 3374), (93, 3407), (96, 3422), (100, 3440), (103, 3449), (105, 3461), (107, 3467), (Start: 116 @3497 has 1 MA's), (120, 3518), (138, 3569), (144, 3593), (146, 3596), (162, 3659), (166, 3692), (167, 3695), (204, 3818), (226, 3914), (231, 3938), (233, 3947), (236, 3965),

Gene: P14.4_4 Start: 3218, Stop: 3973, Start Num: 25

Candidate Starts for P14.4_4:

(Start: 25 @3218 has 45 MA's), (36, 3242), (55, 3311), (59, 3320), (66, 3338), (72, 3356), (75, 3362), (80, 3368), (82, 3374), (93, 3407), (96, 3422), (103, 3449), (105, 3461), (107, 3467), (Start: 116 @3497 has 1 MA's), (120, 3518), (129, 3548), (138, 3569), (146, 3596), (162, 3659), (166, 3692), (167, 3695), (175, 3734), (204, 3818), (206, 3830), (226, 3914), (231, 3938), (233, 3947), (236, 3965),

Gene: P9.1_4 Start: 3213, Stop: 3968, Start Num: 25

Candidate Starts for P9.1_4:

(Start: 25 @3213 has 45 MA's), (30, 3228), (59, 3315), (66, 3333), (72, 3351), (75, 3357), (80, 3363), (82, 3369), (93, 3402), (96, 3417), (100, 3435), (103, 3444), (105, 3456), (107, 3462), (Start: 116 @3492 has 1 MA's), (120, 3513), (138, 3564), (146, 3591), (162, 3654), (166, 3687), (167, 3690), (204, 3813), (226, 3909), (231, 3933), (233, 3942), (236, 3960),

Gene: PA6_4 Start: 3218, Stop: 3973, Start Num: 25

Candidate Starts for PA6_4:

(Start: 25 @3218 has 45 MA's), (59, 3320), (66, 3338), (72, 3356), (75, 3362), (80, 3368), (82, 3374), (93, 3407), (96, 3422), (100, 3440), (103, 3449), (105, 3461), (107, 3467), (Start: 116 @3497 has 1 MA's), (138, 3569), (146, 3596), (162, 3659), (166, 3692), (167, 3695), (204, 3818), (226, 3914), (231, 3938), (233, 3947), (236, 3965),

Gene: PAD20_4 Start: 3218, Stop: 3973, Start Num: 25

Candidate Starts for PAD20_4:

(Start: 25 @3218 has 45 MA's), (30, 3233), (59, 3320), (66, 3338), (72, 3356), (75, 3362), (80, 3368), (82, 3374), (93, 3407), (96, 3422), (100, 3440), (103, 3449), (105, 3461), (107, 3467), (Start: 116 @3497 has 1 MA's), (120, 3518), (138, 3569), (146, 3596), (166, 3692), (167, 3695), (204, 3818), (226, 3914), (231, 3938), (233, 3947), (236, 3965),

Gene: PAS50_4 Start: 3218, Stop: 3973, Start Num: 25

Candidate Starts for PAS50_4:

(Start: 25 @3218 has 45 MA's), (59, 3320), (66, 3338), (75, 3362), (82, 3374), (93, 3407), (96, 3422), (100, 3440), (103, 3449), (105, 3461), (107, 3467), (Start: 116 @3497 has 1 MA's), (120, 3518), (125, 3527), (138, 3569), (146, 3596), (162, 3659), (166, 3692), (167, 3695), (204, 3818), (226, 3914), (231, 3938), (233, 3947), (236, 3965),

Gene: PHL010M04_04 Start: 3214, Stop: 3969, Start Num: 25

Candidate Starts for PHL010M04_04:

(Start: 25 @3214 has 45 MA's), (Start: 27 @3226 has 22 MA's), (30, 3229), (59, 3316), (66, 3334), (72, 3352), (75, 3358), (82, 3370), (93, 3403), (96, 3418), (100, 3436), (103, 3445), (105, 3457), (107, 3463), (Start: 116 @3493 has 1 MA's), (125, 3523), (138, 3565), (144, 3589), (146, 3592), (166, 3688), (177, 3736), (204, 3814), (226, 3910), (231, 3934), (233, 3943), (236, 3961),

Gene: PHL037M02_04 Start: 3215, Stop: 3970, Start Num: 25

Candidate Starts for PHL037M02_04:

(Start: 25 @3215 has 45 MA's), (30, 3230), (59, 3317), (66, 3335), (75, 3359), (80, 3365), (82, 3371), (93, 3404), (96, 3419), (105, 3458), (107, 3464), (Start: 116 @3494 has 1 MA's), (120, 3515), (125, 3524), (138, 3566), (146, 3593), (166, 3689), (167, 3692), (204, 3815), (226, 3911), (231, 3935), (233, 3944), (236, 3962),

Gene: PHL060L00_04 Start: 3213, Stop: 3968, Start Num: 25

Candidate Starts for PHL060L00_04:

(Start: 25 @3213 has 45 MA's), (30, 3228), (59, 3315), (66, 3333), (72, 3351), (75, 3357), (80, 3363), (82, 3369), (93, 3402), (96, 3417), (100, 3435), (105, 3456), (107, 3462), (Start: 116 @3492 has 1 MA's), (120, 3513), (125, 3522), (138, 3564), (146, 3591), (162, 3654), (166, 3687), (167, 3690), (204, 3813), (226, 3909), (231, 3933), (233, 3942), (236, 3960),

Gene: PHL067M10_04 Start: 3215, Stop: 3970, Start Num: 25

Candidate Starts for PHL067M10_04:

(Start: 25 @3215 has 45 MA's), (30, 3230), (59, 3317), (66, 3335), (72, 3353), (75, 3359), (80, 3365), (82, 3371), (93, 3404), (96, 3419), (100, 3437), (103, 3446), (105, 3458), (107, 3464), (Start: 116 @3494 has 1 MA's), (120, 3515), (138, 3566), (146, 3593), (162, 3656), (166, 3689), (167, 3692), (204, 3815), (226, 3911), (231, 3935), (233, 3944), (236, 3962),

Gene: PHL071N05_04 Start: 3213, Stop: 3968, Start Num: 25

Candidate Starts for PHL071N05_04:

(Start: 25 @3213 has 45 MA's), (30, 3228), (55, 3306), (59, 3315), (66, 3333), (75, 3357), (80, 3363), (82, 3369), (93, 3402), (96, 3417), (100, 3435), (103, 3444), (105, 3456), (107, 3462), (Start: 116 @3492 has 1 MA's), (120, 3513), (138, 3564), (146, 3591), (166, 3687), (167, 3690), (204, 3813), (226, 3909), (231, 3933), (233, 3942), (236, 3960),

Gene: PHL111M01_04 Start: 3218, Stop: 3973, Start Num: 25

Candidate Starts for PHL111M01_04:

(Start: 25 @3218 has 45 MA's), (36, 3242), (55, 3311), (59, 3320), (66, 3338), (75, 3362), (80, 3368), (82, 3374), (93, 3407), (96, 3422), (100, 3440), (105, 3461), (107, 3467), (Start: 116 @3497 has 1 MA's), (120, 3518), (125, 3527), (138, 3569), (146, 3596), (166, 3692), (167, 3695), (204, 3818), (226, 3914), (231, 3938), (233, 3947), (236, 3965),

Gene: PHL112N00_04 Start: 3218, Stop: 3973, Start Num: 25

Candidate Starts for PHL112N00_04:

(Start: 25 @3218 has 45 MA's), (30, 3233), (59, 3320), (66, 3338), (72, 3356), (75, 3362), (80, 3368), (82, 3374), (93, 3407), (96, 3422), (100, 3440), (103, 3449), (105, 3461), (107, 3467), (Start: 116 @3497 has 1 MA's), (120, 3518), (129, 3548), (138, 3569), (146, 3596), (162, 3659), (166, 3692), (167, 3695), (204, 3818), (226, 3914), (231, 3938), (233, 3947), (236, 3965),

Gene: PHL113M01_04 Start: 3218, Stop: 3973, Start Num: 25

Candidate Starts for PHL113M01_04:

(Start: 25 @3218 has 45 MA's), (30, 3233), (36, 3242), (55, 3311), (59, 3320), (66, 3338), (72, 3356), (75, 3362), (80, 3368), (82, 3374), (93, 3407), (96, 3422), (100, 3440), (105, 3461), (107, 3467), (Start: 116 @3497 has 1 MA's), (120, 3518), (125, 3527), (138, 3569), (146, 3596), (162, 3659), (166, 3692), (167, 3695), (204, 3818), (226, 3914), (231, 3938), (233, 3947), (236, 3965),

Gene: PHL114L00_04 Start: 3223, Stop: 3978, Start Num: 25

Candidate Starts for PHL114L00_04:

(Start: 25 @3223 has 45 MA's), (Start: 27 @3235 has 22 MA's), (30, 3238), (59, 3325), (66, 3343), (80, 3373), (105, 3466), (107, 3472), (Start: 116 @3502 has 1 MA's), (120, 3523), (138, 3574), (144, 3598), (146, 3601), (166, 3697), (167, 3700), (204, 3823), (226, 3919), (231, 3943), (233, 3952), (236, 3970),

Gene: PYPDinur_6 Start: 3988, Stop: 5043, Start Num: 3

Candidate Starts for PYPDinur_6:

(2, 3982), (Start: 3 @3988 has 78 MA's), (29, 4117), (38, 4132), (77, 4249), (83, 4261), (101, 4339), (115, 4387), (118, 4405), (129, 4435), (139, 4477), (153, 4510), (167, 4579), (169, 4597), (201, 4714), (208, 4738), (212, 4747), (237, 4876), (240, 4903), (246, 4963), (247, 4966),

Gene: Periwinkle_5 Start: 3599, Stop: 4243, Start Num: 27

Candidate Starts for Periwinkle_5:

(Start: 27 @3599 has 22 MA's), (40, 3629), (41, 3632), (56, 3686), (Start: 70 @3722 has 1 MA's), (71, 3725), (91, 3767), (99, 3809), (110, 3842), (140, 3944), (141, 3947), (142, 3950), (169, 4070), (191, 4154), (193, 4160),

Gene: Phabuloso_5 Start: 3597, Stop: 4241, Start Num: 27

Candidate Starts for Phabuloso_5:

(Start: 27 @3597 has 22 MA's), (40, 3627), (47, 3651), (49, 3663), (56, 3684), (68, 3711), (Start: 70 @3720 has 1 MA's), (71, 3723), (78, 3735), (99, 3807), (137, 3930), (140, 3942), (141, 3945), (142, 3948), (169, 4068), (191, 4152), (193, 4158),

Gene: Phistory_5 Start: 3598, Stop: 4242, Start Num: 27

Candidate Starts for Phistory_5:

(20, 3565), (Start: 27 @3598 has 22 MA's), (40, 3628), (56, 3685), (58, 3691), (Start: 70 @3721 has 1 MA's), (71, 3724), (91, 3766), (99, 3808), (140, 3943), (141, 3946), (169, 4069), (191, 4153), (193, 4159),

Gene: PhorbesPhlower_4 Start: 3159, Stop: 3800, Start Num: 27

Candidate Starts for PhorbesPhlower_4:

(Start: 27 @3159 has 22 MA's), (Start: 70 @3282 has 1 MA's), (71, 3285), (78, 3297), (91, 3327), (137, 3495), (138, 3498), (140, 3507), (148, 3531), (154, 3546), (166, 3609), (169, 3630), (179, 3681), (193, 3717), (197, 3732), (217, 3795),

Gene: Pirate_4 Start: 3213, Stop: 3968, Start Num: 25

Candidate Starts for Pirate_4:

(Start: 25 @3213 has 45 MA's), (59, 3315), (66, 3333), (72, 3351), (75, 3357), (80, 3363), (82, 3369), (93, 3402), (96, 3417), (100, 3435), (103, 3444), (105, 3456), (107, 3462), (Start: 116 @3492 has 1 MA's), (120, 3513), (138, 3564), (146, 3591), (162, 3654), (166, 3687), (167, 3690), (204, 3813), (226, 3909), (231, 3933), (233, 3942), (236, 3960),

Gene: Pitbull_4 Start: 3185, Stop: 3862, Start Num: 34

Candidate Starts for Pitbull_4:

(Start: 34 @3185 has 1 MA's), (50, 3239), (54, 3251), (62, 3269), (73, 3299), (74, 3302), (93, 3356), (111, 3425), (127, 3482), (139, 3530), (141, 3536), (159, 3599), (165, 3641), (166, 3644), (184, 3728), (196, 3767), (200, 3776),

Gene: Poochiewood_6 Start: 4320, Stop: 5375, Start Num: 3

Candidate Starts for Poochiewood_6:

(Start: 3 @4320 has 78 MA's), (38, 4458), (41, 4470), (77, 4575), (83, 4587), (93, 4626), (94, 4629), (101, 4665), (118, 4731), (123, 4746), (129, 4761), (139, 4803), (167, 4905), (201, 5040), (208, 5064), (237, 5205), (240, 5232), (243, 5241),

Gene: Procrass1_4 Start: 3213, Stop: 3968, Start Num: 25

Candidate Starts for Procrass1_4:

(Start: 25 @3213 has 45 MA's), (30, 3228), (59, 3315), (66, 3333), (72, 3351), (75, 3357), (80, 3363), (82, 3369), (93, 3402), (96, 3417), (100, 3435), (103, 3444), (105, 3456), (107, 3462), (Start: 116 @3492 has 1 MA's), (120, 3513), (125, 3522), (129, 3543), (138, 3564), (146, 3591), (162, 3654), (166, 3687), (167, 3690), (204, 3813), (226, 3909), (231, 3933), (233, 3942), (236, 3960),

Gene: Quby_6 Start: 3988, Stop: 5043, Start Num: 3

Candidate Starts for Quby_6:

(2, 3982), (Start: 3 @3988 has 78 MA's), (37, 4129), (38, 4132), (77, 4249), (83, 4261), (101, 4339), (115, 4387), (118, 4405), (129, 4435), (139, 4477), (142, 4486), (153, 4510), (167, 4579), (169, 4597), (201, 4714), (208, 4738), (212, 4747), (237, 4876), (240, 4903), (246, 4963), (247, 4966),

Gene: QueenBey_4 Start: 3215, Stop: 3970, Start Num: 25

Candidate Starts for QueenBey_4:

(Start: 25 @3215 has 45 MA's), (36, 3239), (59, 3317), (66, 3335), (72, 3353), (75, 3359), (82, 3371), (93, 3404), (96, 3419), (103, 3446), (105, 3458), (107, 3464), (Start: 116 @3494 has 1 MA's), (138, 3566), (144, 3590), (146, 3593), (166, 3689), (167, 3692), (204, 3815), (206, 3827), (226, 3911), (231, 3935), (233, 3944), (236, 3962),

Gene: Rabbitrun_16 Start: 8261, Stop: 9289, Start Num: 4

Candidate Starts for Rabbitrun_16:

(Start: 4 @8261 has 4 MA's), (19, 8333), (33, 8384), (54, 8456), (111, 8621), (125, 8672), (129, 8693), (132, 8705), (138, 8729), (141, 8741), (143, 8753), (146, 8777), (167, 8882), (170, 8900), (201, 9011), (207, 9032), (216, 9065), (218, 9083), (221, 9095), (224, 9107), (236, 9176), (244, 9236),

Gene: Red305_7 Start: 4416, Stop: 5486, Start Num: 3

Candidate Starts for Red305_7:

(Start: 3 @4416 has 78 MA's), (12, 4464), (15, 4473), (22, 4500), (38, 4551), (61, 4629), (77, 4668), (83, 4680), (101, 4758), (108, 4782), (118, 4824), (129, 4854), (167, 5022), (169, 5040), (201, 5157), (208, 5181), (228, 5268), (240, 5349),

Gene: Rileysaurus_4 Start: 3214, Stop: 3969, Start Num: 25

Candidate Starts for Rileysaurus_4:

(Start: 25 @3214 has 45 MA's), (30, 3229), (55, 3307), (59, 3316), (66, 3334), (75, 3358), (82, 3370), (93, 3403), (100, 3436), (105, 3457), (107, 3463), (Start: 116 @3493 has 1 MA's), (120, 3514), (138,

3565), (144, 3589), (146, 3592), (162, 3655), (166, 3688), (206, 3826), (226, 3910), (231, 3934), (233, 3943), (236, 3961),

Gene: RockScotty_4 Start: 3879, Stop: 4673, Start Num: 10

Candidate Starts for RockScotty_4:

(Start: 10 @3879 has 18 MA's), (22, 3921), (Start: 43 @3987 has 1 MA's), (49, 4017), (53, 4029), (129, 4248), (134, 4269), (145, 4311), (162, 4365), (166, 4398), (169, 4419), (219, 4611),

Gene: Rose5_6 Start: 4320, Stop: 5375, Start Num: 3

Candidate Starts for Rose5_6:

(Start: 3 @4320 has 78 MA's), (38, 4458), (41, 4470), (77, 4575), (83, 4587), (93, 4626), (94, 4629), (101, 4665), (118, 4731), (123, 4746), (129, 4761), (139, 4803), (167, 4905), (201, 5040), (208, 5064), (237, 5205), (240, 5232), (243, 5241),

Gene: Rossetti_6 Start: 4311, Stop: 5369, Start Num: 3

Candidate Starts for Rossetti_6:

(Start: 3 @4311 has 78 MA's), (Start: 9 @4359 has 1 MA's), (38, 4455), (77, 4572), (83, 4584), (95, 4629), (101, 4662), (118, 4728), (129, 4758), (139, 4800), (142, 4809), (167, 4902), (169, 4920), (201, 5037), (208, 5061), (212, 5070), (237, 5202), (240, 5229),

Gene: Rumpelstiltskin_6 Start: 4311, Stop: 5369, Start Num: 3

Candidate Starts for Rumpelstiltskin_6:

(Start: 3 @4311 has 78 MA's), (Start: 9 @4359 has 1 MA's), (77, 4572), (83, 4584), (95, 4629), (101, 4662), (118, 4728), (129, 4758), (139, 4800), (142, 4809), (167, 4902), (169, 4920), (201, 5037), (208, 5061), (212, 5070), (237, 5202), (240, 5229),

Gene: SKKY_4 Start: 3225, Stop: 3980, Start Num: 25

Candidate Starts for SKKY_4:

(Start: 25 @3225 has 45 MA's), (30, 3240), (59, 3327), (66, 3345), (72, 3363), (75, 3369), (80, 3375), (82, 3381), (93, 3414), (96, 3429), (100, 3447), (103, 3456), (105, 3468), (107, 3474), (Start: 116 @3504 has 1 MA's), (120, 3525), (138, 3576), (146, 3603), (162, 3666), (166, 3699), (167, 3702), (204, 3825), (226, 3921), (231, 3945), (233, 3954), (236, 3972),

Gene: Sabourin_4 Start: 3875, Stop: 4669, Start Num: 10

Candidate Starts for Sabourin_4:

(Start: 10 @3875 has 18 MA's), (22, 3917), (Start: 43 @3983 has 1 MA's), (49, 4013), (53, 4025), (129, 4244), (134, 4265), (145, 4307), (166, 4394), (169, 4415), (173, 4433), (219, 4607),

Gene: Salvus_8 Start: 5367, Stop: 5855, Start Num: 116

Candidate Starts for Salvus_8:

(16, 5064), (Start: 44 @5148 has 1 MA's), (60, 5205), (Start: 116 @5367 has 1 MA's), (168, 5568), (174, 5604), (180, 5634), (183, 5640), (189, 5655), (195, 5679), (209, 5721), (224, 5778), (235, 5835),

Gene: Samty_7 Start: 4412, Stop: 5482, Start Num: 3

Candidate Starts for Samty_7:

(Start: 3 @4412 has 78 MA's), (12, 4460), (15, 4469), (22, 4496), (38, 4547), (61, 4625), (77, 4664), (83, 4676), (101, 4754), (108, 4778), (118, 4820), (129, 4850), (167, 5018), (169, 5036), (201, 5153), (208, 5177), (228, 5264), (240, 5345),

Gene: Sarshaun_6 Start: 4350, Stop: 5402, Start Num: 3

Candidate Starts for Sarshaun_6:

(Start: 3 @4350 has 78 MA's), (Start: 9 @4392 has 1 MA's), (77, 4605), (83, 4617), (95, 4662), (101, 4695), (118, 4761), (129, 4791), (139, 4833), (142, 4842), (167, 4935), (169, 4953), (201, 5070), (208,

5094), (212, 5103), (237, 5235), (240, 5262),

Gene: Sephiroth_15 Start: 8089, Stop: 9099, Start Num: 6

Candidate Starts for Sephiroth_15:

(Start: 6 @8089 has 3 MA's), (Start: 11 @8107 has 2 MA's), (14, 8116), (17, 8131), (33, 8188), (54, 8260), (77, 8314), (124, 8464), (132, 8500), (138, 8524), (146, 8572), (158, 8623), (159, 8626), (166, 8674), (177, 8737), (182, 8755), (208, 8839), (216, 8869), (221, 8899), (231, 8947), (238, 8995), (241, 9010), (242, 9016),

Gene: ShakeltOph_4 Start: 3667, Stop: 4464, Start Num: 13

Candidate Starts for ShakeltOph_4:

(Start: 13 @3667 has 15 MA's), (65, 3841), (81, 3874), (129, 4027), (147, 4093), (166, 4177), (196, 4309),

Gene: ShawBrad_5 Start: 3599, Stop: 4243, Start Num: 27

Candidate Starts for ShawBrad_5:

(Start: 27 @3599 has 22 MA's), (40, 3629), (56, 3686), (Start: 70 @3722 has 1 MA's), (71, 3725), (91, 3767), (99, 3809), (140, 3944), (141, 3947), (142, 3950), (169, 4070), (191, 4154), (193, 4160), (211, 4214),

Gene: Sheng711_6 Start: 3988, Stop: 5043, Start Num: 3

Candidate Starts for Sheng711_6:

(2, 3982), (Start: 3 @3988 has 78 MA's), (29, 4117), (38, 4132), (77, 4249), (83, 4261), (101, 4339), (115, 4387), (118, 4405), (129, 4435), (139, 4477), (153, 4510), (167, 4579), (169, 4597), (201, 4714), (208, 4738), (212, 4747), (237, 4876), (240, 4903), (246, 4963), (247, 4966),

Gene: Silverleaf_6 Start: 4320, Stop: 5375, Start Num: 3

Candidate Starts for Silverleaf_6:

(Start: 3 @4320 has 78 MA's), (38, 4458), (41, 4470), (77, 4575), (83, 4587), (93, 4626), (94, 4629), (101, 4665), (118, 4731), (123, 4746), (129, 4761), (139, 4803), (167, 4905), (201, 5040), (208, 5064), (237, 5205), (240, 5232), (243, 5241),

Gene: Snek_5 Start: 4503, Stop: 5270, Start Num: 13

Candidate Starts for Snek_5:

(Start: 13 @4503 has 15 MA's), (23, 4548), (Start: 25 @4554 has 45 MA's), (58, 4659), (81, 4710), (99, 4770), (109, 4803), (117, 4821), (122, 4845), (147, 4929), (158, 4962), (166, 5013), (167, 5016), (214, 5175),

Gene: Snenia_7 Start: 4416, Stop: 5486, Start Num: 3

Candidate Starts for Snenia_7:

(Start: 3 @4416 has 78 MA's), (12, 4464), (15, 4473), (22, 4500), (38, 4551), (61, 4629), (77, 4668), (83, 4680), (101, 4758), (108, 4782), (118, 4824), (129, 4854), (167, 5022), (169, 5040), (201, 5157), (208, 5181), (228, 5268), (240, 5349),

Gene: SoJulia_6 Start: 4311, Stop: 5369, Start Num: 3

Candidate Starts for SoJulia_6:

(Start: 3 @4311 has 78 MA's), (Start: 9 @4359 has 1 MA's), (77, 4572), (83, 4584), (95, 4629), (101, 4662), (118, 4728), (129, 4758), (139, 4800), (142, 4809), (167, 4902), (169, 4920), (201, 5037), (208, 5061), (212, 5070), (237, 5202), (240, 5229),

Gene: Soap141_6 Start: 4350, Stop: 5402, Start Num: 3

Candidate Starts for Soap141_6:

(Start: 3 @4350 has 78 MA's), (Start: 9 @4392 has 1 MA's), (77, 4605), (83, 4617), (95, 4662), (101, 4695), (118, 4761), (129, 4791), (139, 4833), (142, 4842), (167, 4935), (169, 4953), (201, 5070), (208, 5094), (212, 5103), (237, 5235), (240, 5262),

Gene: Solid_4 Start: 3217, Stop: 3972, Start Num: 25

Candidate Starts for Solid_4:

(Start: 25 @3217 has 45 MA's), (30, 3232), (55, 3310), (59, 3319), (66, 3337), (72, 3355), (75, 3361), (80, 3367), (82, 3373), (93, 3406), (96, 3421), (100, 3439), (103, 3448), (105, 3460), (107, 3466), (Start: 116 @3496 has 1 MA's), (120, 3517), (125, 3526), (138, 3568), (146, 3595), (157, 3634), (166, 3691), (167, 3694), (204, 3817), (226, 3913), (231, 3937), (233, 3946), (236, 3964),

Gene: Sooty_4 Start: 3875, Stop: 4669, Start Num: 10

Candidate Starts for Sooty_4:

(Start: 10 @3875 has 18 MA's), (22, 3917), (Start: 43 @3983 has 1 MA's), (49, 4013), (53, 4025), (129, 4244), (134, 4265), (145, 4307), (166, 4394), (169, 4415), (173, 4433), (219, 4607),

Gene: Soul22_5 Start: 3618, Stop: 4229, Start Num: 45

Candidate Starts for Soul22_5:

(26, 3570), (Start: 31 @3585 has 7 MA's), (Start: 45 @3618 has 1 MA's), (56, 3660), (63, 3675), (68, 3687), (Start: 70 @3696 has 1 MA's), (76, 3708), (78, 3711), (Start: 89 @3735 has 1 MA's), (99, 3783), (118, 3852), (121, 3864), (129, 3885), (134, 3906), (160, 3996), (166, 4035), (169, 4056), (191, 4137), (193, 4143), (211, 4197),

Gene: SpecialK_4 Start: 3879, Stop: 4673, Start Num: 10

Candidate Starts for SpecialK_4:

(Start: 10 @3879 has 18 MA's), (22, 3921), (Start: 43 @3987 has 1 MA's), (49, 4017), (53, 4029), (129, 4248), (134, 4269), (145, 4311), (162, 4365), (166, 4398), (169, 4419), (219, 4611),

Gene: Spooky_5 Start: 3598, Stop: 4242, Start Num: 27

Candidate Starts for Spooky_5:

(Start: 27 @3598 has 22 MA's), (Start: 70 @3721 has 1 MA's), (71, 3724), (76, 3733), (78, 3736), (91, 3766), (105, 3832), (133, 3916), (138, 3934), (141, 3946), (148, 3967), (149, 3970), (166, 4048), (169, 4069), (179, 4123), (181, 4129), (193, 4159),

Gene: Squiddly_6 Start: 4291, Stop: 4935, Start Num: 27

Candidate Starts for Squiddly_6:

(Start: 27 @4291 has 22 MA's), (51, 4363), (Start: 70 @4414 has 1 MA's), (71, 4417), (78, 4429), (91, 4459), (105, 4525), (110, 4534), (133, 4609), (137, 4624), (140, 4636), (141, 4639), (148, 4660), (149, 4663), (166, 4741), (169, 4762), (179, 4816), (181, 4822), (193, 4852),

Gene: Stormborn_4 Start: 3216, Stop: 3971, Start Num: 25

Candidate Starts for Stormborn_4:

(Start: 25 @3216 has 45 MA's), (30, 3231), (59, 3318), (66, 3336), (72, 3354), (75, 3360), (80, 3366), (82, 3372), (93, 3405), (96, 3420), (100, 3438), (103, 3447), (105, 3459), (107, 3465), (Start: 116 @3495 has 1 MA's), (120, 3516), (138, 3567), (146, 3594), (162, 3657), (166, 3690), (167, 3693), (204, 3816), (226, 3912), (231, 3936), (233, 3945), (236, 3963),

Gene: Stuu_4 Start: 3879, Stop: 4673, Start Num: 10

Candidate Starts for Stuu_4:

(Start: 10 @3879 has 18 MA's), (22, 3921), (Start: 43 @3987 has 1 MA's), (49, 4017), (122, 4230), (129, 4248), (134, 4269), (145, 4311), (162, 4365), (166, 4398), (169, 4419), (219, 4611),

Gene: SuMoo_4 Start: 3785, Stop: 4639, Start Num: 10

Candidate Starts for SuMoo_4:

(Start: 10 @3785 has 18 MA's), (21, 3821), (134, 4187), (158, 4265), (163, 4295), (166, 4316), (184, 4400), (209, 4484), (227, 4568),

Gene: Supernova_4 Start: 3213, Stop: 3968, Start Num: 25

Candidate Starts for Supernova_4:

(Start: 25 @3213 has 45 MA's), (59, 3315), (66, 3333), (72, 3351), (75, 3357), (80, 3363), (82, 3369), (93, 3402), (105, 3456), (107, 3462), (137, 3561), (138, 3564), (146, 3591), (166, 3687), (204, 3813), (226, 3909), (231, 3933), (233, 3942), (236, 3960),

Gene: Syleon_15 Start: 8011, Stop: 9021, Start Num: 6

Candidate Starts for Syleon_15:

(Start: 6 @8011 has 3 MA's), (Start: 11 @8029 has 2 MA's), (14, 8038), (17, 8053), (33, 8110), (54, 8182), (77, 8236), (124, 8386), (132, 8422), (138, 8446), (146, 8494), (158, 8545), (159, 8548), (166, 8596), (177, 8659), (182, 8677), (208, 8761), (216, 8791), (221, 8821), (231, 8869), (238, 8917), (241, 8932), (242, 8938),

Gene: ThursdayNight_4 Start: 3861, Stop: 4655, Start Num: 13

Candidate Starts for ThursdayNight_4:

(Start: 13 @3861 has 15 MA's), (81, 4068), (96, 4113), (99, 4128), (119, 4191), (147, 4287), (166, 4371),

Gene: Tourach_6 Start: 4327, Stop: 5382, Start Num: 3

Candidate Starts for Tourach_6:

(Start: 3 @4327 has 78 MA's), (Start: 9 @4375 has 1 MA's), (32, 4462), (61, 4549), (77, 4588), (83, 4600), (101, 4678), (118, 4744), (129, 4774), (139, 4816), (142, 4825), (167, 4918), (201, 5053), (208, 5077), (222, 5137), (230, 5167), (232, 5182), (240, 5242),

Gene: Trax_14 Start: 7752, Stop: 8771, Start Num: 4

Candidate Starts for Trax_14:

(Start: 4 @7752 has 4 MA's), (18, 7821), (33, 7875), (48, 7926), (86, 8019), (125, 8166), (129, 8187), (132, 8199), (138, 8223), (141, 8235), (146, 8271), (152, 8295), (166, 8373), (167, 8376), (192, 8481), (201, 8511), (207, 8532), (218, 8583), (221, 8595), (244, 8718),

Gene: TriFive_7 Start: 4416, Stop: 5486, Start Num: 3

Candidate Starts for TriFive_7:

(Start: 3 @4416 has 78 MA's), (12, 4464), (15, 4473), (22, 4500), (38, 4551), (61, 4629), (77, 4668), (83, 4680), (101, 4758), (108, 4782), (118, 4824), (129, 4854), (167, 5022), (169, 5040), (201, 5157), (208, 5181), (228, 5268), (240, 5349),

Gene: Tweety19_5 Start: 4503, Stop: 5270, Start Num: 13

Candidate Starts for Tweety19_5:

(Start: 13 @4503 has 15 MA's), (23, 4548), (58, 4659), (Start: 70 @4689 has 1 MA's), (81, 4710), (99, 4770), (109, 4803), (117, 4821), (122, 4845), (131, 4869), (147, 4929), (158, 4962), (166, 5013), (167, 5016), (214, 5175),

Gene: Tyson_6 Start: 4320, Stop: 5375, Start Num: 3

Candidate Starts for Tyson_6:

(Start: 3 @4320 has 78 MA's), (38, 4458), (41, 4470), (77, 4575), (83, 4587), (93, 4626), (94, 4629), (101, 4665), (118, 4731), (123, 4746), (129, 4761), (139, 4803), (167, 4905), (201, 5040), (208, 5064), (237, 5205), (240, 5232), (243, 5241),

Gene: UPIE_6 Start: 4318, Stop: 5373, Start Num: 3

Candidate Starts for UPIE_6:

(Start: 3 @4318 has 78 MA's), (38, 4456), (41, 4468), (77, 4573), (83, 4585), (93, 4624), (94, 4627), (101, 4663), (118, 4729), (123, 4744), (129, 4759), (139, 4801), (167, 4903), (201, 5038), (208, 5062), (237, 5203), (240, 5230), (243, 5239),

Gene: Underpass_6 Start: 4311, Stop: 5369, Start Num: 3

Candidate Starts for Underpass_6:

(Start: 3 @4311 has 78 MA's), (Start: 9 @4359 has 1 MA's), (77, 4572), (83, 4584), (95, 4629), (101, 4662), (118, 4728), (129, 4758), (139, 4800), (142, 4809), (167, 4902), (169, 4920), (201, 5037), (208, 5061), (212, 5070), (237, 5202), (240, 5229),

Gene: Vetrix_6 Start: 4311, Stop: 5369, Start Num: 3

Candidate Starts for Vetrix_6:

(Start: 3 @4311 has 78 MA's), (Start: 9 @4359 has 1 MA's), (77, 4572), (83, 4584), (95, 4629), (101, 4662), (118, 4728), (129, 4758), (139, 4800), (142, 4809), (167, 4902), (169, 4920), (201, 5037), (208, 5061), (212, 5070), (237, 5202), (240, 5229),

Gene: VroomVroom_4 Start: 3676, Stop: 4473, Start Num: 13

Candidate Starts for VroomVroom_4:

(Start: 13 @3676 has 15 MA's), (58, 3832), (65, 3850), (81, 3883), (129, 4036), (147, 4102), (166, 4186), (196, 4318),

Gene: Wamburgrxpress_6 Start: 4320, Stop: 5375, Start Num: 3

Candidate Starts for Wamburgrxpress_6:

(Start: 3 @4320 has 78 MA's), (38, 4458), (41, 4470), (77, 4575), (83, 4587), (93, 4626), (94, 4629), (101, 4665), (118, 4731), (123, 4746), (129, 4761), (139, 4803), (167, 4905), (201, 5040), (208, 5064), (237, 5205), (240, 5232), (243, 5241),

Gene: Whirlwind_8 Start: 4408, Stop: 5478, Start Num: 3

Candidate Starts for Whirlwind_8:

(Start: 3 @4408 has 78 MA's), (12, 4456), (15, 4465), (22, 4492), (38, 4543), (50, 4594), (61, 4621), (77, 4660), (83, 4672), (101, 4750), (108, 4774), (118, 4816), (129, 4846), (169, 5032), (201, 5149), (208, 5173), (237, 5314), (240, 5341),

Gene: Whitney_5 Start: 3722, Stop: 4243, Start Num: 70

Candidate Starts for Whitney_5:

(Start: 27 @3599 has 22 MA's), (40, 3629), (41, 3632), (56, 3686), (Start: 70 @3722 has 1 MA's), (71, 3725), (91, 3767), (99, 3809), (110, 3842), (140, 3944), (141, 3947), (142, 3950), (169, 4070), (191, 4154), (193, 4160),

Gene: Wigglewobble_6 Start: 4350, Stop: 5402, Start Num: 3

Candidate Starts for Wigglewobble_6:

(Start: 3 @4350 has 78 MA's), (Start: 9 @4392 has 1 MA's), (77, 4605), (83, 4617), (95, 4662), (101, 4695), (118, 4761), (129, 4791), (139, 4833), (142, 4842), (167, 4935), (169, 4953), (201, 5070), (208, 5094), (212, 5103), (237, 5235), (240, 5262),

Gene: Wilder_6 Start: 4311, Stop: 5369, Start Num: 3

Candidate Starts for Wilder_6:

(Start: 3 @4311 has 78 MA's), (Start: 9 @4359 has 1 MA's), (77, 4572), (83, 4584), (95, 4629), (101, 4662), (118, 4728), (129, 4758), (139, 4800), (142, 4809), (167, 4902), (169, 4920), (201, 5037), (208, 5061), (212, 5070), (237, 5202), (240, 5229),

Gene: Winky_6 Start: 4311, Stop: 5369, Start Num: 3

Candidate Starts for Winky_6:

(Start: 3 @4311 has 78 MA's), (Start: 9 @4359 has 1 MA's), (77, 4572), (83, 4584), (95, 4629), (101, 4662), (118, 4728), (129, 4758), (139, 4800), (142, 4809), (167, 4902), (169, 4920), (201, 5037), (208, 5061), (212, 5070), (237, 5202), (240, 5229),

Gene: Wizzo_4 Start: 3218, Stop: 3973, Start Num: 25

Candidate Starts for Wizzo_4:

(Start: 25 @3218 has 45 MA's), (36, 3242), (59, 3320), (66, 3338), (72, 3356), (75, 3362), (80, 3368), (82, 3374), (93, 3407), (96, 3422), (100, 3440), (103, 3449), (105, 3461), (107, 3467), (Start: 116 @3497 has 1 MA's), (120, 3518), (138, 3569), (146, 3596), (162, 3659), (166, 3692), (167, 3695), (204, 3818), (226, 3914), (231, 3938), (233, 3947), (236, 3965),

Gene: Wyatt2_6 Start: 4320, Stop: 5375, Start Num: 3

Candidate Starts for Wyatt2_6:

(Start: 3 @4320 has 78 MA's), (38, 4458), (41, 4470), (77, 4575), (83, 4587), (93, 4626), (94, 4629), (101, 4665), (118, 4731), (123, 4746), (129, 4761), (139, 4803), (167, 4905), (201, 5040), (208, 5064), (237, 5205), (240, 5232), (243, 5241),

Gene: Yoshi_5 Start: 3585, Stop: 4229, Start Num: 31

Candidate Starts for Yoshi_5:

(Start: 31 @3585 has 7 MA's), (Start: 45 @3618 has 1 MA's), (56, 3660), (63, 3675), (68, 3687), (Start: 70 @3696 has 1 MA's), (76, 3708), (78, 3711), (Start: 89 @3735 has 1 MA's), (99, 3783), (118, 3852), (121, 3864), (129, 3885), (134, 3906), (160, 3996), (166, 4035), (169, 4056), (191, 4137), (193, 4143), (211, 4197),

Gene: Zakai_6 Start: 4299, Stop: 5357, Start Num: 3

Candidate Starts for Zakai_6:

(Start: 3 @4299 has 78 MA's), (Start: 9 @4347 has 1 MA's), (77, 4560), (83, 4572), (95, 4617), (101, 4650), (118, 4716), (129, 4746), (139, 4788), (142, 4797), (167, 4890), (169, 4908), (201, 5025), (208, 5049), (212, 5058), (237, 5190), (240, 5217),

Gene: Zapner_6 Start: 4110, Stop: 4754, Start Num: 31

Candidate Starts for Zapner_6:

(Start: 31 @4110 has 7 MA's), (Start: 45 @4143 has 1 MA's), (56, 4185), (63, 4200), (68, 4212), (Start: 70 @4221 has 1 MA's), (76, 4233), (78, 4236), (Start: 89 @4260 has 1 MA's), (99, 4308), (118, 4377), (121, 4389), (129, 4410), (134, 4431), (160, 4521), (166, 4560), (169, 4581), (191, 4662), (193, 4668), (211, 4722),

Gene: Zaria_6 Start: 4321, Stop: 5376, Start Num: 3

Candidate Starts for Zaria_6:

(Start: 3 @4321 has 78 MA's), (38, 4459), (41, 4471), (77, 4576), (83, 4588), (93, 4627), (94, 4630), (101, 4666), (118, 4732), (123, 4747), (129, 4762), (139, 4804), (167, 4906), (201, 5041), (208, 5065), (237, 5206), (240, 5233), (243, 5242),

Gene: Zeta1847_4 Start: 3665, Stop: 4408, Start Num: 11

Candidate Starts for Zeta1847_4:

(Start: 11 @3665 has 2 MA's), (22, 3704), (61, 3833), (84, 3884), (134, 4061), (140, 4085), (166, 4187), (173, 4226),

Gene: ZhongYanYuan_5 Start: 4143, Stop: 5198, Start Num: 3

Candidate Starts for ZhongYanYuan_5:

(Start: 3 @4143 has 78 MA's), (Start: 9 @4191 has 1 MA's), (32, 4278), (77, 4404), (83, 4416), (95, 4461), (101, 4494), (118, 4560), (129, 4590), (139, 4632), (142, 4641), (167, 4734), (169, 4752), (201,

4869), (208, 4893), (212, 4902), (229, 4980), (237, 5031), (240, 5058), (243, 5067),

Gene: phiSASD1_24 Start: 3643, Stop: 4287, Start Num: 46

Candidate Starts for phiSASD1_24:

(46, 3643), (81, 3736), (85, 3751), (94, 3784), (106, 3841), (130, 3928), (149, 4000), (158, 4027), (159, 4030), (167, 4081), (169, 4099), (172, 4111), (173, 4120), (185, 4174), (198, 4216), (202, 4228),