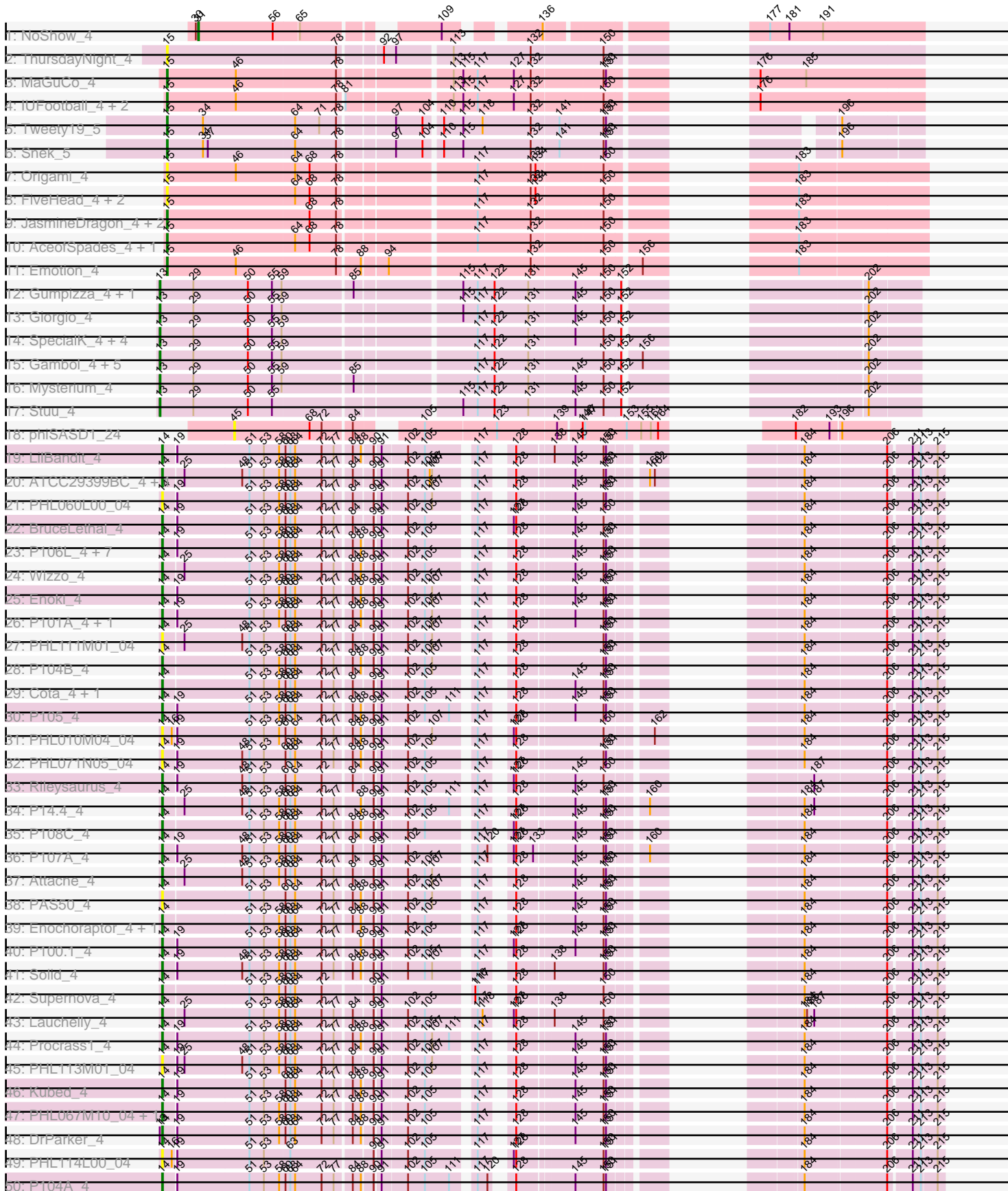
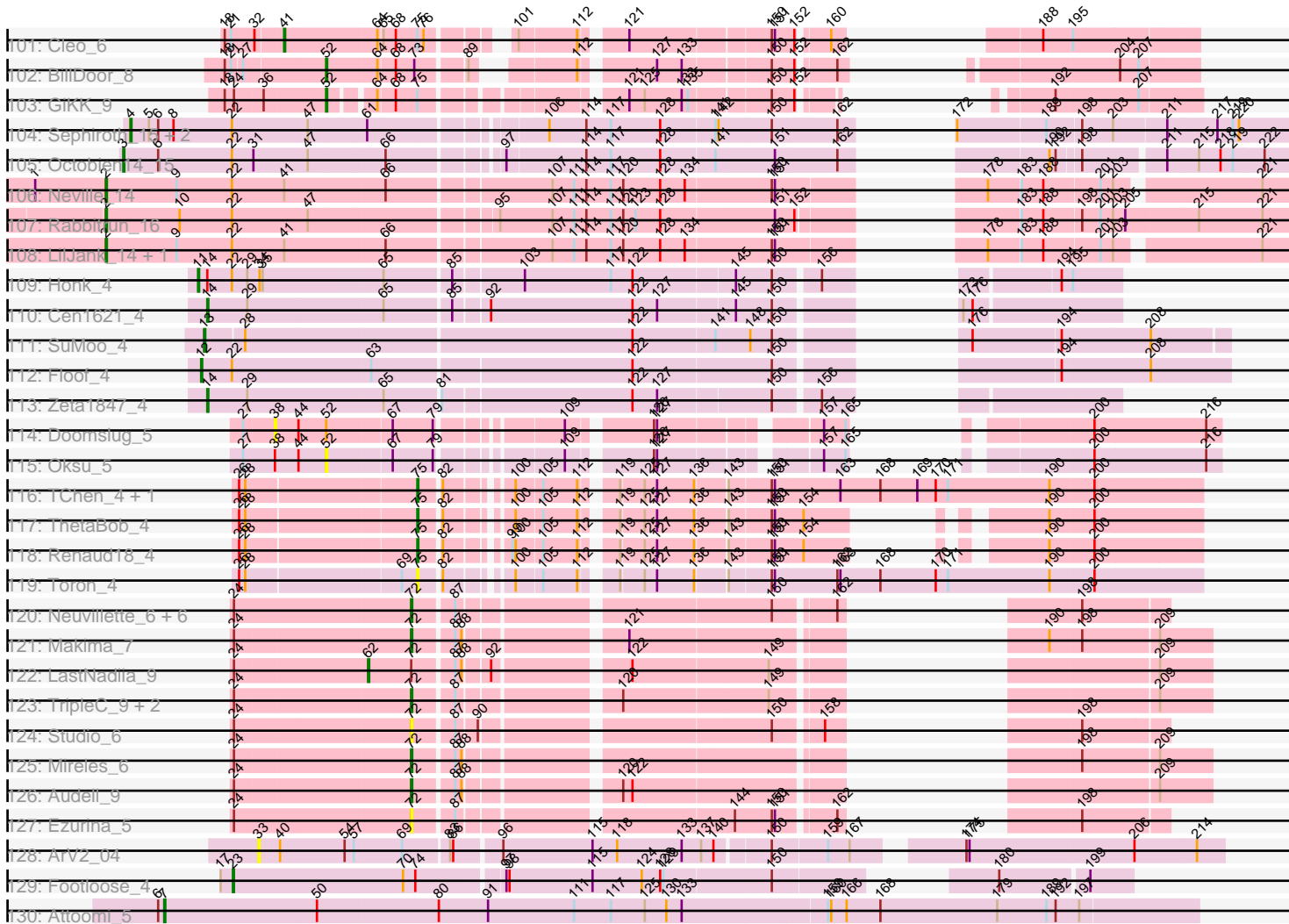


Pham 311234



Pham 311234



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 311234 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311234 has 210 members, 50 are drafts.

Phages represented in each track:

- Track 1 : NoShow_4
- Track 2 : ThursdayNight_4
- Track 3 : MaGuCo_4
- Track 4 : IUFootball_4, Liebe_4, Maureen_4
- Track 5 : Tweety19_5
- Track 6 : Snek_5
- Track 7 : Origami_4
- Track 8 : FiveHead_4, JohnThicc_4, LadyAstra_4
- Track 9 : JasmineDragon_4, MiniMommy_4, ShakeltOph_4
- Track 10 : AceofSpades_4, VroomVroom_4
- Track 11 : Emotion_4
- Track 12 : Gumpizza_4, Beaupre_4
- Track 13 : Giorgio_4
- Track 14 : SpecialK_4, Moss_4, Halsey_4, Ashes_4, RockScotty_4
- Track 15 : Gambol_4, Sooty_4, Cappuccino_4, Donkey_4, Sabourin_4, Kalimba_4
- Track 16 : Mysterium_4
- Track 17 : Stuu_4
- Track 18 : phiSASD1_24
- Track 19 : LilBandit_4
- Track 20 : ATCC29399BC_4, P107C_4
- Track 21 : PHL060L00_04
- Track 22 : BruceLethal_4
- Track 23 : P106L_4, P106I_4, MrAK_4, P9.1_4, SKKY_4, P106M_4, P106C_4, P106A_4
- Track 24 : Wizzo_4
- Track 25 : Enoki_4
- Track 26 : P101A_4, P100D_4
- Track 27 : PHL111M01_04
- Track 28 : P104B_4
- Track 29 : Cota_4, Keiki_4
- Track 30 : P105_4
- Track 31 : PHL010M04_04
- Track 32 : PHL071N05_04
- Track 33 : Rileysaurus_4
- Track 34 : P14.4_4
- Track 35 : P108C_4
- Track 36 : P107A_4

- Track 37 : Attacne_4
- Track 38 : PAS50_4
- Track 39 : Enochoraptor_4, Pirate_4
- Track 40 : P100.1_4
- Track 41 : Solid_4
- Track 42 : Supernova_4
- Track 43 : Lauchelly_4
- Track 44 : Procrass1_4
- Track 45 : PHL113M01_04
- Track 46 : Kubed_4
- Track 47 : PHL067M10_04, Stormborn_4
- Track 48 : DrParker_4
- Track 49 : PHL114L00_04
- Track 50 : P104A_4
- Track 51 : Ouroboros_4
- Track 52 : P100A_4
- Track 53 : PHL112N00_04
- Track 54 : QueenBey_4
- Track 55 : ATCC29399BT_4
- Track 56 : PA6_4
- Track 57 : Leviosa_4
- Track 58 : Moyashi_4
- Track 59 : P1.1_4
- Track 60 : MEAK_4
- Track 61 : PAD20_4
- Track 62 : PHL037M02_04
- Track 63 : Aquarius_4
- Track 64 : SteamedHams_8
- Track 65 : CocoaPuff_5, Balloona_5
- Track 66 : Tarnish_6, SummitAcademy_5, PotPie_6
- Track 67 : Survivors_8
- Track 68 : Horseradish_7, SweatNTears_8, Biskit_7, SketchMex_5, Yummy_7
- Track 69 : Wallaby_9
- Track 70 : Fribs8_7
- Track 71 : Lauer_5
- Track 72 : Sopespian_6, Carsonalex_7, PsychoKiller_6, Elliott_6
- Track 73 : RSchmailzl_7, Cozz_6, MunkgeeRoachy_6, ChickenTender_8, RADical_7, Agatha_6, Starburst_7, Socotra_7, GoldHunter_7, Burnsey_6, Axym_6
- Track 74 : Elinal_7, KayGee_6, Bavidard_6, Yucky_6
- Track 75 : Blondies_7, MScarn_8, Troje_6, Buttrmilkdreams_6
- Track 76 : RedBaron_8
- Track 77 : Gibbous_6, Dre3_6
- Track 78 : Jamzy_9
- Track 79 : CaramelLatte_6, CanesSauce_6, ChocoMunchkin_6
- Track 80 : Amok_5
- Track 81 : Yakult_7
- Track 82 : Mayweather_7, SheckWes_5, MAnor_6, Pons_6
- Track 83 : GTE2_04
- Track 84 : Button_7
- Track 85 : Margaret_9
- Track 86 : McDazzle_5
- Track 87 : AndPeggy_5, Yarn_5
- Track 88 : Vine_7

- Track 89 : HippoPololi_8, Malvina_8
- Track 90 : Quasar_6, Typhonomachy_6
- Track 91 : Wolfwood_8
- Track 92 : Azira_8, MaVan_8, Nibbles_8
- Track 93 : Feastonyeet_5, BigChungus_5
- Track 94 : Emalyn_5, AikoCarson_5
- Track 95 : CherryonLim_7
- Track 96 : Bubble_6
- Track 97 : ElJefes_5
- Track 98 : Zareef_8
- Track 99 : Tolls_8
- Track 100 : RanchParmCat_9
- Track 101 : Cleo_6
- Track 102 : BillDoor_8
- Track 103 : GiKK_9
- Track 104 : Sephiroth_15, Kudefre_14, Syleon_15
- Track 105 : Octobien14_15
- Track 106 : Neville_14
- Track 107 : Rabbitrun_16
- Track 108 : LilJank_14, Trax_14
- Track 109 : Honk_4
- Track 110 : Cen1621_4
- Track 111 : SuMoo_4
- Track 112 : Floof_4
- Track 113 : Zeta1847_4
- Track 114 : Doomslug_5
- Track 115 : Oksu_5
- Track 116 : TChen_4, LunaStella_4
- Track 117 : ThetaBob_4
- Track 118 : Renaud18_4
- Track 119 : Toron_4
- Track 120 : Neuville_6, CardboardBox_6, AnnabelLee_6, ChamoyPickle_6, Roberts_6, ChipsNGuac_6, Gerri43_6
- Track 121 : Makima_7
- Track 122 : LastNadiia_9
- Track 123 : TripleC_9, TMaxx_6, Agamoto_8
- Track 124 : Studio_6
- Track 125 : Mireles_6
- Track 126 : Audell_9
- Track 127 : Ezurina_5
- Track 128 : ArV2_04
- Track 129 : Footloose_4
- Track 130 : Attoomi_5

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

The start number called the most often in the published annotations is 14, it was called in 47 of the 160 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ATCC29399BC_4, ATCC29399BT_4, Aquarius_4, Attacne_4, BruceLethal_4, Cen1621_4, Cota_4, DrParker_4, Enochoraptor_4, Enoki_4, Keiki_4, Kubed_4, Lauchelly_4, Leviosa_4, LilBandit_4, MEAK_4, Moyashi_4, MrAK_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, Pirate_4, Procrass1_4, QueenBey_4, Rileysaurus_4, SKKY_4, Solid_4, Stormborn_4, Supernova_4, Wizzo_4, Zeta1847_4,

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

- Honk_4,

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

- AceofSpades_4, Agamoto_8, Agatha_6, AikoCarson_5, Amok_5, AndPeggy_5, AnnabelLee_6, ArV2_04, Ashes_4, Attoomi_5, Audell_9, Axym_6, Azira_8, Balloona_5, Bavilard_6, Beaupre_4, BigChungus_5, BillDoor_8, Biskit_7, Blondies_7, Bubble_6, Burnsey_6, Button_7, Buttrmlkdreams_6, CanesSauce_6, Cappuccino_4, CaramellLatte_6, CardboardBox_6, Carsonalex_7, ChamoyPickle_6, CherryonLim_7, ChickenTender_8, ChipsNGuac_6, ChocoMunchkin_6, Cleo_6, CocoaPuff_5, Cozz_6, Donkey_4, Doomslug_5, Dre3_6, ElJefes_5, Elinal_7, Elliott_6, Emalyn_5, Emotion_4, Ezurina_5, Feastonyet_5, FiveHead_4, Floof_4, Footloose_4, Fribs8_7, GTE2_04, Gambol_4, Gerri43_6, GiKK_9, Gibbous_6, Giorgio_4, GoldHunter_7, Gumpizza_4, Halsey_4, HippoPololi_8, Horseradish_7, IUFootball_4, Jamzy_9, JasmineDragon_4, JohnThicc_4, Kalimba_4, KayGee_6, Kudrefre_14, LadyAstra_4, LastNadiia_9, Lauer_5, Liebe_4, LilJank_14, LunaStella_4, MAnor_6, MScarn_8, MaGuCo_4, MaVan_8, Makima_7, Malvina_8, Margaret_9, Maureen_4, Mayweather_7, McDazzle_5, MiniMommy_4, Mireles_6, Moss_4, MunkgeeRoachy_6, Mysterium_4, Neuville_6, Neville_14, Nibbles_8, NoShow_4, Octobien14_15, Oksu_5, Origami_4, Pons_6, PotPie_6, PsychoKiller_6, Quasar_6, RADical_7, RSchmailzl_7, Rabbitrun_16, RanchParmCat_9, RedBaron_8, Renaud18_4, Roberts_6, RockScotty_4, Sabourin_4, Sephiroth_15, ShakeltOph_4, SheckWes_5, SketchMex_5, Snek_5, Socotra_7, Sooty_4, Sopespian_6, SpecialK_4, Starburst_7, SteamedHams_8, Studio_6, Stuu_4, SuMoo_4, SummitAcademy_5, Survivors_8, SweatNTears_8, Syleon_15, TChen_4, TMaxx_6, Tarnish_6, ThetaBob_4, ThursdayNight_4, Tolls_8, Toron_4, Trax_14, TripleC_9, Troje_6, Tweety19_5, Typhonmarchy_6, Vine_7, VroomVroom_4, Wallaby_9, Wolfwood_8, Yakult_7, Yarn_5, Yucky_6, Yummy_7, Zareef_8, phiSASD1_24,

Summary by start number:

Start 2:

- Found in 4 of 210 (1.9%) of genes in pham
- Manual Annotations of this start: 3 of 160
- 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 3:

- Found in 1 of 210 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 160
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Octobien14_15 (DU1),

Start 4:

- Found in 3 of 210 (1.4%) of genes in pham
- Manual Annotations of this start: 3 of 160
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kudrefre_14 (DU1), Sephiroth_15 (DU1), Syleon_15 (DU1),

Start 7:

- Found in 1 of 210 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 160
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Attoomi_5 (singleton),

Start 11:

- Found in 1 of 210 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 160
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Honk_4 (EH),

Start 12:

- Found in 1 of 210 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 160
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Floof_4 (EH),

Start 13:

- Found in 18 of 210 (8.6%) of genes in pham
- Manual Annotations of this start: 17 of 160
- Called 94.4% of time when present
- Phage (with cluster) where this start called: Ashes_4 (AZ5), Beaupre_4 (AZ5), Cappuccino_4 (AZ5), Donkey_4 (AZ5), 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 14:

- Found in 60 of 210 (28.6%) of genes in pham
- Manual Annotations of this start: 47 of 160
- 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), Cen1621_4 (EH), 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), Zeta1847_4 (EH),

Start 15:

- Found in 17 of 210 (8.1%) of genes in pham
- Manual Annotations of this start: 10 of 160
- 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 21:

- Found in 73 of 210 (34.8%) of genes in pham
- No Manual Annotations of this start.
- Called 1.4% of time when present
- Phage (with cluster) where this start called: GTE2_04 (CT),

Start 23:

- Found in 1 of 210 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 160
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Footloose_4 (singleton),

Start 24:

- Found in 22 of 210 (10.5%) of genes in pham
- Manual Annotations of this start: 1 of 160
- Called 4.5% of time when present
- Phage (with cluster) where this start called: Jamzy_9 (CT),

Start 31:

- Found in 2 of 210 (1.0%) of genes in pham
- Manual Annotations of this start: 1 of 160
- Called 50.0% of time when present
- Phage (with cluster) where this start called: NoShow_4 (AB),

Start 33:

- Found in 1 of 210 (0.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ArV2_04 (singleton),

Start 38:

- Found in 2 of 210 (1.0%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Doomslug_5 (F),

Start 41:

- Found in 36 of 210 (17.1%) of genes in pham
- Manual Annotations of this start: 3 of 160
- Called 8.3% of time when present

- Phage (with cluster) where this start called: Cleo_6 (CT), Survivors_8 (CT), Wolfwood_8 (CT),

Start 43:

- Found in 20 of 210 (9.5%) of genes in pham
- Manual Annotations of this start: 2 of 160
- Called 15.0% of time when present
- Phage (with cluster) where this start called: ElJefes_5 (CT), Lauer_5 (CT), Vine_7 (CT),

Start 45:

- Found in 1 of 210 (0.5%) 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 49:

- Found in 1 of 210 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 160
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fribs8_7 (CT),

Start 52:

- Found in 68 of 210 (32.4%) of genes in pham
- Manual Annotations of this start: 40 of 160
- Called 83.8% of time when present
- Phage (with cluster) where this start called: Agatha_6 (CT), AikoCarson_5 (CT), Amok_5 (CT), AndPeggy_5 (CT), Axym_6 (CT), Balloona_5 (CT), Bavidard_6 (CT), BillDoor_8 (CT), Biskit_7 (CT), Blondies_7 (CT), Bubble_6 (CT), Burnsey_6 (CT), Button_7 (CT), Buttrmlkdreams_6 (CT), CanesSauce_6 (CT), CaramelLatte_6 (CT), Carsonalex_7 (CT), ChickenTender_8 (CT), ChocoMunchkin_6 (CT), CocoaPuff_5 (CT), Cozz_6 (CT), Elinal_7 (CT), Elliott_6 (CT), Emalyn_5 (CT), GiKK_9 (CT), GoldHunter_7 (CT), Horseradish_7 (CT), KayGee_6 (CT), MAnor_6 (CT), MScarn_8 (CT), Margaret_9 (CT), Mayweather_7 (CT), McDazzle_5 (CT), MunkgeeRoachy_6 (CT), Oksu_5 (F1), Pons_6 (CT), PotPie_6 (CT), PsychoKiller_6 (CT), RADical_7 (CT), RSchmailzl_7 (CT), RanchParmCat_9 (CT), RedBaron_8 (CT), SheckWes_5 (CT), SketchMex_5 (CT), Socotra_7 (CT), Sopeopian_6 (CT), Starburst_7 (CT), SteamedHams_8 (CT), SummitAcademy_5 (CT), SweatNTears_8 (CT), Tarnish_6 (CT), Tolls_8 (CT), Troje_6 (CT), Yakult_7 (CT), Yarn_5 (CT), Yucky_6 (CT), Yummy_7 (CT),

Start 55:

- Found in 17 of 210 (8.1%) of genes in pham
- Manual Annotations of this start: 1 of 160
- Called 5.9% of time when present
- Phage (with cluster) where this start called: CherryonLim_7 (CT),

Start 62:

- Found in 1 of 210 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 160
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LastNadiia_9 (FR),

Start 64:

- Found in 143 of 210 (68.1%) of genes in pham
- Manual Annotations of this start: 11 of 160
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Azira_8 (CT), BigChungus_5 (CT), Dre3_6 (CT), Feastonyeet_5 (CT), Gibbous_6 (CT), HippoPololi_8 (CT), MaVan_8 (CT), Malvina_8 (CT), Nibbles_8 (CT), Quasar_6 (CT), Typhonmarchy_6 (CT), Wallaby_9 (CT), Zareef_8 (CT),

Start 72:

- Found in 73 of 210 (34.8%) of genes in pham
- Manual Annotations of this start: 10 of 160
- Called 20.5% of time when present
- Phage (with cluster) where this start called: Agamoto_8 (FR), AnnabelLee_6 (FR), Audell_9 (FR), CardboardBox_6 (FR), ChamoyPickle_6 (FR), ChipsNGuac_6 (FR), Ezurina_5 (FR), Gerri43_6 (FR), Makima_7 (FR), Mireles_6 (FR), Neuville_6 (FR), Roberts_6 (FR), Studio_6 (FR), TMaxx_6 (FR), TripleC_9 (FR),

Start 75:

- Found in 36 of 210 (17.1%) of genes in pham
- Manual Annotations of this start: 4 of 160
- Called 13.9% of time when present
- Phage (with cluster) where this start called: LunaStella_4 (F4), Renaud18_4 (F4), TChen_4 (F4), ThetaBob_4 (F4), Toron_4 (F6),

Summary by clusters:

There are 18 clusters represented in this pham: F1, FR, AZ3, F4, EH, F6, F, DU2, singleton, BJ, BU, AB, DU1, AZ2, AZ, AZ4, AZ5, CT,

Info for manual annotations of cluster AB:

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

Info for manual annotations of cluster AZ2:

- Start number 15 was manually annotated 3 times for cluster AZ2.

Info for manual annotations of cluster AZ3:

- Start number 15 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster AZ4:

- Start number 15 was manually annotated 5 times for cluster AZ4.

Info for manual annotations of cluster AZ5:

- Start number 13 was manually annotated 16 times for cluster AZ5.

Info for manual annotations of cluster BU:

- Start number 14 was manually annotated 45 times for cluster BU.

Info for manual annotations of cluster CT:

- Start number 24 was manually annotated 1 time for cluster CT.
- Start number 41 was manually annotated 3 times for cluster CT.

- Start number 43 was manually annotated 2 times for cluster CT.
- Start number 49 was manually annotated 1 time for cluster CT.
- Start number 52 was manually annotated 40 times for cluster CT.
- Start number 55 was manually annotated 1 time for cluster CT.
- Start number 64 was manually annotated 11 times for cluster CT.

Info for manual annotations of cluster DU1:

- Start number 3 was manually annotated 1 time for cluster DU1.
- Start number 4 was manually annotated 3 times for cluster DU1.

Info for manual annotations of cluster DU2:

- Start number 2 was manually annotated 3 times for cluster DU2.

Info for manual annotations of cluster EH:

- Start number 11 was manually annotated 1 time for cluster EH.
- Start number 12 was manually annotated 1 time for cluster EH.
- Start number 13 was manually annotated 1 time for cluster EH.
- Start number 14 was manually annotated 2 times for cluster EH.

Info for manual annotations of cluster F4:

- Start number 75 was manually annotated 4 times for cluster F4.

Info for manual annotations of cluster FR:

- Start number 62 was manually annotated 1 time for cluster FR.
- Start number 72 was manually annotated 10 times for cluster FR.

Gene Information:

Gene: ATCC29399BC_4 Start: 3218, Stop: 3973, Start Num: 14

Candidate Starts for ATCC29399BC_4:

(Start: 14 @3218 has 47 MA's), (25, 3242), (48, 3311), (51, 3320), (53, 3338), (58, 3356), (60, 3362), (63, 3368), (Start: 64 @3374 has 11 MA's), (Start: 72 @3407 has 10 MA's), (77, 3422), (84, 3440), (90, 3461), (91, 3467), (102, 3497), (105, 3518), (106, 3524), (107, 3527), (117, 3569), (128, 3596), (145, 3659), (150, 3692), (151, 3695), (160, 3734), (162, 3740), (184, 3818), (206, 3914), (211, 3938), (213, 3947), (215, 3965),

Gene: ATCC29399BT_4 Start: 3225, Stop: 3980, Start Num: 14

Candidate Starts for ATCC29399BT_4:

(Start: 14 @3225 has 47 MA's), (51, 3327), (53, 3345), (58, 3363), (60, 3369), (Start: 64 @3381 has 11 MA's), (Start: 72 @3414 has 10 MA's), (88, 3456), (90, 3468), (91, 3474), (102, 3504), (107, 3534), (117, 3576), (127, 3600), (128, 3603), (133, 3624), (145, 3666), (150, 3699), (151, 3702), (184, 3825), (206, 3921), (211, 3945), (213, 3954), (215, 3972),

Gene: AceofSpades_4 Start: 3676, Stop: 4473, Start Num: 15

Candidate Starts for AceofSpades_4:

(Start: 15 @3676 has 10 MA's), (Start: 64 @3832 has 11 MA's), (68, 3850), (78, 3883), (117, 4036), (132, 4102), (150, 4186), (183, 4318),

Gene: Agamoto_8 Start: 7462, Stop: 8025, Start Num: 72

Candidate Starts for Agamoto_8:

(Start: 24 @7297 has 1 MA's), (Start: 72 @7462 has 10 MA's), (87, 7498), (120, 7633), (149, 7771), (209, 7975),

Gene: Agatha_6 Start: 4221, Stop: 4844, Start Num: 52

Candidate Starts for Agatha_6:

(18, 4131), (21, 4137), (Start: 52 @4221 has 40 MA's), (Start: 64 @4269 has 11 MA's), (69, 4290), (73, 4302), (76, 4311), (89, 4344), (112, 4416), (127, 4476), (150, 4578), (162, 4629), (190, 4707), (204, 4773), (207, 4791), (210, 4812),

Gene: AikoCarson_5 Start: 3913, Stop: 4572, Start Num: 52

Candidate Starts for AikoCarson_5:

(18, 3826), (21, 3832), (Start: 52 @3913 has 40 MA's), (Start: 64 @3961 has 11 MA's), (68, 3976), (69, 3982), (73, 3994), (112, 4108), (125, 4156), (150, 4270), (152, 4291), (162, 4321), (207, 4516), (211, 4543),

Gene: Amok_5 Start: 3914, Stop: 4573, Start Num: 52

Candidate Starts for Amok_5:

(18, 3827), (21, 3833), (27, 3842), (Start: 52 @3914 has 40 MA's), (Start: 64 @3962 has 11 MA's), (68, 3977), (69, 3983), (73, 3995), (112, 4109), (125, 4157), (133, 4193), (150, 4271), (152, 4292), (162, 4322), (200, 4475), (207, 4517), (211, 4544),

Gene: AndPeggy_5 Start: 4225, Stop: 4881, Start Num: 52

Candidate Starts for AndPeggy_5:

(18, 4138), (21, 4144), (27, 4153), (Start: 52 @4225 has 40 MA's), (Start: 64 @4273 has 11 MA's), (68, 4288), (73, 4306), (89, 4348), (112, 4420), (127, 4480), (133, 4504), (150, 4582), (162, 4633), (204, 4810), (207, 4828),

Gene: AnnabelLee_6 Start: 4338, Stop: 4859, Start Num: 72

Candidate Starts for AnnabelLee_6:

(Start: 24 @4173 has 1 MA's), (Start: 72 @4338 has 10 MA's), (87, 4374), (150, 4650), (162, 4701), (198, 4779),

Gene: Aquarius_4 Start: 3218, Stop: 3973, Start Num: 14

Candidate Starts for Aquarius_4:

(Start: 14 @3218 has 47 MA's), (25, 3242), (51, 3320), (53, 3338), (58, 3356), (60, 3362), (63, 3368), (Start: 64 @3374 has 11 MA's), (Start: 72 @3407 has 10 MA's), (77, 3422), (88, 3449), (90, 3461), (91, 3467), (102, 3497), (105, 3518), (106, 3524), (107, 3527), (111, 3548), (117, 3569), (128, 3596), (145, 3659), (150, 3692), (151, 3695), (184, 3818), (206, 3914), (211, 3938), (213, 3947), (215, 3965),

Gene: ArV2_04 Start: 3209, Stop: 4093, Start Num: 33

Candidate Starts for ArV2_04:

(33, 3209), (40, 3230), (54, 3293), (57, 3302), (69, 3347), (83, 3389), (86, 3392), (96, 3434), (115, 3521), (118, 3545), (133, 3608), (137, 3626), (140, 3638), (150, 3686), (159, 3737), (167, 3758), (174, 3845), (175, 3848), (206, 4007), (214, 4067),

Gene: Ashes_4 Start: 3879, Stop: 4673, Start Num: 13

Candidate Starts for Ashes_4:

(Start: 13 @3879 has 17 MA's), (29, 3921), (50, 3987), (Start: 55 @4017 has 1 MA's), (59, 4029), (117, 4248), (122, 4269), (131, 4311), (145, 4365), (150, 4398), (152, 4419), (202, 4611),

Gene: Attacne_4 Start: 3213, Stop: 3968, Start Num: 14

Candidate Starts for Attacne_4:

(Start: 14 @3213 has 47 MA's), (25, 3237), (48, 3306), (51, 3315), (53, 3333), (58, 3351), (60, 3357), (63, 3363), (Start: 64 @3369 has 11 MA's), (Start: 72 @3402 has 10 MA's), (77, 3417), (84, 3435), (90, 3456), (91, 3462), (102, 3492), (105, 3513), (107, 3522), (117, 3564), (128, 3591), (145, 3654), (150, 3687), (151, 3690), (184, 3813), (206, 3909), (211, 3933), (213, 3942), (215, 3960),

Gene: Attoomi_5 Start: 3965, Stop: 4960, Start Num: 7

Candidate Starts for Attoomi_5:

(6, 3959), (Start: 7 @3965 has 1 MA's), (50, 4112), (80, 4229), (91, 4277), (111, 4361), (117, 4397), (125, 4430), (130, 4451), (133, 4466), (159, 4604), (160, 4607), (166, 4622), (168, 4655), (179, 4769), (189, 4817), (192, 4826), (197, 4847),

Gene: Audell_9 Start: 7732, Stop: 8295, Start Num: 72

Candidate Starts for Audell_9:

(Start: 24 @7567 has 1 MA's), (Start: 72 @7732 has 10 MA's), (87, 7768), (88, 7774), (120, 7903), (122, 7912), (209, 8245),

Gene: Axym_6 Start: 4221, Stop: 4844, Start Num: 52

Candidate Starts for Axym_6:

(18, 4131), (21, 4137), (Start: 52 @4221 has 40 MA's), (Start: 64 @4269 has 11 MA's), (69, 4290), (73, 4302), (76, 4311), (89, 4344), (112, 4416), (127, 4476), (150, 4578), (162, 4629), (190, 4707), (204, 4773), (207, 4791), (210, 4812),

Gene: Azira_8 Start: 5151, Stop: 5714, Start Num: 64

Candidate Starts for Azira_8:

(18, 5016), (21, 5022), (32, 5040), (Start: 41 @5064 has 3 MA's), (42, 5070), (Start: 64 @5151 has 11 MA's), (Start: 75 @5187 has 4 MA's), (76, 5193), (101, 5250), (112, 5304), (121, 5337), (122, 5340), (133, 5388), (150, 5466), (151, 5469), (152, 5487), (188, 5571), (190, 5577), (195, 5598), (212, 5688),

Gene: Balloona_5 Start: 3999, Stop: 4592, Start Num: 52

Candidate Starts for Balloona_5:

(18, 3909), (21, 3915), (36, 3942), (Start: 41 @3960 has 3 MA's), (Start: 43 @3969 has 2 MA's), (Start: 52 @3999 has 40 MA's), (Start: 64 @4047 has 11 MA's), (Start: 75 @4083 has 4 MA's), (89, 4122), (99, 4134), (107, 4170), (108, 4176), (112, 4194), (150, 4356), (152, 4377), (192, 4458), (195, 4473), (211, 4560),

Gene: Bavilard_6 Start: 4775, Stop: 5368, Start Num: 52

Candidate Starts for Bavilard_6:

(18, 4685), (21, 4691), (36, 4718), (Start: 41 @4736 has 3 MA's), (Start: 43 @4745 has 2 MA's), (Start: 52 @4775 has 40 MA's), (Start: 64 @4823 has 11 MA's), (Start: 75 @4859 has 4 MA's), (89, 4898), (99, 4910), (107, 4946), (108, 4952), (112, 4970), (150, 5132), (192, 5234), (195, 5249), (211, 5336),

Gene: Beaupre_4 Start: 3879, Stop: 4673, Start Num: 13

Candidate Starts for Beaupre_4:

(Start: 13 @3879 has 17 MA's), (29, 3921), (50, 3987), (Start: 55 @4017 has 1 MA's), (59, 4029), (85, 4110), (115, 4230), (117, 4248), (122, 4269), (131, 4311), (145, 4365), (150, 4398), (152, 4419), (202, 4611),

Gene: BigChungus_5 Start: 4072, Stop: 4617, Start Num: 64

Candidate Starts for BigChungus_5:

(18, 3934), (21, 3940), (36, 3967), (Start: 41 @3985 has 3 MA's), (Start: 43 @3994 has 2 MA's), (Start: 52 @4024 has 40 MA's), (Start: 64 @4072 has 11 MA's), (Start: 75 @4108 has 4 MA's), (89, 4147), (99, 4159), (107, 4195), (108, 4201), (112, 4219), (150, 4381), (152, 4402), (192, 4483), (195, 4498),

(211, 4585),

Gene: BillDoor_8 Start: 4220, Stop: 4846, Start Num: 52

Candidate Starts for BillDoor_8:

(18, 4133), (21, 4139), (27, 4148), (Start: 52 @4220 has 40 MA's), (Start: 64 @4268 has 11 MA's), (68, 4283), (73, 4301), (89, 4343), (112, 4415), (127, 4475), (133, 4499), (150, 4577), (152, 4598), (162, 4628), (204, 4775), (207, 4793),

Gene: Biskit_7 Start: 4215, Stop: 4838, Start Num: 52

Candidate Starts for Biskit_7:

(18, 4128), (21, 4134), (Start: 52 @4215 has 40 MA's), (Start: 64 @4263 has 11 MA's), (73, 4296), (89, 4338), (112, 4410), (127, 4470), (133, 4494), (150, 4572), (152, 4593), (162, 4623), (204, 4767), (207, 4785),

Gene: Blondies_7 Start: 4216, Stop: 4839, Start Num: 52

Candidate Starts for Blondies_7:

(18, 4129), (21, 4135), (Start: 52 @4216 has 40 MA's), (Start: 64 @4264 has 11 MA's), (68, 4279), (73, 4297), (89, 4339), (112, 4411), (127, 4471), (133, 4495), (150, 4573), (152, 4594), (162, 4624), (204, 4768), (207, 4786),

Gene: BruceLethal_4 Start: 3210, Stop: 3965, Start Num: 14

Candidate Starts for BruceLethal_4:

(Start: 14 @3210 has 47 MA's), (19, 3225), (51, 3312), (53, 3330), (58, 3348), (60, 3354), (63, 3360), (Start: 64 @3366 has 11 MA's), (Start: 72 @3399 has 10 MA's), (77, 3414), (84, 3432), (90, 3453), (91, 3459), (102, 3489), (105, 3510), (117, 3561), (127, 3585), (128, 3588), (145, 3651), (150, 3684), (184, 3810), (206, 3906), (211, 3930), (213, 3939), (215, 3957),

Gene: Bubble_6 Start: 4221, Stop: 4844, Start Num: 52

Candidate Starts for Bubble_6:

(18, 4131), (21, 4137), (Start: 52 @4221 has 40 MA's), (Start: 64 @4269 has 11 MA's), (69, 4290), (73, 4302), (76, 4311), (89, 4344), (112, 4416), (150, 4578), (162, 4629), (190, 4707), (204, 4773), (207, 4791), (210, 4812),

Gene: Burnsey_6 Start: 4221, Stop: 4844, Start Num: 52

Candidate Starts for Burnsey_6:

(18, 4131), (21, 4137), (Start: 52 @4221 has 40 MA's), (Start: 64 @4269 has 11 MA's), (69, 4290), (73, 4302), (76, 4311), (89, 4344), (112, 4416), (127, 4476), (150, 4578), (162, 4629), (190, 4707), (204, 4773), (207, 4791), (210, 4812),

Gene: Button_7 Start: 4307, Stop: 4906, Start Num: 52

Candidate Starts for Button_7:

(18, 4214), (Start: 24 @4223 has 1 MA's), (Start: 52 @4307 has 40 MA's), (Start: 64 @4343 has 11 MA's), (68, 4358), (Start: 75 @4379 has 4 MA's), (93, 4439), (121, 4544), (133, 4595), (135, 4601), (150, 4673), (152, 4694), (190, 4766), (192, 4772), (207, 4850),

Gene: Buttrmlkdreams_6 Start: 4216, Stop: 4839, Start Num: 52

Candidate Starts for Buttrmlkdreams_6:

(18, 4129), (21, 4135), (Start: 52 @4216 has 40 MA's), (Start: 64 @4264 has 11 MA's), (68, 4279), (73, 4297), (89, 4339), (112, 4411), (127, 4471), (133, 4495), (150, 4573), (152, 4594), (162, 4624), (204, 4768), (207, 4786),

Gene: CanesSauce_6 Start: 4225, Stop: 4881, Start Num: 52

Candidate Starts for CanesSauce_6:

(18, 4138), (21, 4144), (27, 4153), (Start: 52 @4225 has 40 MA's), (Start: 64 @4273 has 11 MA's), (68, 4288), (73, 4306), (89, 4348), (112, 4420), (127, 4480), (133, 4504), (150, 4582), (162, 4633), (172, 4657), (204, 4810), (207, 4828),

Gene: Cappuccino_4 Start: 3875, Stop: 4669, Start Num: 13

Candidate Starts for Cappuccino_4:

(Start: 13 @3875 has 17 MA's), (29, 3917), (50, 3983), (Start: 55 @4013 has 1 MA's), (59, 4025), (117, 4244), (122, 4265), (131, 4307), (150, 4394), (152, 4415), (156, 4433), (202, 4607),

Gene: CaramellLatte_6 Start: 4225, Stop: 4881, Start Num: 52

Candidate Starts for CaramellLatte_6:

(18, 4138), (21, 4144), (27, 4153), (Start: 52 @4225 has 40 MA's), (Start: 64 @4273 has 11 MA's), (68, 4288), (73, 4306), (89, 4348), (112, 4420), (127, 4480), (133, 4504), (150, 4582), (162, 4633), (172, 4657), (204, 4810), (207, 4828),

Gene: CardboardBox_6 Start: 4338, Stop: 4859, Start Num: 72

Candidate Starts for CardboardBox_6:

(Start: 24 @4173 has 1 MA's), (Start: 72 @4338 has 10 MA's), (87, 4374), (150, 4650), (162, 4701), (198, 4779),

Gene: Carsonalex_7 Start: 4278, Stop: 4901, Start Num: 52

Candidate Starts for Carsonalex_7:

(18, 4188), (21, 4194), (Start: 52 @4278 has 40 MA's), (Start: 64 @4326 has 11 MA's), (69, 4347), (73, 4359), (76, 4368), (89, 4401), (112, 4473), (127, 4533), (150, 4635), (162, 4686), (204, 4830), (207, 4848), (210, 4869),

Gene: Cen1621_4 Start: 3740, Stop: 4483, Start Num: 14

Candidate Starts for Cen1621_4:

(Start: 14 @3740 has 47 MA's), (29, 3779), (65, 3908), (85, 3968), (92, 3998), (122, 4136), (127, 4160), (145, 4229), (150, 4262), (173, 4337), (176, 4346),

Gene: ChamoyPickle_6 Start: 4338, Stop: 4859, Start Num: 72

Candidate Starts for ChamoyPickle_6:

(Start: 24 @4173 has 1 MA's), (Start: 72 @4338 has 10 MA's), (87, 4374), (150, 4650), (162, 4701), (198, 4779),

Gene: CherryonLim_7 Start: 4771, Stop: 5343, Start Num: 55

Candidate Starts for CherryonLim_7:

(18, 4660), (21, 4666), (36, 4693), (Start: 41 @4711 has 3 MA's), (Start: 43 @4720 has 2 MA's), (Start: 52 @4750 has 40 MA's), (Start: 55 @4771 has 1 MA's), (Start: 64 @4798 has 11 MA's), (89, 4873), (99, 4885), (107, 4921), (108, 4927), (112, 4945), (150, 5107), (152, 5128), (190, 5203), (192, 5209), (195, 5224), (211, 5311),

Gene: ChickenTender_8 Start: 4269, Stop: 4892, Start Num: 52

Candidate Starts for ChickenTender_8:

(18, 4179), (21, 4185), (Start: 52 @4269 has 40 MA's), (Start: 64 @4317 has 11 MA's), (69, 4338), (73, 4350), (76, 4359), (89, 4392), (112, 4464), (127, 4524), (150, 4626), (162, 4677), (190, 4755), (204, 4821), (207, 4839), (210, 4860),

Gene: ChipsNGuac_6 Start: 4338, Stop: 4859, Start Num: 72

Candidate Starts for ChipsNGuac_6:

(Start: 24 @4173 has 1 MA's), (Start: 72 @4338 has 10 MA's), (87, 4374), (150, 4650), (162, 4701), (198, 4779),

Gene: ChocoMunchkin_6 Start: 4225, Stop: 4881, Start Num: 52

Candidate Starts for ChocoMunchkin_6:

(18, 4138), (21, 4144), (27, 4153), (Start: 52 @4225 has 40 MA's), (Start: 64 @4273 has 11 MA's), (68, 4288), (73, 4306), (89, 4348), (112, 4420), (127, 4480), (133, 4504), (150, 4582), (162, 4633), (172, 4657), (204, 4810), (207, 4828),

Gene: Cleo_6 Start: 4357, Stop: 5013, Start Num: 41

Candidate Starts for Cleo_6:

(18, 4306), (21, 4312), (32, 4333), (Start: 41 @4357 has 3 MA's), (Start: 64 @4444 has 11 MA's), (65, 4447), (68, 4459), (Start: 75 @4480 has 4 MA's), (76, 4486), (101, 4543), (112, 4597), (121, 4630), (150, 4759), (151, 4762), (152, 4780), (160, 4804), (188, 4870), (195, 4897),

Gene: CocoaPuff_5 Start: 3999, Stop: 4592, Start Num: 52

Candidate Starts for CocoaPuff_5:

(18, 3909), (21, 3915), (36, 3942), (Start: 41 @3960 has 3 MA's), (Start: 43 @3969 has 2 MA's), (Start: 52 @3999 has 40 MA's), (Start: 64 @4047 has 11 MA's), (Start: 75 @4083 has 4 MA's), (89, 4122), (99, 4134), (107, 4170), (108, 4176), (112, 4194), (150, 4356), (152, 4377), (192, 4458), (195, 4473), (211, 4560),

Gene: Cota_4 Start: 3218, Stop: 3973, Start Num: 14

Candidate Starts for Cota_4:

(Start: 14 @3218 has 47 MA's), (51, 3320), (53, 3338), (58, 3356), (60, 3362), (63, 3368), (Start: 64 @3374 has 11 MA's), (Start: 72 @3407 has 10 MA's), (77, 3422), (84, 3440), (90, 3461), (91, 3467), (102, 3497), (105, 3518), (117, 3569), (128, 3596), (145, 3659), (150, 3692), (151, 3695), (184, 3818), (206, 3914), (211, 3938), (213, 3947), (215, 3965),

Gene: Cozz_6 Start: 4221, Stop: 4844, Start Num: 52

Candidate Starts for Cozz_6:

(18, 4131), (21, 4137), (Start: 52 @4221 has 40 MA's), (Start: 64 @4269 has 11 MA's), (69, 4290), (73, 4302), (76, 4311), (89, 4344), (112, 4416), (127, 4476), (150, 4578), (162, 4629), (190, 4707), (204, 4773), (207, 4791), (210, 4812),

Gene: Donkey_4 Start: 3875, Stop: 4669, Start Num: 13

Candidate Starts for Donkey_4:

(Start: 13 @3875 has 17 MA's), (29, 3917), (50, 3983), (Start: 55 @4013 has 1 MA's), (59, 4025), (117, 4244), (122, 4265), (131, 4307), (150, 4394), (152, 4415), (156, 4433), (202, 4607),

Gene: Doomslug_5 Start: 3631, Stop: 4329, Start Num: 38

Candidate Starts for Doomslug_5:

(27, 3604), (38, 3631), (44, 3652), (Start: 52 @3679 has 40 MA's), (67, 3739), (79, 3778), (109, 3877), (126, 3946), (127, 3949), (157, 4078), (165, 4099), (200, 4207), (216, 4315),

Gene: DrParker_4 Start: 3218, Stop: 3973, Start Num: 14

Candidate Starts for DrParker_4:

(Start: 13 @3215 has 17 MA's), (Start: 14 @3218 has 47 MA's), (19, 3233), (51, 3320), (53, 3338), (58, 3356), (60, 3362), (63, 3368), (Start: 64 @3374 has 11 MA's), (Start: 72 @3407 has 10 MA's), (77, 3422), (84, 3440), (88, 3449), (90, 3461), (91, 3467), (102, 3497), (105, 3518), (117, 3569), (128, 3596), (145, 3659), (150, 3692), (151, 3695), (184, 3818), (206, 3914), (211, 3938), (213, 3947), (215, 3965),

Gene: Dre3_6 Start: 4388, Stop: 4960, Start Num: 64

Candidate Starts for Dre3_6:

(18, 4250), (21, 4256), (32, 4277), (Start: 41 @4301 has 3 MA's), (Start: 64 @4388 has 11 MA's), (65, 4391), (68, 4403), (Start: 75 @4424 has 4 MA's), (76, 4430), (101, 4490), (112, 4544), (121, 4577), (150, 4706), (151, 4709), (152, 4727), (160, 4751), (188, 4817), (195, 4844),

Gene: ElJefes_5 Start: 4440, Stop: 5063, Start Num: 43

Candidate Starts for ElJefes_5:

(21, 4389), (Start: 41 @4431 has 3 MA's), (Start: 43 @4440 has 2 MA's), (Start: 52 @4470 has 40 MA's), (Start: 64 @4518 has 11 MA's), (89, 4593), (99, 4605), (107, 4641), (108, 4647), (112, 4665), (150, 4827), (152, 4848), (190, 4923), (192, 4929), (195, 4944), (211, 5031),

Gene: Elinal_7 Start: 4002, Stop: 4595, Start Num: 52

Candidate Starts for Elinal_7:

(18, 3912), (21, 3918), (36, 3945), (Start: 41 @3963 has 3 MA's), (Start: 43 @3972 has 2 MA's), (Start: 52 @4002 has 40 MA's), (Start: 64 @4050 has 11 MA's), (Start: 75 @4086 has 4 MA's), (89, 4125), (99, 4137), (107, 4173), (108, 4179), (112, 4197), (150, 4359), (192, 4461), (195, 4476), (211, 4563),

Gene: Elliott_6 Start: 4221, Stop: 4844, Start Num: 52

Candidate Starts for Elliott_6:

(18, 4131), (21, 4137), (Start: 52 @4221 has 40 MA's), (Start: 64 @4269 has 11 MA's), (69, 4290), (73, 4302), (76, 4311), (89, 4344), (112, 4416), (127, 4476), (150, 4578), (162, 4629), (204, 4773), (207, 4791), (210, 4812),

Gene: Emalyn_5 Start: 3913, Stop: 4572, Start Num: 52

Candidate Starts for Emalyn_5:

(18, 3826), (21, 3832), (Start: 52 @3913 has 40 MA's), (Start: 64 @3961 has 11 MA's), (68, 3976), (69, 3982), (73, 3994), (112, 4108), (125, 4156), (150, 4270), (152, 4291), (162, 4321), (207, 4516), (211, 4543),

Gene: Emotion_4 Start: 3677, Stop: 4474, Start Num: 15

Candidate Starts for Emotion_4:

(Start: 15 @3677 has 10 MA's), (46, 3761), (78, 3884), (88, 3908), (94, 3935), (132, 4103), (150, 4187), (156, 4226), (183, 4319),

Gene: Enochoraptor_4 Start: 3225, Stop: 3980, Start Num: 14

Candidate Starts for Enochoraptor_4:

(Start: 14 @3225 has 47 MA's), (51, 3327), (53, 3345), (58, 3363), (60, 3369), (63, 3375), (Start: 64 @3381 has 11 MA's), (Start: 72 @3414 has 10 MA's), (77, 3429), (84, 3447), (88, 3456), (90, 3468), (91, 3474), (102, 3504), (105, 3525), (117, 3576), (128, 3603), (145, 3666), (150, 3699), (151, 3702), (184, 3825), (206, 3921), (211, 3945), (213, 3954), (215, 3972),

Gene: Enoki_4 Start: 3210, Stop: 3965, Start Num: 14

Candidate Starts for Enoki_4:

(Start: 14 @3210 has 47 MA's), (19, 3225), (51, 3312), (53, 3330), (58, 3348), (60, 3354), (63, 3360), (Start: 64 @3366 has 11 MA's), (Start: 72 @3399 has 10 MA's), (77, 3414), (84, 3432), (88, 3441), (90, 3453), (91, 3459), (102, 3489), (105, 3510), (107, 3519), (117, 3561), (128, 3588), (145, 3651), (150, 3684), (151, 3687), (184, 3810), (206, 3906), (211, 3930), (213, 3939), (215, 3957),

Gene: Ezurina_5 Start: 3952, Stop: 4473, Start Num: 72

Candidate Starts for Ezurina_5:

(Start: 24 @3787 has 1 MA's), (Start: 72 @3952 has 10 MA's), (87, 3988), (144, 4228), (150, 4264), (151, 4267), (162, 4315), (198, 4393),

Gene: Feastonyeet_5 Start: 4072, Stop: 4617, Start Num: 64

Candidate Starts for Feastonyeet_5:

(18, 3934), (21, 3940), (36, 3967), (Start: 41 @3985 has 3 MA's), (Start: 43 @3994 has 2 MA's), (Start: 52 @4024 has 40 MA's), (Start: 64 @4072 has 11 MA's), (Start: 75 @4108 has 4 MA's), (89, 4147), (99, 4159), (107, 4195), (108, 4201), (112, 4219), (150, 4381), (152, 4402), (192, 4483), (195, 4498), (211, 4585),

Gene: FiveHead_4 Start: 3658, Stop: 4455, Start Num: 15

Candidate Starts for FiveHead_4:

(Start: 15 @3658 has 10 MA's), (Start: 64 @3814 has 11 MA's), (68, 3832), (78, 3865), (117, 4018), (132, 4084), (134, 4090), (150, 4168), (183, 4300),

Gene: Floof_4 Start: 4029, Stop: 4892, Start Num: 12

Candidate Starts for Floof_4:

(Start: 12 @4029 has 1 MA's), (22, 4059), (63, 4191), (122, 4434), (150, 4563), (194, 4731), (208, 4815),

Gene: Footloose_4 Start: 3515, Stop: 4273, Start Num: 23

Candidate Starts for Footloose_4:

(17, 3503), (Start: 23 @3515 has 1 MA's), (70, 3680), (74, 3692), (97, 3767), (98, 3770), (115, 3851), (124, 3899), (128, 3917), (129, 3920), (150, 4019), (180, 4154), (199, 4232),

Gene: Fribs8_7 Start: 4879, Stop: 5508, Start Num: 49

Candidate Starts for Fribs8_7:

(18, 4804), (21, 4810), (32, 4828), (Start: 41 @4852 has 3 MA's), (Start: 49 @4879 has 1 MA's), (Start: 64 @4939 has 11 MA's), (65, 4942), (Start: 75 @4975 has 4 MA's), (76, 4981), (101, 5038), (112, 5092), (121, 5125), (122, 5128), (150, 5254), (151, 5257), (152, 5275), (188, 5365), (195, 5392),

Gene: GTE2_04 Start: 3827, Stop: 4531, Start Num: 21

Candidate Starts for GTE2_04:

(18, 3821), (21, 3827), (27, 3836), (Start: 52 @3908 has 40 MA's), (Start: 64 @3956 has 11 MA's), (68, 3971), (73, 3989), (89, 4031), (112, 4103), (127, 4163), (133, 4187), (150, 4265), (152, 4286), (162, 4316), (204, 4460), (207, 4478),

Gene: Gambol_4 Start: 3875, Stop: 4669, Start Num: 13

Candidate Starts for Gambol_4:

(Start: 13 @3875 has 17 MA's), (29, 3917), (50, 3983), (Start: 55 @4013 has 1 MA's), (59, 4025), (117, 4244), (122, 4265), (131, 4307), (150, 4394), (152, 4415), (156, 4433), (202, 4607),

Gene: Gerri43_6 Start: 4338, Stop: 4859, Start Num: 72

Candidate Starts for Gerri43_6:

(Start: 24 @4173 has 1 MA's), (Start: 72 @4338 has 10 MA's), (87, 4374), (150, 4650), (162, 4701), (198, 4779),

Gene: GiKK_9 Start: 4616, Stop: 5209, Start Num: 52

Candidate Starts for GiKK_9:

(18, 4523), (Start: 24 @4532 has 1 MA's), (36, 4559), (Start: 52 @4616 has 40 MA's), (Start: 64 @4652 has 11 MA's), (68, 4667), (Start: 75 @4688 has 4 MA's), (121, 4847), (125, 4862), (133, 4898), (135, 4904), (150, 4976), (152, 4997), (192, 5075), (207, 5153),

Gene: Gibbous_6 Start: 4388, Stop: 4960, Start Num: 64

Candidate Starts for Gibbous_6:

(18, 4250), (21, 4256), (32, 4277), (Start: 41 @4301 has 3 MA's), (Start: 64 @4388 has 11 MA's), (65, 4391), (68, 4403), (Start: 75 @4424 has 4 MA's), (76, 4430), (101, 4490), (112, 4544), (121, 4577),

(150, 4706), (151, 4709), (152, 4727), (160, 4751), (188, 4817), (195, 4844),

Gene: Giorgio_4 Start: 3880, Stop: 4674, Start Num: 13

Candidate Starts for Giorgio_4:

(Start: 13 @3880 has 17 MA's), (29, 3922), (50, 3988), (Start: 55 @4018 has 1 MA's), (59, 4030), (115, 4231), (117, 4249), (122, 4270), (131, 4312), (145, 4366), (150, 4399), (152, 4420), (202, 4612),

Gene: GoldHunter_7 Start: 4221, Stop: 4844, Start Num: 52

Candidate Starts for GoldHunter_7:

(18, 4131), (21, 4137), (Start: 52 @4221 has 40 MA's), (Start: 64 @4269 has 11 MA's), (69, 4290), (73, 4302), (76, 4311), (89, 4344), (112, 4416), (127, 4476), (150, 4578), (162, 4629), (190, 4707), (204, 4773), (207, 4791), (210, 4812),

Gene: Gumpizza_4 Start: 3879, Stop: 4673, Start Num: 13

Candidate Starts for Gumpizza_4:

(Start: 13 @3879 has 17 MA's), (29, 3921), (50, 3987), (Start: 55 @4017 has 1 MA's), (59, 4029), (85, 4110), (115, 4230), (117, 4248), (122, 4269), (131, 4311), (145, 4365), (150, 4398), (152, 4419), (202, 4611),

Gene: Halsey_4 Start: 3879, Stop: 4673, Start Num: 13

Candidate Starts for Halsey_4:

(Start: 13 @3879 has 17 MA's), (29, 3921), (50, 3987), (Start: 55 @4017 has 1 MA's), (59, 4029), (117, 4248), (122, 4269), (131, 4311), (145, 4365), (150, 4398), (152, 4419), (202, 4611),

Gene: HippoPololi_8 Start: 5028, Stop: 5600, Start Num: 64

Candidate Starts for HippoPololi_8:

(18, 4890), (20, 4893), (21, 4896), (Start: 41 @4941 has 3 MA's), (Start: 64 @5028 has 11 MA's), (65, 5031), (Start: 75 @5064 has 4 MA's), (76, 5070), (101, 5130), (112, 5184), (121, 5217), (122, 5220), (127, 5244), (133, 5268), (150, 5346), (151, 5349), (152, 5367), (188, 5457), (190, 5463), (195, 5484),

Gene: Honk_4 Start: 3779, Stop: 4525, Start Num: 11

Candidate Starts for Honk_4:

(Start: 11 @3779 has 1 MA's), (Start: 14 @3788 has 47 MA's), (22, 3812), (29, 3827), (34, 3839), (35, 3842), (65, 3953), (85, 4013), (103, 4076), (117, 4160), (122, 4181), (145, 4274), (150, 4307), (156, 4346), (194, 4469), (195, 4478),

Gene: Horseradish_7 Start: 4122, Stop: 4745, Start Num: 52

Candidate Starts for Horseradish_7:

(18, 4035), (21, 4041), (Start: 52 @4122 has 40 MA's), (Start: 64 @4170 has 11 MA's), (73, 4203), (89, 4245), (112, 4317), (127, 4377), (133, 4401), (150, 4479), (152, 4500), (162, 4530), (204, 4674), (207, 4692),

Gene: IUFootball_4 Start: 3813, Stop: 4607, Start Num: 15

Candidate Starts for IUFootball_4:

(Start: 15 @3813 has 10 MA's), (46, 3897), (78, 4020), (81, 4026), (113, 4143), (115, 4155), (117, 4173), (127, 4218), (132, 4239), (150, 4323), (176, 4407),

Gene: Jamzy_9 Start: 4537, Stop: 5217, Start Num: 24

Candidate Starts for Jamzy_9:

(18, 4528), (Start: 24 @4537 has 1 MA's), (36, 4564), (Start: 52 @4621 has 40 MA's), (Start: 64 @4657 has 11 MA's), (Start: 75 @4693 has 4 MA's), (76, 4699), (99, 4759), (102, 4768), (121, 4852), (125, 4867), (133, 4903), (135, 4909), (144, 4948), (150, 4981), (152, 5002), (160, 5026), (192, 5083), (207, 5161),

Gene: JasmineDragon_4 Start: 3667, Stop: 4464, Start Num: 15

Candidate Starts for JasmineDragon_4:

(Start: 15 @3667 has 10 MA's), (68, 3841), (78, 3874), (117, 4027), (132, 4093), (150, 4177), (183, 4309),

Gene: JohnThicc_4 Start: 3658, Stop: 4455, Start Num: 15

Candidate Starts for JohnThicc_4:

(Start: 15 @3658 has 10 MA's), (Start: 64 @3814 has 11 MA's), (68, 3832), (78, 3865), (117, 4018), (132, 4084), (134, 4090), (150, 4168), (183, 4300),

Gene: Kalimba_4 Start: 3875, Stop: 4669, Start Num: 13

Candidate Starts for Kalimba_4:

(Start: 13 @3875 has 17 MA's), (29, 3917), (50, 3983), (Start: 55 @4013 has 1 MA's), (59, 4025), (117, 4244), (122, 4265), (131, 4307), (150, 4394), (152, 4415), (156, 4433), (202, 4607),

Gene: KayGee_6 Start: 4002, Stop: 4595, Start Num: 52

Candidate Starts for KayGee_6:

(18, 3912), (21, 3918), (36, 3945), (Start: 41 @3963 has 3 MA's), (Start: 43 @3972 has 2 MA's), (Start: 52 @4002 has 40 MA's), (Start: 64 @4050 has 11 MA's), (Start: 75 @4086 has 4 MA's), (89, 4125), (99, 4137), (107, 4173), (108, 4179), (112, 4197), (150, 4359), (192, 4461), (195, 4476), (211, 4563),

Gene: Keiki_4 Start: 3218, Stop: 3973, Start Num: 14

Candidate Starts for Keiki_4:

(Start: 14 @3218 has 47 MA's), (51, 3320), (53, 3338), (58, 3356), (60, 3362), (63, 3368), (Start: 64 @3374 has 11 MA's), (Start: 72 @3407 has 10 MA's), (77, 3422), (84, 3440), (90, 3461), (91, 3467), (102, 3497), (105, 3518), (117, 3569), (128, 3596), (145, 3659), (150, 3692), (151, 3695), (184, 3818), (206, 3914), (211, 3938), (213, 3947), (215, 3965),

Gene: Kubed_4 Start: 3215, Stop: 3970, Start Num: 14

Candidate Starts for Kubed_4:

(Start: 14 @3215 has 47 MA's), (19, 3230), (51, 3317), (53, 3335), (60, 3359), (63, 3365), (Start: 64 @3371 has 11 MA's), (Start: 72 @3404 has 10 MA's), (77, 3419), (84, 3437), (88, 3446), (90, 3458), (91, 3464), (102, 3494), (105, 3515), (117, 3566), (128, 3593), (145, 3656), (150, 3689), (151, 3692), (184, 3815), (206, 3911), (211, 3935), (213, 3944), (215, 3962),

Gene: Kudefre_14 Start: 7918, Stop: 8928, Start Num: 4

Candidate Starts for Kudefre_14:

(Start: 4 @7918 has 3 MA's), (5, 7936), (6, 7945), (8, 7960), (22, 8017), (47, 8089), (61, 8143), (106, 8293), (114, 8329), (117, 8353), (128, 8401), (141, 8452), (142, 8455), (150, 8503), (162, 8566), (172, 8584), (189, 8668), (198, 8698), (203, 8728), (211, 8776), (217, 8824), (219, 8839), (220, 8845),

Gene: LadyAstra_4 Start: 3658, Stop: 4455, Start Num: 15

Candidate Starts for LadyAstra_4:

(Start: 15 @3658 has 10 MA's), (Start: 64 @3814 has 11 MA's), (68, 3832), (78, 3865), (117, 4018), (132, 4084), (134, 4090), (150, 4168), (183, 4300),

Gene: LastNadiia_9 Start: 6642, Stop: 7247, Start Num: 62

Candidate Starts for LastNadiia_9:

(Start: 24 @6519 has 1 MA's), (Start: 62 @6642 has 1 MA's), (Start: 72 @6684 has 10 MA's), (87, 6720), (88, 6726), (92, 6747), (122, 6864), (149, 6993), (209, 7197),

Gene: Lauchelly_4 Start: 3218, Stop: 3973, Start Num: 14

Candidate Starts for Lauchelly_4:

(Start: 14 @3218 has 47 MA's), (25, 3242), (51, 3320), (53, 3338), (58, 3356), (60, 3362), (63, 3368), (Start: 64 @3374 has 11 MA's), (Start: 72 @3407 has 10 MA's), (77, 3422), (84, 3440), (90, 3461), (91, 3467), (102, 3497), (105, 3518), (117, 3569), (118, 3575), (127, 3593), (128, 3596), (138, 3635), (150, 3692), (184, 3818), (186, 3821), (187, 3830), (206, 3914), (211, 3938), (213, 3947), (215, 3965),

Gene: Lauer_5 Start: 4024, Stop: 4647, Start Num: 43

Candidate Starts for Lauer_5:

(18, 3964), (21, 3970), (36, 3997), (Start: 41 @4015 has 3 MA's), (Start: 43 @4024 has 2 MA's), (Start: 52 @4054 has 40 MA's), (Start: 64 @4102 has 11 MA's), (Start: 75 @4138 has 4 MA's), (89, 4177), (99, 4189), (107, 4225), (108, 4231), (112, 4249), (150, 4411), (190, 4507), (192, 4513), (195, 4528), (211, 4615),

Gene: Leviosa_4 Start: 3217, Stop: 3972, Start Num: 14

Candidate Starts for Leviosa_4:

(Start: 14 @3217 has 47 MA's), (19, 3232), (51, 3319), (53, 3337), (60, 3361), (Start: 64 @3373 has 11 MA's), (Start: 72 @3406 has 10 MA's), (77, 3421), (84, 3439), (90, 3460), (91, 3466), (102, 3496), (105, 3517), (107, 3526), (117, 3568), (127, 3592), (128, 3595), (145, 3658), (150, 3691), (184, 3817), (206, 3913), (211, 3937), (213, 3946), (215, 3964),

Gene: Liebe_4 Start: 3813, Stop: 4607, Start Num: 15

Candidate Starts for Liebe_4:

(Start: 15 @3813 has 10 MA's), (46, 3897), (78, 4020), (81, 4026), (113, 4143), (115, 4155), (117, 4173), (127, 4218), (132, 4239), (150, 4323), (176, 4407),

Gene: LilBandit_4 Start: 3215, Stop: 3970, Start Num: 14

Candidate Starts for LilBandit_4:

(Start: 14 @3215 has 47 MA's), (19, 3230), (51, 3317), (53, 3335), (58, 3353), (60, 3359), (63, 3365), (Start: 64 @3371 has 11 MA's), (Start: 72 @3404 has 10 MA's), (77, 3419), (84, 3437), (88, 3446), (90, 3458), (91, 3464), (102, 3494), (105, 3515), (117, 3566), (128, 3593), (138, 3632), (145, 3656), (150, 3689), (151, 3692), (184, 3815), (206, 3911), (211, 3935), (213, 3944), (215, 3962),

Gene: LilJank_14 Start: 7803, Stop: 8822, Start Num: 2

Candidate Starts for LilJank_14:

(Start: 2 @7803 has 3 MA's), (9, 7872), (22, 7926), (Start: 41 @7977 has 3 MA's), (66, 8070), (107, 8217), (111, 8238), (114, 8250), (117, 8274), (120, 8286), (128, 8322), (134, 8346), (150, 8424), (151, 8427), (178, 8532), (183, 8562), (188, 8583), (201, 8634), (203, 8646), (221, 8769),

Gene: LunaStella_4 Start: 3803, Stop: 4498, Start Num: 75

Candidate Starts for LunaStella_4:

(26, 3644), (28, 3650), (Start: 75 @3803 has 4 MA's), (82, 3821), (100, 3869), (105, 3893), (112, 3926), (119, 3950), (125, 3971), (127, 3983), (136, 4019), (143, 4046), (150, 4085), (151, 4088), (163, 4151), (168, 4190), (169, 4226), (170, 4244), (171, 4256), (190, 4355), (200, 4397),

Gene: MAnor_6 Start: 3999, Stop: 4592, Start Num: 52

Candidate Starts for MAnor_6:

(18, 3909), (21, 3915), (36, 3942), (Start: 41 @3960 has 3 MA's), (Start: 43 @3969 has 2 MA's), (Start: 52 @3999 has 40 MA's), (Start: 64 @4047 has 11 MA's), (89, 4122), (99, 4134), (107, 4170), (108, 4176), (112, 4194), (150, 4356), (152, 4377), (190, 4452), (192, 4458), (195, 4473), (211, 4560),

Gene: MEAK_4 Start: 3213, Stop: 3968, Start Num: 14

Candidate Starts for MEAK_4:

(Start: 14 @3213 has 47 MA's), (19, 3228), (51, 3315), (53, 3333), (60, 3357), (63, 3363), (Start: 64 @3369 has 11 MA's), (Start: 72 @3402 has 10 MA's), (77, 3417), (84, 3435), (88, 3444), (90, 3456), (91, 3462), (102, 3492), (117, 3564), (118, 3570), (128, 3591), (150, 3687), (151, 3690), (184, 3813), (206, 3909), (211, 3933), (213, 3942), (215, 3960),

Gene: MScarn_8 Start: 4216, Stop: 4839, Start Num: 52

Candidate Starts for MScarn_8:

(18, 4129), (21, 4135), (Start: 52 @4216 has 40 MA's), (Start: 64 @4264 has 11 MA's), (68, 4279), (73, 4297), (89, 4339), (112, 4411), (127, 4471), (133, 4495), (150, 4573), (152, 4594), (162, 4624), (204, 4768), (207, 4786),

Gene: MaGuCo_4 Start: 3672, Stop: 4466, Start Num: 15

Candidate Starts for MaGuCo_4:

(Start: 15 @3672 has 10 MA's), (46, 3756), (78, 3879), (113, 4002), (115, 4014), (117, 4032), (127, 4077), (132, 4098), (150, 4182), (151, 4185), (176, 4266), (185, 4323),

Gene: MaVan_8 Start: 5151, Stop: 5714, Start Num: 64

Candidate Starts for MaVan_8:

(18, 5016), (21, 5022), (32, 5040), (Start: 41 @5064 has 3 MA's), (42, 5070), (Start: 64 @5151 has 11 MA's), (Start: 75 @5187 has 4 MA's), (76, 5193), (101, 5250), (112, 5304), (121, 5337), (122, 5340), (133, 5388), (150, 5466), (151, 5469), (152, 5487), (188, 5571), (190, 5577), (195, 5598), (212, 5688),

Gene: Makima_7 Start: 5797, Stop: 6360, Start Num: 72

Candidate Starts for Makima_7:

(Start: 24 @5632 has 1 MA's), (Start: 72 @5797 has 10 MA's), (87, 5833), (88, 5839), (121, 5974), (190, 6208), (198, 6238), (209, 6310),

Gene: Malvina_8 Start: 5031, Stop: 5603, Start Num: 64

Candidate Starts for Malvina_8:

(18, 4893), (20, 4896), (21, 4899), (Start: 41 @4944 has 3 MA's), (Start: 64 @5031 has 11 MA's), (65, 5034), (Start: 75 @5067 has 4 MA's), (76, 5073), (101, 5133), (112, 5187), (121, 5220), (122, 5223), (127, 5247), (133, 5271), (150, 5349), (151, 5352), (152, 5370), (188, 5460), (190, 5466), (195, 5487),

Gene: Margaret_9 Start: 4991, Stop: 5593, Start Num: 52

Candidate Starts for Margaret_9:

(18, 4898), (Start: 24 @4907 has 1 MA's), (36, 4934), (Start: 52 @4991 has 40 MA's), (Start: 64 @5027 has 11 MA's), (Start: 75 @5063 has 4 MA's), (76, 5069), (121, 5228), (125, 5243), (133, 5279), (135, 5285), (144, 5324), (150, 5357), (152, 5378), (160, 5402), (192, 5459), (207, 5537),

Gene: Maureen_4 Start: 3813, Stop: 4607, Start Num: 15

Candidate Starts for Maureen_4:

(Start: 15 @3813 has 10 MA's), (46, 3897), (78, 4020), (81, 4026), (113, 4143), (115, 4155), (117, 4173), (127, 4218), (132, 4239), (150, 4323), (176, 4407),

Gene: Mayweather_7 Start: 4620, Stop: 5213, Start Num: 52

Candidate Starts for Mayweather_7:

(18, 4530), (21, 4536), (36, 4563), (Start: 41 @4581 has 3 MA's), (Start: 43 @4590 has 2 MA's), (Start: 52 @4620 has 40 MA's), (Start: 64 @4668 has 11 MA's), (89, 4743), (99, 4755), (107, 4791), (108, 4797), (112, 4815), (150, 4977), (152, 4998), (190, 5073), (192, 5079), (195, 5094), (211, 5181),

Gene: McDazzle_5 Start: 4464, Stop: 5057, Start Num: 52

Candidate Starts for McDazzle_5:

(21, 4383), (Start: 41 @4425 has 3 MA's), (Start: 43 @4434 has 2 MA's), (Start: 52 @4464 has 40 MA's), (Start: 64 @4512 has 11 MA's), (89, 4587), (99, 4599), (107, 4635), (108, 4641), (112, 4659), (150, 4821), (152, 4842), (190, 4917), (192, 4923), (195, 4938), (211, 5025),

Gene: MiniMommy_4 Start: 3667, Stop: 4464, Start Num: 15

Candidate Starts for MiniMommy_4:

(Start: 15 @3667 has 10 MA's), (68, 3841), (78, 3874), (117, 4027), (132, 4093), (150, 4177), (183, 4309),

Gene: Mireles_6 Start: 4203, Stop: 4766, Start Num: 72

Candidate Starts for Mireles_6:

(Start: 24 @4038 has 1 MA's), (Start: 72 @4203 has 10 MA's), (87, 4239), (88, 4245), (198, 4644), (209, 4716),

Gene: Moss_4 Start: 3879, Stop: 4673, Start Num: 13

Candidate Starts for Moss_4:

(Start: 13 @3879 has 17 MA's), (29, 3921), (50, 3987), (Start: 55 @4017 has 1 MA's), (59, 4029), (117, 4248), (122, 4269), (131, 4311), (145, 4365), (150, 4398), (152, 4419), (202, 4611),

Gene: Moyashi_4 Start: 3218, Stop: 3973, Start Num: 14

Candidate Starts for Moyashi_4:

(Start: 14 @3218 has 47 MA's), (19, 3233), (51, 3320), (53, 3338), (58, 3356), (60, 3362), (63, 3368), (Start: 64 @3374 has 11 MA's), (Start: 72 @3407 has 10 MA's), (77, 3422), (84, 3440), (88, 3449), (90, 3461), (91, 3467), (102, 3497), (105, 3518), (117, 3569), (128, 3596), (145, 3659), (150, 3692), (151, 3695), (184, 3818), (187, 3830), (206, 3914), (211, 3938), (213, 3947), (215, 3965),

Gene: MrAK_4 Start: 3218, Stop: 3973, Start Num: 14

Candidate Starts for MrAK_4:

(Start: 14 @3218 has 47 MA's), (19, 3233), (51, 3320), (53, 3338), (58, 3356), (60, 3362), (63, 3368), (Start: 64 @3374 has 11 MA's), (Start: 72 @3407 has 10 MA's), (77, 3422), (84, 3440), (88, 3449), (90, 3461), (91, 3467), (102, 3497), (105, 3518), (117, 3569), (128, 3596), (145, 3659), (150, 3692), (151, 3695), (184, 3818), (206, 3914), (211, 3938), (213, 3947), (215, 3965),

Gene: MunkgeeRoachy_6 Start: 4269, Stop: 4892, Start Num: 52

Candidate Starts for MunkgeeRoachy_6:

(18, 4179), (21, 4185), (Start: 52 @4269 has 40 MA's), (Start: 64 @4317 has 11 MA's), (69, 4338), (73, 4350), (76, 4359), (89, 4392), (112, 4464), (127, 4524), (150, 4626), (162, 4677), (190, 4755), (204, 4821), (207, 4839), (210, 4860),

Gene: Mysterium_4 Start: 3879, Stop: 4673, Start Num: 13

Candidate Starts for Mysterium_4:

(Start: 13 @3879 has 17 MA's), (29, 3921), (50, 3987), (Start: 55 @4017 has 1 MA's), (59, 4029), (85, 4110), (117, 4248), (122, 4269), (131, 4311), (145, 4365), (150, 4398), (152, 4419), (202, 4611),

Gene: Neuville_6 Start: 4338, Stop: 4859, Start Num: 72

Candidate Starts for Neuville_6:

(Start: 24 @4173 has 1 MA's), (Start: 72 @4338 has 10 MA's), (87, 4374), (150, 4650), (162, 4701), (198, 4779),

Gene: Neville_14 Start: 7752, Stop: 8771, Start Num: 2

Candidate Starts for Neville_14:

(1, 7683), (Start: 2 @7752 has 3 MA's), (9, 7821), (22, 7875), (Start: 41 @7926 has 3 MA's), (66, 8019), (107, 8166), (111, 8187), (114, 8199), (117, 8223), (120, 8235), (128, 8271), (134, 8295), (150,

8373), (151, 8376), (178, 8481), (183, 8511), (188, 8532), (201, 8583), (203, 8595), (221, 8718),

Gene: Nibbles_8 Start: 5151, Stop: 5714, Start Num: 64

Candidate Starts for Nibbles_8:

(18, 5016), (21, 5022), (32, 5040), (Start: 41 @5064 has 3 MA's), (42, 5070), (Start: 64 @5151 has 11 MA's), (Start: 75 @5187 has 4 MA's), (76, 5193), (101, 5250), (112, 5304), (121, 5337), (122, 5340), (133, 5388), (150, 5466), (151, 5469), (152, 5487), (188, 5571), (190, 5577), (195, 5598), (212, 5688),

Gene: NoShow_4 Start: 3865, Stop: 4563, Start Num: 31

Candidate Starts for NoShow_4:

(30, 3862), (Start: 31 @3865 has 1 MA's), (56, 3958), (65, 3988), (109, 4123), (136, 4213), (177, 4372), (181, 4396), (191, 4438),

Gene: Octobien14_15 Start: 8989, Stop: 9996, Start Num: 3

Candidate Starts for Octobien14_15:

(Start: 3 @8989 has 1 MA's), (6, 9022), (22, 9094), (Start: 31 @9115 has 1 MA's), (47, 9166), (66, 9238), (97, 9331), (114, 9406), (117, 9430), (128, 9478), (141, 9529), (151, 9583), (162, 9643), (190, 9748), (192, 9754), (198, 9772), (211, 9844), (215, 9874), (218, 9895), (219, 9907), (222, 9937),

Gene: Oksu_5 Start: 3680, Stop: 4330, Start Num: 52

Candidate Starts for Oksu_5:

(27, 3605), (38, 3632), (44, 3653), (Start: 52 @3680 has 40 MA's), (67, 3740), (79, 3779), (109, 3878), (126, 3947), (127, 3950), (157, 4079), (165, 4100), (200, 4208), (216, 4316),

Gene: Origami_4 Start: 3658, Stop: 4455, Start Num: 15

Candidate Starts for Origami_4:

(Start: 15 @3658 has 10 MA's), (46, 3742), (Start: 64 @3814 has 11 MA's), (68, 3832), (78, 3865), (117, 4018), (132, 4084), (134, 4090), (150, 4168), (183, 4300),

Gene: Ouroboros_4 Start: 3215, Stop: 3970, Start Num: 14

Candidate Starts for Ouroboros_4:

(Start: 14 @3215 has 47 MA's), (19, 3230), (51, 3317), (53, 3335), (58, 3353), (60, 3359), (63, 3365), (Start: 64 @3371 has 11 MA's), (Start: 72 @3404 has 10 MA's), (77, 3419), (90, 3458), (91, 3464), (102, 3494), (105, 3515), (107, 3524), (111, 3545), (117, 3566), (127, 3590), (128, 3593), (145, 3656), (150, 3689), (151, 3692), (184, 3815), (206, 3911), (211, 3935), (213, 3944), (215, 3962),

Gene: P1.1_4 Start: 3218, Stop: 3973, Start Num: 14

Candidate Starts for P1.1_4:

(Start: 14 @3218 has 47 MA's), (51, 3320), (53, 3338), (58, 3356), (60, 3362), (63, 3368), (Start: 64 @3374 has 11 MA's), (Start: 72 @3407 has 10 MA's), (77, 3422), (84, 3440), (88, 3449), (90, 3461), (91, 3467), (102, 3497), (105, 3518), (117, 3569), (128, 3596), (150, 3692), (151, 3695), (184, 3818), (206, 3914), (211, 3938), (213, 3947), (215, 3965),

Gene: P100.1_4 Start: 3218, Stop: 3973, Start Num: 14

Candidate Starts for P100.1_4:

(Start: 14 @3218 has 47 MA's), (19, 3233), (51, 3320), (53, 3338), (58, 3356), (60, 3362), (63, 3368), (Start: 64 @3374 has 11 MA's), (Start: 72 @3407 has 10 MA's), (77, 3422), (88, 3449), (90, 3461), (91, 3467), (102, 3497), (105, 3518), (117, 3569), (127, 3593), (128, 3596), (145, 3659), (150, 3692), (151, 3695), (184, 3818), (206, 3914), (211, 3938), (213, 3947), (215, 3965),

Gene: P100A_4 Start: 3223, Stop: 3978, Start Num: 14

Candidate Starts for P100A_4:

(Start: 14 @3223 has 47 MA's), (25, 3247), (51, 3325), (53, 3343), (58, 3361), (60, 3367), (Start: 64 @3379 has 11 MA's), (Start: 72 @3412 has 10 MA's), (77, 3427), (84, 3445), (90, 3466), (91, 3472), (102, 3502), (105, 3523), (117, 3574), (120, 3586), (127, 3598), (128, 3601), (145, 3664), (150, 3697), (151, 3700), (184, 3823), (187, 3835), (206, 3919), (211, 3943), (213, 3952), (215, 3970),

Gene: P100D_4 Start: 3213, Stop: 3968, Start Num: 14

Candidate Starts for P100D_4:

(Start: 14 @3213 has 47 MA's), (19, 3228), (51, 3315), (53, 3333), (58, 3351), (60, 3357), (63, 3363), (Start: 64 @3369 has 11 MA's), (Start: 72 @3402 has 10 MA's), (77, 3417), (84, 3435), (88, 3444), (90, 3456), (91, 3462), (102, 3492), (105, 3513), (107, 3522), (117, 3564), (128, 3591), (145, 3654), (150, 3687), (151, 3690), (184, 3813), (206, 3909), (211, 3933), (213, 3942), (215, 3960),

Gene: P101A_4 Start: 3218, Stop: 3973, Start Num: 14

Candidate Starts for P101A_4:

(Start: 14 @3218 has 47 MA's), (19, 3233), (51, 3320), (53, 3338), (58, 3356), (60, 3362), (63, 3368), (Start: 64 @3374 has 11 MA's), (Start: 72 @3407 has 10 MA's), (77, 3422), (84, 3440), (88, 3449), (90, 3461), (91, 3467), (102, 3497), (105, 3518), (107, 3527), (117, 3569), (128, 3596), (145, 3659), (150, 3692), (151, 3695), (184, 3818), (206, 3914), (211, 3938), (213, 3947), (215, 3965),

Gene: P104A_4 Start: 3215, Stop: 3970, Start Num: 14

Candidate Starts for P104A_4:

(Start: 14 @3215 has 47 MA's), (19, 3230), (51, 3317), (53, 3335), (58, 3353), (60, 3359), (63, 3365), (Start: 64 @3371 has 11 MA's), (Start: 72 @3404 has 10 MA's), (77, 3419), (84, 3437), (88, 3446), (90, 3458), (91, 3464), (102, 3494), (105, 3515), (111, 3545), (117, 3566), (120, 3578), (128, 3593), (145, 3656), (150, 3689), (151, 3692), (184, 3815), (206, 3911), (211, 3935), (213, 3944), (215, 3962),

Gene: P104B_4 Start: 3213, Stop: 3968, Start Num: 14

Candidate Starts for P104B_4:

(Start: 14 @3213 has 47 MA's), (51, 3315), (53, 3333), (58, 3351), (60, 3357), (63, 3363), (Start: 64 @3369 has 11 MA's), (Start: 72 @3402 has 10 MA's), (77, 3417), (84, 3435), (88, 3444), (90, 3456), (91, 3462), (102, 3492), (105, 3513), (107, 3522), (117, 3564), (128, 3591), (150, 3687), (151, 3690), (184, 3813), (206, 3909), (211, 3933), (213, 3942), (215, 3960),

Gene: P105_4 Start: 3210, Stop: 3965, Start Num: 14

Candidate Starts for P105_4:

(Start: 14 @3210 has 47 MA's), (19, 3225), (51, 3312), (53, 3330), (58, 3348), (60, 3354), (63, 3360), (Start: 64 @3366 has 11 MA's), (Start: 72 @3399 has 10 MA's), (77, 3414), (84, 3432), (88, 3441), (90, 3453), (91, 3459), (102, 3489), (105, 3510), (111, 3540), (117, 3561), (128, 3588), (145, 3651), (150, 3684), (151, 3687), (184, 3810), (206, 3906), (211, 3930), (213, 3939), (215, 3957),

Gene: P106A_4 Start: 3218, Stop: 3973, Start Num: 14

Candidate Starts for P106A_4:

(Start: 14 @3218 has 47 MA's), (19, 3233), (51, 3320), (53, 3338), (58, 3356), (60, 3362), (63, 3368), (Start: 64 @3374 has 11 MA's), (Start: 72 @3407 has 10 MA's), (77, 3422), (84, 3440), (88, 3449), (90, 3461), (91, 3467), (102, 3497), (105, 3518), (117, 3569), (128, 3596), (145, 3659), (150, 3692), (151, 3695), (184, 3818), (206, 3914), (211, 3938), (213, 3947), (215, 3965),

Gene: P106C_4 Start: 3218, Stop: 3973, Start Num: 14

Candidate Starts for P106C_4:

(Start: 14 @3218 has 47 MA's), (19, 3233), (51, 3320), (53, 3338), (58, 3356), (60, 3362), (63, 3368), (Start: 64 @3374 has 11 MA's), (Start: 72 @3407 has 10 MA's), (77, 3422), (84, 3440), (88, 3449), (90, 3461), (91, 3467), (102, 3497), (105, 3518), (117, 3569), (128, 3596), (145, 3659), (150, 3692), (151, 3695), (184, 3818), (206, 3914), (211, 3938), (213, 3947), (215, 3965),

Gene: P106I_4 Start: 3218, Stop: 3973, Start Num: 14

Candidate Starts for P106I_4:

(Start: 14 @3218 has 47 MA's), (19, 3233), (51, 3320), (53, 3338), (58, 3356), (60, 3362), (63, 3368), (Start: 64 @3374 has 11 MA's), (Start: 72 @3407 has 10 MA's), (77, 3422), (84, 3440), (88, 3449), (90, 3461), (91, 3467), (102, 3497), (105, 3518), (117, 3569), (128, 3596), (145, 3659), (150, 3692), (151, 3695), (184, 3818), (206, 3914), (211, 3938), (213, 3947), (215, 3965),

Gene: P106L_4 Start: 3218, Stop: 3973, Start Num: 14

Candidate Starts for P106L_4:

(Start: 14 @3218 has 47 MA's), (19, 3233), (51, 3320), (53, 3338), (58, 3356), (60, 3362), (63, 3368), (Start: 64 @3374 has 11 MA's), (Start: 72 @3407 has 10 MA's), (77, 3422), (84, 3440), (88, 3449), (90, 3461), (91, 3467), (102, 3497), (105, 3518), (117, 3569), (128, 3596), (145, 3659), (150, 3692), (151, 3695), (184, 3818), (206, 3914), (211, 3938), (213, 3947), (215, 3965),

Gene: P106M_4 Start: 3218, Stop: 3973, Start Num: 14

Candidate Starts for P106M_4:

(Start: 14 @3218 has 47 MA's), (19, 3233), (51, 3320), (53, 3338), (58, 3356), (60, 3362), (63, 3368), (Start: 64 @3374 has 11 MA's), (Start: 72 @3407 has 10 MA's), (77, 3422), (84, 3440), (88, 3449), (90, 3461), (91, 3467), (102, 3497), (105, 3518), (117, 3569), (128, 3596), (145, 3659), (150, 3692), (151, 3695), (184, 3818), (206, 3914), (211, 3938), (213, 3947), (215, 3965),

Gene: P107A_4 Start: 3223, Stop: 3978, Start Num: 14

Candidate Starts for P107A_4:

(Start: 14 @3223 has 47 MA's), (19, 3238), (48, 3316), (51, 3325), (53, 3343), (58, 3361), (60, 3367), (63, 3373), (Start: 64 @3379 has 11 MA's), (Start: 72 @3412 has 10 MA's), (77, 3427), (84, 3445), (90, 3466), (91, 3472), (102, 3502), (117, 3574), (120, 3586), (127, 3598), (128, 3601), (133, 3622), (145, 3664), (150, 3697), (151, 3700), (160, 3739), (184, 3823), (206, 3919), (211, 3943), (213, 3952), (215, 3970),

Gene: P107C_4 Start: 3218, Stop: 3973, Start Num: 14

Candidate Starts for P107C_4:

(Start: 14 @3218 has 47 MA's), (25, 3242), (48, 3311), (51, 3320), (53, 3338), (58, 3356), (60, 3362), (63, 3368), (Start: 64 @3374 has 11 MA's), (Start: 72 @3407 has 10 MA's), (77, 3422), (84, 3440), (90, 3461), (91, 3467), (102, 3497), (105, 3518), (106, 3524), (107, 3527), (117, 3569), (128, 3596), (145, 3659), (150, 3692), (151, 3695), (160, 3734), (162, 3740), (184, 3818), (206, 3914), (211, 3938), (213, 3947), (215, 3965),

Gene: P108C_4 Start: 3218, Stop: 3973, Start Num: 14

Candidate Starts for P108C_4:

(Start: 14 @3218 has 47 MA's), (51, 3320), (53, 3338), (58, 3356), (60, 3362), (63, 3368), (Start: 64 @3374 has 11 MA's), (Start: 72 @3407 has 10 MA's), (77, 3422), (84, 3440), (88, 3449), (90, 3461), (91, 3467), (102, 3497), (105, 3518), (117, 3569), (127, 3593), (128, 3596), (145, 3659), (150, 3692), (151, 3695), (184, 3818), (206, 3914), (211, 3938), (213, 3947), (215, 3965),

Gene: P14.4_4 Start: 3218, Stop: 3973, Start Num: 14

Candidate Starts for P14.4_4:

(Start: 14 @3218 has 47 MA's), (25, 3242), (48, 3311), (51, 3320), (53, 3338), (58, 3356), (60, 3362), (63, 3368), (Start: 64 @3374 has 11 MA's), (Start: 72 @3407 has 10 MA's), (77, 3422), (88, 3449), (90, 3461), (91, 3467), (102, 3497), (105, 3518), (111, 3548), (117, 3569), (128, 3596), (145, 3659), (150, 3692), (151, 3695), (160, 3734), (184, 3818), (187, 3830), (206, 3914), (211, 3938), (213, 3947), (215, 3965),

Gene: P9.1_4 Start: 3213, Stop: 3968, Start Num: 14

Candidate Starts for P9.1_4:

(Start: 14 @3213 has 47 MA's), (19, 3228), (51, 3315), (53, 3333), (58, 3351), (60, 3357), (63, 3363), (Start: 64 @3369 has 11 MA's), (Start: 72 @3402 has 10 MA's), (77, 3417), (84, 3435), (88, 3444), (90, 3456), (91, 3462), (102, 3492), (105, 3513), (117, 3564), (128, 3591), (145, 3654), (150, 3687), (151, 3690), (184, 3813), (206, 3909), (211, 3933), (213, 3942), (215, 3960),

Gene: PA6_4 Start: 3218, Stop: 3973, Start Num: 14

Candidate Starts for PA6_4:

(Start: 14 @3218 has 47 MA's), (51, 3320), (53, 3338), (58, 3356), (60, 3362), (63, 3368), (Start: 64 @3374 has 11 MA's), (Start: 72 @3407 has 10 MA's), (77, 3422), (84, 3440), (88, 3449), (90, 3461), (91, 3467), (102, 3497), (117, 3569), (128, 3596), (145, 3659), (150, 3692), (151, 3695), (184, 3818), (206, 3914), (211, 3938), (213, 3947), (215, 3965),

Gene: PAD20_4 Start: 3218, Stop: 3973, Start Num: 14

Candidate Starts for PAD20_4:

(Start: 14 @3218 has 47 MA's), (19, 3233), (51, 3320), (53, 3338), (58, 3356), (60, 3362), (63, 3368), (Start: 64 @3374 has 11 MA's), (Start: 72 @3407 has 10 MA's), (77, 3422), (84, 3440), (88, 3449), (90, 3461), (91, 3467), (102, 3497), (105, 3518), (117, 3569), (128, 3596), (150, 3692), (151, 3695), (184, 3818), (206, 3914), (211, 3938), (213, 3947), (215, 3965),

Gene: PAS50_4 Start: 3218, Stop: 3973, Start Num: 14

Candidate Starts for PAS50_4:

(Start: 14 @3218 has 47 MA's), (51, 3320), (53, 3338), (60, 3362), (Start: 64 @3374 has 11 MA's), (Start: 72 @3407 has 10 MA's), (77, 3422), (84, 3440), (88, 3449), (90, 3461), (91, 3467), (102, 3497), (105, 3518), (107, 3527), (117, 3569), (128, 3596), (145, 3659), (150, 3692), (151, 3695), (184, 3818), (206, 3914), (211, 3938), (213, 3947), (215, 3965),

Gene: PHL010M04_04 Start: 3214, Stop: 3969, Start Num: 14

Candidate Starts for PHL010M04_04:

(Start: 14 @3214 has 47 MA's), (16, 3226), (19, 3229), (51, 3316), (53, 3334), (58, 3352), (60, 3358), (Start: 64 @3370 has 11 MA's), (Start: 72 @3403 has 10 MA's), (77, 3418), (84, 3436), (88, 3445), (90, 3457), (91, 3463), (102, 3493), (107, 3523), (117, 3565), (127, 3589), (128, 3592), (150, 3688), (162, 3736), (184, 3814), (206, 3910), (211, 3934), (213, 3943), (215, 3961),

Gene: PHL037M02_04 Start: 3215, Stop: 3970, Start Num: 14

Candidate Starts for PHL037M02_04:

(Start: 14 @3215 has 47 MA's), (19, 3230), (51, 3317), (53, 3335), (60, 3359), (63, 3365), (Start: 64 @3371 has 11 MA's), (Start: 72 @3404 has 10 MA's), (77, 3419), (90, 3458), (91, 3464), (102, 3494), (105, 3515), (107, 3524), (117, 3566), (128, 3593), (150, 3689), (151, 3692), (184, 3815), (206, 3911), (211, 3935), (213, 3944), (215, 3962),

Gene: PHL060L00_04 Start: 3213, Stop: 3968, Start Num: 14

Candidate Starts for PHL060L00_04:

(Start: 14 @3213 has 47 MA's), (19, 3228), (51, 3315), (53, 3333), (58, 3351), (60, 3357), (63, 3363), (Start: 64 @3369 has 11 MA's), (Start: 72 @3402 has 10 MA's), (77, 3417), (84, 3435), (90, 3456), (91, 3462), (102, 3492), (105, 3513), (107, 3522), (117, 3564), (128, 3591), (145, 3654), (150, 3687), (151, 3690), (184, 3813), (206, 3909), (211, 3933), (213, 3942), (215, 3960),

Gene: PHL067M10_04 Start: 3215, Stop: 3970, Start Num: 14

Candidate Starts for PHL067M10_04:

(Start: 14 @3215 has 47 MA's), (19, 3230), (51, 3317), (53, 3335), (58, 3353), (60, 3359), (63, 3365), (Start: 64 @3371 has 11 MA's), (Start: 72 @3404 has 10 MA's), (77, 3419), (84, 3437), (88, 3446), (90,

3458), (91, 3464), (102, 3494), (105, 3515), (117, 3566), (128, 3593), (145, 3656), (150, 3689), (151, 3692), (184, 3815), (206, 3911), (211, 3935), (213, 3944), (215, 3962),

Gene: PHL071N05_04 Start: 3213, Stop: 3968, Start Num: 14

Candidate Starts for PHL071N05_04:

(Start: 14 @3213 has 47 MA's), (19, 3228), (48, 3306), (51, 3315), (53, 3333), (60, 3357), (63, 3363), (Start: 64 @3369 has 11 MA's), (Start: 72 @3402 has 10 MA's), (77, 3417), (84, 3435), (88, 3444), (90, 3456), (91, 3462), (102, 3492), (105, 3513), (117, 3564), (128, 3591), (150, 3687), (151, 3690), (184, 3813), (206, 3909), (211, 3933), (213, 3942), (215, 3960),

Gene: PHL111M01_04 Start: 3218, Stop: 3973, Start Num: 14

Candidate Starts for PHL111M01_04:

(Start: 14 @3218 has 47 MA's), (25, 3242), (48, 3311), (51, 3320), (53, 3338), (60, 3362), (63, 3368), (Start: 64 @3374 has 11 MA's), (Start: 72 @3407 has 10 MA's), (77, 3422), (84, 3440), (90, 3461), (91, 3467), (102, 3497), (105, 3518), (107, 3527), (117, 3569), (128, 3596), (150, 3692), (151, 3695), (184, 3818), (206, 3914), (211, 3938), (213, 3947), (215, 3965),

Gene: PHL112N00_04 Start: 3218, Stop: 3973, Start Num: 14

Candidate Starts for PHL112N00_04:

(Start: 14 @3218 has 47 MA's), (19, 3233), (51, 3320), (53, 3338), (58, 3356), (60, 3362), (63, 3368), (Start: 64 @3374 has 11 MA's), (Start: 72 @3407 has 10 MA's), (77, 3422), (84, 3440), (88, 3449), (90, 3461), (91, 3467), (102, 3497), (105, 3518), (111, 3548), (117, 3569), (128, 3596), (145, 3659), (150, 3692), (151, 3695), (184, 3818), (206, 3914), (211, 3938), (213, 3947), (215, 3965),

Gene: PHL113M01_04 Start: 3218, Stop: 3973, Start Num: 14

Candidate Starts for PHL113M01_04:

(Start: 14 @3218 has 47 MA's), (19, 3233), (25, 3242), (48, 3311), (51, 3320), (53, 3338), (58, 3356), (60, 3362), (63, 3368), (Start: 64 @3374 has 11 MA's), (Start: 72 @3407 has 10 MA's), (77, 3422), (84, 3440), (90, 3461), (91, 3467), (102, 3497), (105, 3518), (107, 3527), (117, 3569), (128, 3596), (145, 3659), (150, 3692), (151, 3695), (184, 3818), (206, 3914), (211, 3938), (213, 3947), (215, 3965),

Gene: PHL114L00_04 Start: 3223, Stop: 3978, Start Num: 14

Candidate Starts for PHL114L00_04:

(Start: 14 @3223 has 47 MA's), (16, 3235), (19, 3238), (51, 3325), (53, 3343), (63, 3373), (90, 3466), (91, 3472), (102, 3502), (105, 3523), (117, 3574), (127, 3598), (128, 3601), (150, 3697), (151, 3700), (184, 3823), (206, 3919), (211, 3943), (213, 3952), (215, 3970),

Gene: Pirate_4 Start: 3213, Stop: 3968, Start Num: 14

Candidate Starts for Pirate_4:

(Start: 14 @3213 has 47 MA's), (51, 3315), (53, 3333), (58, 3351), (60, 3357), (63, 3363), (Start: 64 @3369 has 11 MA's), (Start: 72 @3402 has 10 MA's), (77, 3417), (84, 3435), (88, 3444), (90, 3456), (91, 3462), (102, 3492), (105, 3513), (117, 3564), (128, 3591), (145, 3654), (150, 3687), (151, 3690), (184, 3813), (206, 3909), (211, 3933), (213, 3942), (215, 3960),

Gene: Pons_6 Start: 3999, Stop: 4592, Start Num: 52

Candidate Starts for Pons_6:

(18, 3909), (21, 3915), (36, 3942), (Start: 41 @3960 has 3 MA's), (Start: 43 @3969 has 2 MA's), (Start: 52 @3999 has 40 MA's), (Start: 64 @4047 has 11 MA's), (89, 4122), (99, 4134), (107, 4170), (108, 4176), (112, 4194), (150, 4356), (152, 4377), (190, 4452), (192, 4458), (195, 4473), (211, 4560),

Gene: PotPie_6 Start: 4858, Stop: 5451, Start Num: 52

Candidate Starts for PotPie_6:

(18, 4768), (21, 4774), (36, 4801), (Start: 41 @4819 has 3 MA's), (Start: 43 @4828 has 2 MA's), (Start: 52 @4858 has 40 MA's), (Start: 64 @4906 has 11 MA's), (Start: 75 @4942 has 4 MA's), (89, 4981), (99, 4993), (107, 5029), (108, 5035), (112, 5053), (150, 5215), (152, 5236), (190, 5311), (192, 5317), (195, 5332), (211, 5419),

Gene: Procrass1_4 Start: 3213, Stop: 3968, Start Num: 14

Candidate Starts for Procrass1_4:

(Start: 14 @3213 has 47 MA's), (19, 3228), (51, 3315), (53, 3333), (58, 3351), (60, 3357), (63, 3363), (Start: 64 @3369 has 11 MA's), (Start: 72 @3402 has 10 MA's), (77, 3417), (84, 3435), (88, 3444), (90, 3456), (91, 3462), (102, 3492), (105, 3513), (107, 3522), (111, 3543), (117, 3564), (128, 3591), (145, 3654), (150, 3687), (151, 3690), (184, 3813), (206, 3909), (211, 3933), (213, 3942), (215, 3960),

Gene: PsychoKiller_6 Start: 4221, Stop: 4844, Start Num: 52

Candidate Starts for PsychoKiller_6:

(18, 4131), (21, 4137), (Start: 52 @4221 has 40 MA's), (Start: 64 @4269 has 11 MA's), (69, 4290), (73, 4302), (76, 4311), (89, 4344), (112, 4416), (127, 4476), (150, 4578), (162, 4629), (204, 4773), (207, 4791), (210, 4812),

Gene: Quasar_6 Start: 4890, Stop: 5465, Start Num: 64

Candidate Starts for Quasar_6:

(18, 4752), (21, 4758), (Start: 52 @4842 has 40 MA's), (Start: 64 @4890 has 11 MA's), (69, 4911), (73, 4923), (76, 4932), (89, 4965), (112, 5037), (127, 5097), (150, 5199), (162, 5250), (190, 5328), (204, 5394), (207, 5412), (210, 5433),

Gene: QueenBey_4 Start: 3215, Stop: 3970, Start Num: 14

Candidate Starts for QueenBey_4:

(Start: 14 @3215 has 47 MA's), (25, 3239), (51, 3317), (53, 3335), (58, 3353), (60, 3359), (Start: 64 @3371 has 11 MA's), (Start: 72 @3404 has 10 MA's), (77, 3419), (88, 3446), (90, 3458), (91, 3464), (102, 3494), (117, 3566), (127, 3590), (128, 3593), (150, 3689), (151, 3692), (184, 3815), (187, 3827), (206, 3911), (211, 3935), (213, 3944), (215, 3962),

Gene: RADical_7 Start: 4222, Stop: 4845, Start Num: 52

Candidate Starts for RADical_7:

(18, 4132), (21, 4138), (Start: 52 @4222 has 40 MA's), (Start: 64 @4270 has 11 MA's), (69, 4291), (73, 4303), (76, 4312), (89, 4345), (112, 4417), (127, 4477), (150, 4579), (162, 4630), (190, 4708), (204, 4774), (207, 4792), (210, 4813),

Gene: RSchmailzl_7 Start: 4362, Stop: 4985, Start Num: 52

Candidate Starts for RSchmailzl_7:

(18, 4272), (21, 4278), (Start: 52 @4362 has 40 MA's), (Start: 64 @4410 has 11 MA's), (69, 4431), (73, 4443), (76, 4452), (89, 4485), (112, 4557), (127, 4617), (150, 4719), (162, 4770), (190, 4848), (204, 4914), (207, 4932), (210, 4953),

Gene: Rabbitrun_16 Start: 8261, Stop: 9289, Start Num: 2

Candidate Starts for Rabbitrun_16:

(Start: 2 @8261 has 3 MA's), (10, 8333), (22, 8384), (47, 8456), (95, 8621), (107, 8672), (111, 8693), (114, 8705), (117, 8729), (120, 8741), (123, 8753), (128, 8777), (151, 8882), (152, 8900), (183, 9011), (188, 9032), (198, 9065), (201, 9083), (203, 9095), (205, 9107), (215, 9176), (221, 9236),

Gene: RanchParmCat_9 Start: 4991, Stop: 5593, Start Num: 52

Candidate Starts for RanchParmCat_9:

(18, 4898), (Start: 24 @4907 has 1 MA's), (36, 4934), (Start: 52 @4991 has 40 MA's), (Start: 64 @5027 has 11 MA's), (Start: 75 @5063 has 4 MA's), (121, 5228), (125, 5243), (133, 5279), (135, 5285), (144,

5324), (150, 5357), (152, 5378), (160, 5402), (192, 5459), (207, 5537),

Gene: RedBaron_8 Start: 4266, Stop: 4889, Start Num: 52

Candidate Starts for RedBaron_8:

(18, 4176), (21, 4182), (Start: 52 @4266 has 40 MA's), (Start: 64 @4314 has 11 MA's), (69, 4335), (73, 4347), (76, 4356), (89, 4389), (112, 4461), (127, 4521), (150, 4623), (162, 4674), (190, 4752), (204, 4818), (210, 4857),

Gene: Renaud18_4 Start: 3803, Stop: 4378, Start Num: 75

Candidate Starts for Renaud18_4:

(26, 3644), (28, 3650), (Start: 75 @3803 has 4 MA's), (82, 3821), (99, 3866), (100, 3869), (105, 3893), (112, 3926), (119, 3950), (125, 3971), (127, 3983), (136, 4019), (143, 4046), (150, 4085), (151, 4088), (154, 4115), (190, 4235), (200, 4277),

Gene: Rileysaurus_4 Start: 3214, Stop: 3969, Start Num: 14

Candidate Starts for Rileysaurus_4:

(Start: 14 @3214 has 47 MA's), (19, 3229), (48, 3307), (51, 3316), (53, 3334), (60, 3358), (Start: 64 @3370 has 11 MA's), (Start: 72 @3403 has 10 MA's), (84, 3436), (90, 3457), (91, 3463), (102, 3493), (105, 3514), (117, 3565), (127, 3589), (128, 3592), (145, 3655), (150, 3688), (187, 3826), (206, 3910), (211, 3934), (213, 3943), (215, 3961),

Gene: Roberts_6 Start: 4338, Stop: 4859, Start Num: 72

Candidate Starts for Roberts_6:

(Start: 24 @4173 has 1 MA's), (Start: 72 @4338 has 10 MA's), (87, 4374), (150, 4650), (162, 4701), (198, 4779),

Gene: RockScotty_4 Start: 3879, Stop: 4673, Start Num: 13

Candidate Starts for RockScotty_4:

(Start: 13 @3879 has 17 MA's), (29, 3921), (50, 3987), (Start: 55 @4017 has 1 MA's), (59, 4029), (117, 4248), (122, 4269), (131, 4311), (145, 4365), (150, 4398), (152, 4419), (202, 4611),

Gene: SKKY_4 Start: 3225, Stop: 3980, Start Num: 14

Candidate Starts for SKKY_4:

(Start: 14 @3225 has 47 MA's), (19, 3240), (51, 3327), (53, 3345), (58, 3363), (60, 3369), (63, 3375), (Start: 64 @3381 has 11 MA's), (Start: 72 @3414 has 10 MA's), (77, 3429), (84, 3447), (88, 3456), (90, 3468), (91, 3474), (102, 3504), (105, 3525), (117, 3576), (128, 3603), (145, 3666), (150, 3699), (151, 3702), (184, 3825), (206, 3921), (211, 3945), (213, 3954), (215, 3972),

Gene: Sabourin_4 Start: 3875, Stop: 4669, Start Num: 13

Candidate Starts for Sabourin_4:

(Start: 13 @3875 has 17 MA's), (29, 3917), (50, 3983), (Start: 55 @4013 has 1 MA's), (59, 4025), (117, 4244), (122, 4265), (131, 4307), (150, 4394), (152, 4415), (156, 4433), (202, 4607),

Gene: Sephiroth_15 Start: 8089, Stop: 9099, Start Num: 4

Candidate Starts for Sephiroth_15:

(Start: 4 @8089 has 3 MA's), (5, 8107), (6, 8116), (8, 8131), (22, 8188), (47, 8260), (61, 8314), (106, 8464), (114, 8500), (117, 8524), (128, 8572), (141, 8623), (142, 8626), (150, 8674), (162, 8737), (172, 8755), (189, 8839), (198, 8869), (203, 8899), (211, 8947), (217, 8995), (219, 9010), (220, 9016),

Gene: ShakeltOph_4 Start: 3667, Stop: 4464, Start Num: 15

Candidate Starts for ShakeltOph_4:

(Start: 15 @3667 has 10 MA's), (68, 3841), (78, 3874), (117, 4027), (132, 4093), (150, 4177), (183, 4309),

Gene: SheckWes_5 Start: 3999, Stop: 4592, Start Num: 52

Candidate Starts for SheckWes_5:

(18, 3909), (21, 3915), (36, 3942), (Start: 41 @3960 has 3 MA's), (Start: 43 @3969 has 2 MA's), (Start: 52 @3999 has 40 MA's), (Start: 64 @4047 has 11 MA's), (89, 4122), (99, 4134), (107, 4170), (108, 4176), (112, 4194), (150, 4356), (152, 4377), (190, 4452), (192, 4458), (195, 4473), (211, 4560),

Gene: SketchMex_5 Start: 4215, Stop: 4838, Start Num: 52

Candidate Starts for SketchMex_5:

(18, 4128), (21, 4134), (Start: 52 @4215 has 40 MA's), (Start: 64 @4263 has 11 MA's), (73, 4296), (89, 4338), (112, 4410), (127, 4470), (133, 4494), (150, 4572), (152, 4593), (162, 4623), (204, 4767), (207, 4785),

Gene: Snek_5 Start: 4503, Stop: 5270, Start Num: 15

Candidate Starts for Snek_5:

(Start: 15 @4503 has 10 MA's), (34, 4548), (37, 4554), (Start: 64 @4659 has 11 MA's), (78, 4710), (97, 4770), (104, 4803), (110, 4821), (115, 4845), (132, 4929), (141, 4962), (150, 5013), (151, 5016), (196, 5175),

Gene: Socotra_7 Start: 4221, Stop: 4844, Start Num: 52

Candidate Starts for Socotra_7:

(18, 4131), (21, 4137), (Start: 52 @4221 has 40 MA's), (Start: 64 @4269 has 11 MA's), (69, 4290), (73, 4302), (76, 4311), (89, 4344), (112, 4416), (127, 4476), (150, 4578), (162, 4629), (190, 4707), (204, 4773), (207, 4791), (210, 4812),

Gene: Solid_4 Start: 3217, Stop: 3972, Start Num: 14

Candidate Starts for Solid_4:

(Start: 14 @3217 has 47 MA's), (19, 3232), (48, 3310), (51, 3319), (53, 3337), (58, 3355), (60, 3361), (63, 3367), (Start: 64 @3373 has 11 MA's), (Start: 72 @3406 has 10 MA's), (77, 3421), (84, 3439), (88, 3448), (90, 3460), (91, 3466), (102, 3496), (105, 3517), (107, 3526), (117, 3568), (128, 3595), (138, 3634), (150, 3691), (151, 3694), (184, 3817), (206, 3913), (211, 3937), (213, 3946), (215, 3964),

Gene: Sooty_4 Start: 3875, Stop: 4669, Start Num: 13

Candidate Starts for Sooty_4:

(Start: 13 @3875 has 17 MA's), (29, 3917), (50, 3983), (Start: 55 @4013 has 1 MA's), (59, 4025), (117, 4244), (122, 4265), (131, 4307), (150, 4394), (152, 4415), (156, 4433), (202, 4607),

Gene: Sopespian_6 Start: 4221, Stop: 4844, Start Num: 52

Candidate Starts for Sopespian_6:

(18, 4131), (21, 4137), (Start: 52 @4221 has 40 MA's), (Start: 64 @4269 has 11 MA's), (69, 4290), (73, 4302), (76, 4311), (89, 4344), (112, 4416), (127, 4476), (150, 4578), (162, 4629), (204, 4773), (207, 4791), (210, 4812),

Gene: SpecialK_4 Start: 3879, Stop: 4673, Start Num: 13

Candidate Starts for SpecialK_4:

(Start: 13 @3879 has 17 MA's), (29, 3921), (50, 3987), (Start: 55 @4017 has 1 MA's), (59, 4029), (117, 4248), (122, 4269), (131, 4311), (145, 4365), (150, 4398), (152, 4419), (202, 4611),

Gene: Starburst_7 Start: 4221, Stop: 4844, Start Num: 52

Candidate Starts for Starburst_7:

(18, 4131), (21, 4137), (Start: 52 @4221 has 40 MA's), (Start: 64 @4269 has 11 MA's), (69, 4290), (73, 4302), (76, 4311), (89, 4344), (112, 4416), (127, 4476), (150, 4578), (162, 4629), (190, 4707), (204, 4773), (207, 4791), (210, 4812),

Gene: SteamedHams_8 Start: 4225, Stop: 4881, Start Num: 52

Candidate Starts for SteamedHams_8:

(18, 4138), (21, 4144), (27, 4153), (Start: 52 @4225 has 40 MA's), (Start: 64 @4273 has 11 MA's), (68, 4288), (73, 4306), (89, 4348), (112, 4420), (127, 4480), (133, 4504), (150, 4582), (162, 4633), (200, 4786), (207, 4828),

Gene: Stormborn_4 Start: 3216, Stop: 3971, Start Num: 14

Candidate Starts for Stormborn_4:

(Start: 14 @3216 has 47 MA's), (19, 3231), (51, 3318), (53, 3336), (58, 3354), (60, 3360), (63, 3366), (Start: 64 @3372 has 11 MA's), (Start: 72 @3405 has 10 MA's), (77, 3420), (84, 3438), (88, 3447), (90, 3459), (91, 3465), (102, 3495), (105, 3516), (117, 3567), (128, 3594), (145, 3657), (150, 3690), (151, 3693), (184, 3816), (206, 3912), (211, 3936), (213, 3945), (215, 3963),

Gene: Studio_6 Start: 4142, Stop: 4663, Start Num: 72

Candidate Starts for Studio_6:

(Start: 24 @3977 has 1 MA's), (Start: 72 @4142 has 10 MA's), (87, 4178), (90, 4196), (150, 4454), (158, 4493), (198, 4583),

Gene: Stuu_4 Start: 3879, Stop: 4673, Start Num: 13

Candidate Starts for Stuu_4:

(Start: 13 @3879 has 17 MA's), (29, 3921), (50, 3987), (Start: 55 @4017 has 1 MA's), (115, 4230), (117, 4248), (122, 4269), (131, 4311), (145, 4365), (150, 4398), (152, 4419), (202, 4611),

Gene: SuMoo_4 Start: 3785, Stop: 4639, Start Num: 13

Candidate Starts for SuMoo_4:

(Start: 13 @3785 has 17 MA's), (28, 3821), (122, 4187), (141, 4265), (148, 4295), (150, 4316), (176, 4400), (194, 4484), (208, 4568),

Gene: SummitAcademy_5 Start: 4073, Stop: 4666, Start Num: 52

Candidate Starts for SummitAcademy_5:

(18, 3983), (21, 3989), (36, 4016), (Start: 41 @4034 has 3 MA's), (Start: 43 @4043 has 2 MA's), (Start: 52 @4073 has 40 MA's), (Start: 64 @4121 has 11 MA's), (Start: 75 @4157 has 4 MA's), (89, 4196), (99, 4208), (107, 4244), (108, 4250), (112, 4268), (150, 4430), (152, 4451), (190, 4526), (192, 4532), (195, 4547), (211, 4634),

Gene: Supernova_4 Start: 3213, Stop: 3968, Start Num: 14

Candidate Starts for Supernova_4:

(Start: 14 @3213 has 47 MA's), (51, 3315), (53, 3333), (58, 3351), (60, 3357), (63, 3363), (Start: 64 @3369 has 11 MA's), (Start: 72 @3402 has 10 MA's), (90, 3456), (91, 3462), (116, 3561), (117, 3564), (128, 3591), (150, 3687), (184, 3813), (206, 3909), (211, 3933), (213, 3942), (215, 3960),

Gene: Survivors_8 Start: 4918, Stop: 5568, Start Num: 41

Candidate Starts for Survivors_8:

(18, 4870), (21, 4876), (32, 4894), (Start: 41 @4918 has 3 MA's), (42, 4924), (Start: 64 @5005 has 11 MA's), (Start: 75 @5041 has 4 MA's), (76, 5047), (101, 5104), (112, 5158), (121, 5191), (122, 5194), (150, 5320), (151, 5323), (152, 5341), (188, 5425), (190, 5431), (195, 5452), (212, 5542),

Gene: SweatNTears_8 Start: 4742, Stop: 5365, Start Num: 52

Candidate Starts for SweatNTears_8:

(18, 4655), (21, 4661), (Start: 52 @4742 has 40 MA's), (Start: 64 @4790 has 11 MA's), (73, 4823), (89, 4865), (112, 4937), (127, 4997), (133, 5021), (150, 5099), (152, 5120), (162, 5150), (204, 5294), (207, 5312),

Gene: Syleon_15 Start: 8011, Stop: 9021, Start Num: 4

Candidate Starts for Syleon_15:

(Start: 4 @8011 has 3 MA's), (5, 8029), (6, 8038), (8, 8053), (22, 8110), (47, 8182), (61, 8236), (106, 8386), (114, 8422), (117, 8446), (128, 8494), (141, 8545), (142, 8548), (150, 8596), (162, 8659), (172, 8677), (189, 8761), (198, 8791), (203, 8821), (211, 8869), (217, 8917), (219, 8932), (220, 8938),

Gene: TChen_4 Start: 3803, Stop: 4498, Start Num: 75

Candidate Starts for TChen_4:

(26, 3644), (28, 3650), (Start: 75 @3803 has 4 MA's), (82, 3821), (100, 3869), (105, 3893), (112, 3926), (119, 3950), (125, 3971), (127, 3983), (136, 4019), (143, 4046), (150, 4085), (151, 4088), (163, 4151), (168, 4190), (169, 4226), (170, 4244), (171, 4256), (190, 4355), (200, 4397),

Gene: TMaxx_6 Start: 4276, Stop: 4839, Start Num: 72

Candidate Starts for TMaxx_6:

(Start: 24 @4111 has 1 MA's), (Start: 72 @4276 has 10 MA's), (87, 4312), (120, 4447), (149, 4585), (209, 4789),

Gene: Tarnish_6 Start: 4372, Stop: 4965, Start Num: 52

Candidate Starts for Tarnish_6:

(18, 4282), (21, 4288), (36, 4315), (Start: 41 @4333 has 3 MA's), (Start: 43 @4342 has 2 MA's), (Start: 52 @4372 has 40 MA's), (Start: 64 @4420 has 11 MA's), (Start: 75 @4456 has 4 MA's), (89, 4495), (99, 4507), (107, 4543), (108, 4549), (112, 4567), (150, 4729), (152, 4750), (190, 4825), (192, 4831), (195, 4846), (211, 4933),

Gene: ThetaBob_4 Start: 3803, Stop: 4378, Start Num: 75

Candidate Starts for ThetaBob_4:

(26, 3644), (28, 3650), (Start: 75 @3803 has 4 MA's), (82, 3821), (100, 3869), (105, 3893), (112, 3926), (119, 3950), (125, 3971), (127, 3983), (136, 4019), (143, 4046), (150, 4085), (151, 4088), (154, 4115), (190, 4235), (200, 4277),

Gene: ThursdayNight_4 Start: 3861, Stop: 4655, Start Num: 15

Candidate Starts for ThursdayNight_4:

(Start: 15 @3861 has 10 MA's), (78, 4068), (92, 4113), (97, 4128), (113, 4191), (132, 4287), (150, 4371),

Gene: Tolls_8 Start: 4226, Stop: 4885, Start Num: 52

Candidate Starts for Tolls_8:

(18, 4139), (21, 4145), (Start: 52 @4226 has 40 MA's), (Start: 64 @4274 has 11 MA's), (68, 4289), (73, 4307), (89, 4349), (112, 4421), (127, 4481), (133, 4505), (150, 4583), (162, 4634), (200, 4787), (207, 4829), (211, 4856),

Gene: Toron_4 Start: 3803, Stop: 4498, Start Num: 75

Candidate Starts for Toron_4:

(26, 3644), (28, 3650), (69, 3788), (Start: 75 @3803 has 4 MA's), (82, 3821), (100, 3869), (105, 3893), (112, 3926), (119, 3950), (125, 3971), (127, 3983), (136, 4019), (143, 4046), (150, 4085), (151, 4088), (162, 4148), (163, 4151), (168, 4190), (170, 4244), (171, 4256), (190, 4355), (200, 4397),

Gene: Trax_14 Start: 7752, Stop: 8771, Start Num: 2

Candidate Starts for Trax_14:

(Start: 2 @7752 has 3 MA's), (9, 7821), (22, 7875), (Start: 41 @7926 has 3 MA's), (66, 8019), (107, 8166), (111, 8187), (114, 8199), (117, 8223), (120, 8235), (128, 8271), (134, 8295), (150, 8373), (151, 8376), (178, 8481), (183, 8511), (188, 8532), (201, 8583), (203, 8595), (221, 8718),

Gene: TripleC_9 Start: 7743, Stop: 8306, Start Num: 72

Candidate Starts for TripleC_9:

(Start: 24 @7578 has 1 MA's), (Start: 72 @7743 has 10 MA's), (87, 7779), (120, 7914), (149, 8052), (209, 8256),

Gene: Troje_6 Start: 4216, Stop: 4839, Start Num: 52

Candidate Starts for Troje_6:

(18, 4129), (21, 4135), (Start: 52 @4216 has 40 MA's), (Start: 64 @4264 has 11 MA's), (68, 4279), (73, 4297), (89, 4339), (112, 4411), (127, 4471), (133, 4495), (150, 4573), (152, 4594), (162, 4624), (204, 4768), (207, 4786),

Gene: Tweety19_5 Start: 4503, Stop: 5270, Start Num: 15

Candidate Starts for Tweety19_5:

(Start: 15 @4503 has 10 MA's), (34, 4548), (Start: 64 @4659 has 11 MA's), (71, 4689), (78, 4710), (97, 4770), (104, 4803), (110, 4821), (115, 4845), (118, 4869), (132, 4929), (141, 4962), (150, 5013), (151, 5016), (196, 5175),

Gene: Typhonomachy_6 Start: 4269, Stop: 4844, Start Num: 64

Candidate Starts for Typhonomachy_6:

(18, 4131), (21, 4137), (Start: 52 @4221 has 40 MA's), (Start: 64 @4269 has 11 MA's), (69, 4290), (73, 4302), (76, 4311), (89, 4344), (112, 4416), (127, 4476), (150, 4578), (162, 4629), (190, 4707), (204, 4773), (207, 4791), (210, 4812),

Gene: Vine_7 Start: 4967, Stop: 5590, Start Num: 43

Candidate Starts for Vine_7:

(18, 4907), (21, 4913), (36, 4940), (Start: 41 @4958 has 3 MA's), (Start: 43 @4967 has 2 MA's), (Start: 52 @4997 has 40 MA's), (Start: 64 @5045 has 11 MA's), (Start: 75 @5081 has 4 MA's), (89, 5120), (99, 5132), (107, 5168), (108, 5174), (112, 5192), (150, 5354), (192, 5456), (195, 5471), (211, 5558),

Gene: VroomVroom_4 Start: 3676, Stop: 4473, Start Num: 15

Candidate Starts for VroomVroom_4:

(Start: 15 @3676 has 10 MA's), (Start: 64 @3832 has 11 MA's), (68, 3850), (78, 3883), (117, 4036), (132, 4102), (150, 4186), (183, 4318),

Gene: Wallaby_9 Start: 5150, Stop: 5713, Start Num: 64

Candidate Starts for Wallaby_9:

(18, 5015), (21, 5021), (32, 5039), (Start: 41 @5063 has 3 MA's), (42, 5069), (Start: 64 @5150 has 11 MA's), (Start: 75 @5186 has 4 MA's), (76, 5192), (101, 5249), (112, 5303), (121, 5336), (122, 5339), (150, 5465), (151, 5468), (152, 5486), (188, 5570), (190, 5576), (195, 5597), (212, 5687),

Gene: Wizzo_4 Start: 3218, Stop: 3973, Start Num: 14

Candidate Starts for Wizzo_4:

(Start: 14 @3218 has 47 MA's), (25, 3242), (51, 3320), (53, 3338), (58, 3356), (60, 3362), (63, 3368), (Start: 64 @3374 has 11 MA's), (Start: 72 @3407 has 10 MA's), (77, 3422), (84, 3440), (88, 3449), (90, 3461), (91, 3467), (102, 3497), (105, 3518), (117, 3569), (128, 3596), (145, 3659), (150, 3692), (151, 3695), (184, 3818), (206, 3914), (211, 3938), (213, 3947), (215, 3965),

Gene: Wolfwood_8 Start: 5063, Stop: 5713, Start Num: 41

Candidate Starts for Wolfwood_8:

(18, 5015), (21, 5021), (32, 5039), (Start: 41 @5063 has 3 MA's), (42, 5069), (Start: 64 @5150 has 11 MA's), (Start: 75 @5186 has 4 MA's), (76, 5192), (101, 5249), (112, 5303), (121, 5336), (122, 5339), (133, 5387), (150, 5465), (151, 5468), (152, 5486), (188, 5570), (190, 5576), (195, 5597), (212, 5687),

Gene: Yakult_7 Start: 4190, Stop: 4777, Start Num: 52

Candidate Starts for Yakult_7:

(18, 4097), (Start: 24 @4106 has 1 MA's), (39, 4145), (42, 4157), (Start: 52 @4190 has 40 MA's), (Start: 64 @4226 has 11 MA's), (68, 4241), (121, 4412), (135, 4469), (150, 4541), (152, 4562), (160, 4586), (192, 4643), (207, 4721),

Gene: Yarn_5 Start: 4219, Stop: 4875, Start Num: 52

Candidate Starts for Yarn_5:

(18, 4132), (21, 4138), (27, 4147), (Start: 52 @4219 has 40 MA's), (Start: 64 @4267 has 11 MA's), (68, 4282), (73, 4300), (89, 4342), (112, 4414), (127, 4474), (133, 4498), (150, 4576), (162, 4627), (204, 4804), (207, 4822),

Gene: Yucky_6 Start: 4858, Stop: 5451, Start Num: 52

Candidate Starts for Yucky_6:

(18, 4768), (21, 4774), (36, 4801), (Start: 41 @4819 has 3 MA's), (Start: 43 @4828 has 2 MA's), (Start: 52 @4858 has 40 MA's), (Start: 64 @4906 has 11 MA's), (Start: 75 @4942 has 4 MA's), (89, 4981), (99, 4993), (107, 5029), (108, 5035), (112, 5053), (150, 5215), (192, 5317), (195, 5332), (211, 5419),

Gene: Yummy_7 Start: 4122, Stop: 4745, Start Num: 52

Candidate Starts for Yummy_7:

(18, 4035), (21, 4041), (Start: 52 @4122 has 40 MA's), (Start: 64 @4170 has 11 MA's), (73, 4203), (89, 4245), (112, 4317), (127, 4377), (133, 4401), (150, 4479), (152, 4500), (162, 4530), (204, 4674), (207, 4692),

Gene: Zareef_8 Start: 5152, Stop: 5715, Start Num: 64

Candidate Starts for Zareef_8:

(18, 5017), (21, 5023), (32, 5041), (Start: 41 @5065 has 3 MA's), (42, 5071), (Start: 64 @5152 has 11 MA's), (Start: 75 @5188 has 4 MA's), (76, 5194), (101, 5251), (112, 5305), (121, 5338), (122, 5341), (133, 5389), (150, 5467), (151, 5470), (152, 5488), (188, 5572), (195, 5599), (212, 5689),

Gene: Zeta1847_4 Start: 3665, Stop: 4408, Start Num: 14

Candidate Starts for Zeta1847_4:

(Start: 14 @3665 has 47 MA's), (29, 3704), (65, 3833), (81, 3884), (122, 4061), (127, 4085), (150, 4187), (156, 4226),

Gene: phiSASD1_24 Start: 3643, Stop: 4287, Start Num: 45

Candidate Starts for phiSASD1_24:

(45, 3643), (68, 3736), (Start: 72 @3751 has 10 MA's), (84, 3784), (105, 3841), (123, 3928), (139, 4000), (146, 4027), (147, 4030), (153, 4081), (155, 4099), (161, 4111), (164, 4120), (182, 4174), (193, 4216), (196, 4228),