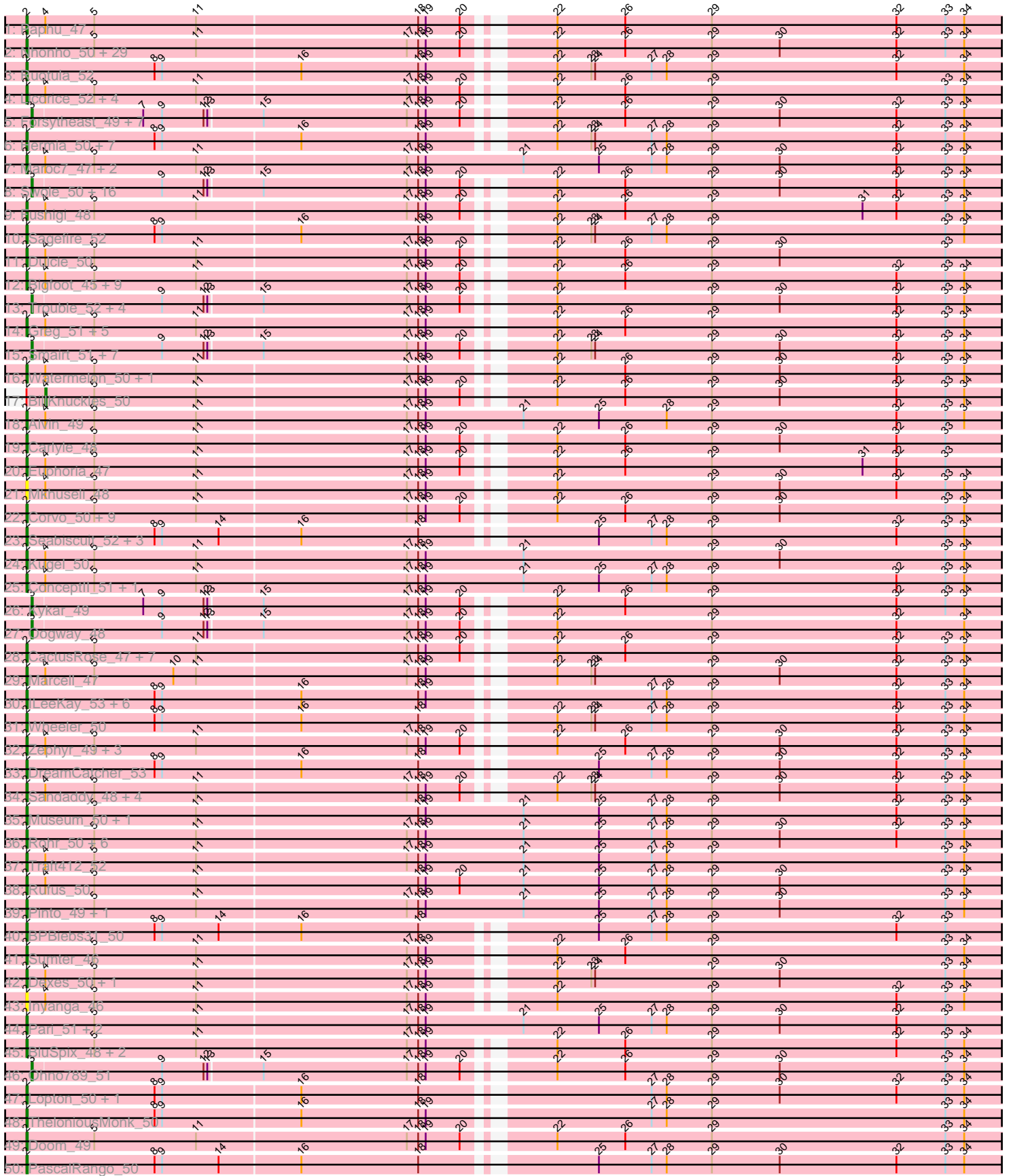


Pham 202667



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 202667 Report

This analysis was run 01/18/25 on database version 583.

Pham number 202667 has 220 members, 11 are drafts.

Phages represented in each track:

- Track 1 : Paphu_47
- Track 2 : Nhonho_50, Gandalf20_52, SarFire_47, Blue_49, Thor_47, Norz_50, Graduation_53, Alsfro_53, SkiPole_54, Paraselene_47, Pepe_46, Scowl_50, Zeuska_48, Snazzy_48, Rhynn_48, Magnito_48, Espresso_49, Barriga_50, Hami1_43, Abrogate_480, Turj99_48, Teodoridan_48, Kenmech_53, STLscum_52, Parliament_49, Niza_52, Wilkins_49, StewieG_48, Target_50, Topgun_49
- Track 3 : Ruotula_52
- Track 4 : Licorice_52, BigPaolini_49, Froghopper_47, Marsha_49, Tasp14_51
- Track 5 : Forsytheast_49, SwissCheese_51, Crispicious1_47, Altman_52, Bruns_48, Moose_49, Kanely_51, RidgeCB_49
- Track 6 : Hermia_50, KBG_51, GrecoEtereo_50, PattyP_50, Arcanine_50, Papez_52, HarryOW_48, Slagathor_51
- Track 7 : Maroc7_47, Fascinus_45, Mryolo_47
- Track 8 : Swole_50, Bxb1_45, Homines_42, Lesedi_46, Tote_45, JuliaChild_50, Eyeball_51, Molly_50, Petp2012_50, PacerPaul_49, Francis47_48, Gompeii16_48, Agaliana_45, TwoPeat_50, Pita2_52, PSullivan_49, Bircsak_48
- Track 9 : Fushigi_48
- Track 10 : Sagefire_52
- Track 11 : Dulcie_50
- Track 12 : Bigfoot_45, Dussy_51, Buttons_48, Marge_49, Gyzlar_45, Big3_49, Ajay_51, Abbysshoes_52, Petruccio_49, Tripl3t_49
- Track 13 : Trouble_52, NEHalo_47, BK1_45, A6_45, BaconJack_52
- Track 14 : Greg_51, Fajezeel_51, Zeeculate_47, Pippin_51, Ciao_49, Michley_49
- Track 15 : Smairt_51, Sanya_47, Perseus_49, Aeneas_51, GMonster_46, Applejack_44, PhrostyMug_48, Mule_46
- Track 16 : Watermelon_50, QTRlifeCrisis_49
- Track 17 : BillKnuckles_50
- Track 18 : Alvin_49
- Track 19 : Carlyle_48
- Track 20 : Euphoria_47
- Track 21 : Mkhuseji_48
- Track 22 : Corvo_50, Beatrix_49, Jorgensen_51, StrongArm_49, Bexan_48, Raid_50, Makemake_49, ShortQueendom_43, MaryBeth_49, MetalQZJ_48
- Track 23 : Seabiscuit_52, McGuire_51, U2_49, Ichabod_52
- Track 24 : Kugel_50
- Track 25 : ConceptII_51, Acme_51
- Track 26 : Kykar_49

- Track 27 : Oogway_48
- Track 28 : CactusRose_47, Bethlehem_50, Dreamboat_51, Fenn_52, Squee_50, Jasper_51, Naira_52, PherrisBueller_49
- Track 29 : Marcell_47
- Track 30 : ILeeKay_53, Payneful_49, Arlo_47, Solon_48, Anglerfish_51, Marchy_44, Manatee_51
- Track 31 : Wheeler_50
- Track 32 : Zephyr_49, Violet_47, Peterson_54, Magnar_49
- Track 33 : DreamCatcher_53
- Track 34 : Sandaddy_48, AFIS_47, SpikeBT_49, GageAP_50, Sorpresa_48
- Track 35 : Museum_50, Burton_49
- Track 36 : Rohr_50, Bob3_47, BigMau_50, Bones_50, Jerm2_50, HermioneGrange_49, Cueyllyss_51
- Track 37 : Traft412_52
- Track 38 : Rufus_50
- Track 39 : Pinto_49, Dynamix_51
- Track 40 : BPBiebs31_50
- Track 41 : Sumter_46
- Track 42 : Dexes_50, Pelly_49
- Track 43 : Inyanga_46
- Track 44 : Pari_51, Hope4ever_52, Rajelicia_50
- Track 45 : BluSpix_48, IgnatiusPatJac_50, DrFeelGood_47
- Track 46 : Ohno789_51
- Track 47 : Lopton_50, KSSJEB_49
- Track 48 : TheloniousMonk_50
- Track 49 : Doom_49
- Track 50 : PascalRango_50
- Track 51 : JC27_51, Ashballer_51, KyMonks1A_51
- Track 52 : JackSparrow_50, Nerujay_52
- Track 53 : Smeagol_51
- Track 54 : Gwendoluna_53
- Track 55 : Chanagan_46
- Track 56 : Killigrew_49
- Track 57 : Seanderson_51
- Track 58 : Treddle_50, Edtherson_49, Monet_52
- Track 59 : Rubeus_49
- Track 60 : Atkinbua_52
- Track 61 : Rutherferd_51
- Track 62 : Adahisdi_49
- Track 63 : Sunshine924_50, ProMouse_50
- Track 64 : HanShotFirst_49, PinkPlastic_49, Briton15_52
- Track 65 : LilBib_49
- Track 66 : BeesKnees_51, Lockley_48
- Track 67 : MrGordo_49
- Track 68 : Ringer_50
- Track 69 : DD5_48
- Track 70 : MPlant7149_48
- Track 71 : Lamina13_50
- Track 72 : Switzer_51
- Track 73 : Sibs6_50

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

The start number called the most often in the published annotations is 2, it was called in 155 of the 209 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AFIS_47, Abbyshoes_52, Abrogate_480, Acme_51, Adahisdi_49, Ajay_51, Alsfro_53, Alvin_49, Anglerfish_51, Arcanine_50, Arlo_47, Ashballer_51, Atkinbua_52, BPBiebs31_50, Barriga_50, Beatrix_49, Bethlehem_50, Bexan_48, Big3_49, BigMau_50, BigPaolini_49, Bigfoot_45, BluSpix_48, Blue_49, Bob3_47, Bones_50, Burton_49, Buttons_48, CactusRose_47, Carlyle_48, Chanagan_46, Ciao_49, Conceptll_51, Corvo_50, Cueylyss_51, Dexes_50, Doom_49, DrFeelGood_47, DreamCatcher_53, Dreamboat_51, Dulcie_50, Dussy_51, Dynamix_51, Edtherson_49, Espresso_49, Euphoria_47, Fajezeel_51, Fascinus_45, Fenn_52, Froghopper_47, Fushigi_48, GageAP_50, Gandalf20_52, Graduation_53, GrecoEtereo_50, Greg_51, Gwendoluna_53, Gyzlar_45, Hami1_43, HarryOW_48, Hermia_50, HermioneGrange_49, Hope4ever_52, ILeeKay_53, Ichabod_52, IgnatiusPatJac_50, Inyanga_46, JC27_51, Jasper_51, Jerm2_50, Jorgensen_51, KBG_51, KSSJEB_49, Kenmech_53, Kugel_50, KyMonks1A_51, Licorice_52, LilBib_49, Lopton_50, MPlant7149_48, Magnar_49, Magnito_48, Makemake_49, Manatee_51, Marcell_47, Marchy_44, Marge_49, Maroc7_47, Marsha_49, MaryBeth_49, McGuire_51, MetalQZJ_48, Michley_49, Mkhuseleli_48, Monet_52, Mryolo_47, Museum_50, Naira_52, Nhonho_50, Niza_52, Norz_50, Papez_52, Paphu_47, Paraselene_47, Pari_51, Parliament_49, PascalRango_50, PattyP_50, Payneful_49, Pelly_49, Pepe_46, Peterson_54, Petruchio_49, PherrisBueller_49, Pinto_49, Pippin_51, QTRlifeCrisis_49, Raid_50, Rajelicia_50, Rhynn_48, Rohr_50, Rubeus_49, Rufus_50, Ruotula_52, Rutherford_51, STLscum_52, Sagefire_52, Sandaddy_48, SarFire_47, Scowl_50, Seabiscuit_52, ShortQueendom_43, SkiPole_54, Slagathor_51, Smeagol_51, Snazzy_48, Solon_48, Sorpresa_48, SpikeBT_49, Squee_50, StewieG_48, StrongArm_49, Sumter_46, Switzer_51, Target_50, Tasp14_51, Teodoridan_48, TheloniousMonk_50, Thor_47, Topgun_49, Traft412_52, Treddle_50, Tripl3t_49, Turj99_48, U2_49, Violet_47, Watermelon_50, Wheeler_50, Wilkins_49, Zeeculate_47, Zephyr_49, Zeuska_48,

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

- BillKnuckles_50, Lamina13_50, Ringer_50,

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

- A6_45, Aeneas_51, Agaliana_45, Altman_52, Applejack_44, BK1_45, BaconJack_52, BeesKnees_51, Bircsak_48, Briton15_52, Bruns_48, Bxb1_45, Crispicous1_47, DD5_48, Eyeball_51, Forsytheast_49, Francis47_48, GMonster_46, Gompeii16_48, HanShotFirst_49, Homines_42, JackSparrow_50, JuliaChild_50, Kanely_51, Killigrew_49, Kykar_49, Lesedi_46, Lockley_48, Molly_50, Moose_49, MrGordo_49, Mule_46, NEHalo_47, Nerujay_52, Ohno789_51, Oogway_48, PSullivan_49, PacerPaul_49, Perseus_49, Petp2012_50, PhrostyMug_48, PinkPlastic_49, Pita2_52, ProMouse_50, RidgeCB_49, Sanya_47, Seanderson_51, Sibs6_50, Smairt_51, Sunshine924_50, SwissCheese_51, Swole_50, Tote_45, Trouble_52, TwoPeat_50,

Summary by start number:

Start 1:

- Found in 8 of 220 (3.6%) of genes in pham
- Manual Annotations of this start: 1 of 209
- Called 12.5% of time when present
- Phage (with cluster) where this start called: DD5_48 (A1),

Start 2:

- Found in 165 of 220 (75.0%) of genes in pham
- Manual Annotations of this start: 155 of 209
- Called 98.2% of time when present
- Phage (with cluster) where this start called: AFIS_47 (A1), Abbyshoes_52 (A1), Abrogate_480 (A1), Acme_51 (A1), Adahisdi_49 (A1), Ajay_51 (A1), Alsfro_53 (A1), Alvin_49 (A1), Anglerfish_51 (A1), Arcanine_50 (A1), Arlo_47 (A1), Ashballer_51 (A1), Atkinbua_52 (A1), BPBiebs31_50 (A1), Barriga_50 (A1), Beatrix_49 (A1), Bethlehem_50 (A1), Bexan_48 (A1), Big3_49 (A1), BigMau_50 (A1), BigPaolini_49 (A1), Bigfoot_45 (A1), BluSpix_48 (A1), Blue_49 (A1), Bob3_47 (A1), Bones_50 (A1), Burton_49 (A1), Buttons_48 (A1), CactusRose_47 (A1), Carlyle_48 (A1), Chanagan_46 (A1), Ciao_49 (A1), ConceptII_51 (A1), Corvo_50 (A1), Cueyllyss_51 (A1), Dexes_50 (A1), Doom_49 (A1), DrFeelGood_47 (A1), DreamCatcher_53 (A1), Dreamboat_51 (A1), Dulcie_50 (A1), Dussy_51 (A1), Dynamix_51 (A1), Edtherson_49 (A1), Espresso_49 (A1), Euphoria_47 (A1), Fajezeel_51 (A1), Fascinus_45 (A1), Fenn_52 (A1), Froghopper_47 (A1), Fushigi_48 (A1), GageAP_50 (A1), Gandalf20_52 (A1), Graduation_53 (A1), GrecoEtereo_50 (A1), Greg_51 (A1), Gwendoluna_53 (A1), Gyzlar_45 (A1), Hami1_43 (A1), HarryOW_48 (A1), Hermia_50 (A1), HermioneGrange_49 (A1), Hope4ever_52 (A1), ILeeKay_53 (A1), Ichabod_52 (A1), IgnatiusPatJac_50 (A1), Inyanga_46 (A1), JC27_51 (A1), Jasper_51 (A1), Jerm2_50 (A1), Jorgensen_51 (A1), KBG_51 (A1), KSSJEB_49 (A1), Kenmech_53 (A1), Kugel_50 (A1), KyMonks1A_51 (A1), Licorice_52 (A1), LilBib_49 (A1), Lopton_50 (A1), MPlant7149_48 (A1), Magnar_49 (A1), Magnito_48 (A1), Makemake_49 (A1), Manatee_51 (A1), Marcell_47 (A1), Marchy_44 (A1), Marge_49 (A1), Maroc7_47 (A1), Marsha_49 (A1), MaryBeth_49 (A1), McGuire_51 (A1), MetalQZJ_48 (A1), Michley_49 (A1), Mkhusele_48 (A1), Monet_52 (A1), Mryolo_47 (A1), Museum_50 (A1), Naira_52 (A1), Nhonho_50 (A1), Niza_52 (A1), Norz_50 (A1), Papez_52 (A1), Paphu_47 (A1), Paraselene_47 (A1), Pari_51 (A1), Parliament_49 (A1), PascalRango_50 (A1), PattyP_50 (A1), Payneful_49 (A1), Pelly_49 (A1), Pepe_46 (A1), Peterson_54 (A1), Petruccio_49 (A1), PherrisBueller_49 (A1), Pinto_49 (A1), Pippin_51 (A1), QTRlifeCrisis_49 (A1), Raid_50 (A1), Rajelicia_50 (A1), Rhynn_48 (A1), Rohr_50 (A1), Rubeus_49 (A1), Rufus_50 (A1), Ruotula_52 (A1), Rutherford_51 (A1), STLscum_52 (A1), Sagefire_52 (A1), Sandaddy_48 (A1), SarFire_47 (A1), Scowl_50 (A1), Seabiscuit_52 (A1), ShortQueendom_43 (A1), SkiPole_54 (A1), Slogathor_51 (A1), Smeagol_51 (A1), Snazzy_48 (A1), Solon_48 (A1), Sorpresa_48 (A1), SpikeBT_49 (A1), Squee_50 (A1), StewieG_48 (A1), StrongArm_49 (A1), Sumter_46 (A1), Switzer_51 (A1), Target_50 (A1), Tasp14_51 (A1), Teodoridan_48 (A1), TheloniousMonk_50 (A1), Thor_47 (A1), Topgun_49 (A1), Traft412_52 (A1), Treddle_50 (A1), Tripl3t_49 (A1), Turj99_48 (A1), U2_49 (A1), Violet_47 (A1), Watermelon_50 (A1), Wheeler_50 (A1), Wilkins_49 (A1), Zeeculate_47 (A1), Zephyr_49 (A1), Zeuska_48 (A1),

Start 3:

- Found in 55 of 220 (25.0%) of genes in pham
- Manual Annotations of this start: 50 of 209
- Called 98.2% of time when present
- Phage (with cluster) where this start called: A6_45 (A1), Aeneas_51 (A1), Agaliana_45 (A1), Altman_52 (A1), Applejack_44 (A1), BK1_45 (A1), BaconJack_52

(A1), BeesKnees_51 (A1), Bircsak_48 (A1), Briton15_52 (A1), Bruns_48 (A1), Bxb1_45 (A1), Crispicous1_47 (A1), Eyeball_51 (A1), Forsytheast_49 (A1), Francis47_48 (A1), GMonster_46 (A1), Gompeii16_48 (A1), HanShotFirst_49 (A1), Homines_42 (A1), JackSparrow_50 (A1), JuliaChild_50 (A1), Kanely_51 (A1), Killigrew_49 (A1), Kykar_49 (A1), Lesedi_46 (A1), Lockley_48 (A1), Molly_50 (A1), Moose_49 (A1), MrGordo_49 (A1), Mule_46 (A1), NEHalo_47 (A1), Nerujay_52 (A1), Ohno789_51 (A1), Oogway_48 (A1), PSullivan_49 (A1), PacerPaul_49 (A1), Perseus_49 (A1), Petp2012_50 (A1), PhrostyMug_48 (A1), PinkPlastic_49 (A1), Pita2_52 (A1), ProMouse_50 (A1), RidgeCB_49 (A1), Sanya_47 (A1), Seanderson_51 (A1), Sibs6_50 (A1), Smairt_51 (A1), Sunshine924_50 (A1), SwissCheese_51 (A1), Swole_50 (A1), Tote_45 (A1), Trouble_52 (A1), TwoPeat_50 (A1),

Start 4:

- Found in 65 of 220 (29.5%) of genes in pham
- Manual Annotations of this start: 2 of 209
- Called 3.1% of time when present
- Phage (with cluster) where this start called: BillKnuckles_50 (A1), Lamina13_50 (A1),

Start 5:

- Found in 133 of 220 (60.5%) of genes in pham
- Manual Annotations of this start: 1 of 209
- Called 0.8% of time when present
- Phage (with cluster) where this start called: Ringer_50 (A1),

Summary by clusters:

There is one cluster represented in this pham: A1

Info for manual annotations of cluster A1:

- Start number 1 was manually annotated 1 time for cluster A1.
- Start number 2 was manually annotated 155 times for cluster A1.
- Start number 3 was manually annotated 50 times for cluster A1.
- Start number 4 was manually annotated 2 times for cluster A1.
- Start number 5 was manually annotated 1 time for cluster A1.

Gene Information:

Gene: A6_45 Start: 35301, Stop: 34516, Start Num: 3

Candidate Starts for A6_45:

(Start: 3 @35301 has 50 MA's), (9, 35199), (12, 35166), (13, 35163), (15, 35121), (17, 35007), (18, 34998), (19, 34992), (20, 34965), (22, 34911), (29, 34788), (30, 34734), (32, 34641), (33, 34602), (34, 34587),

Gene: AFIS_47 Start: 36105, Stop: 35314, Start Num: 2

Candidate Starts for AFIS_47:

(Start: 2 @36105 has 155 MA's), (Start: 4 @36090 has 2 MA's), (Start: 5 @36051 has 1 MA's), (11, 35970), (17, 35805), (18, 35796), (19, 35790), (20, 35763), (22, 35709), (23, 35682), (24, 35679), (29, 35586), (30, 35532), (32, 35439), (33, 35400), (34, 35385),

Gene: Abbysshoes_52 Start: 36747, Stop: 35956, Start Num: 2

Candidate Starts for Abbysshoes_52:

(Start: 2 @36747 has 155 MA's), (Start: 4 @36732 has 2 MA's), (Start: 5 @36693 has 1 MA's), (11, 36612), (17, 36447), (18, 36438), (19, 36432), (20, 36405), (22, 36351), (26, 36297), (29, 36228), (32, 36081), (33, 36042), (34, 36027),

Gene: Abrogate_480 Start: 36762, Stop: 35971, Start Num: 2

Candidate Starts for Abrogate_480:

(Start: 2 @36762 has 155 MA's), (Start: 5 @36708 has 1 MA's), (11, 36627), (17, 36462), (18, 36453), (19, 36447), (20, 36420), (22, 36366), (26, 36312), (29, 36243), (30, 36189), (32, 36096), (33, 36057), (34, 36042),

Gene: Acme_51 Start: 36648, Stop: 35833, Start Num: 2

Candidate Starts for Acme_51:

(Start: 2 @36648 has 155 MA's), (Start: 4 @36633 has 2 MA's), (Start: 5 @36594 has 1 MA's), (11, 36513), (17, 36348), (18, 36339), (19, 36333), (21, 36255), (25, 36195), (27, 36153), (28, 36141), (29, 36105), (32, 35958), (33, 35919), (34, 35904),

Gene: Adahisdi_49 Start: 36498, Stop: 35707, Start Num: 2

Candidate Starts for Adahisdi_49:

(Start: 2 @36498 has 155 MA's), (Start: 5 @36444 has 1 MA's), (11, 36363), (17, 36198), (18, 36189), (19, 36183), (22, 36102), (23, 36075), (24, 36072), (29, 35979), (30, 35925), (32, 35832), (34, 35778),

Gene: Aeneas_51 Start: 36709, Stop: 35924, Start Num: 3

Candidate Starts for Aeneas_51:

(Start: 3 @36709 has 50 MA's), (9, 36607), (12, 36574), (13, 36571), (15, 36529), (17, 36415), (18, 36406), (19, 36400), (20, 36373), (22, 36319), (23, 36292), (24, 36289), (29, 36196), (30, 36142), (32, 36049), (33, 36010), (34, 35995),

Gene: Agaliana_45 Start: 33356, Stop: 32571, Start Num: 3

Candidate Starts for Agaliana_45:

(Start: 3 @33356 has 50 MA's), (9, 33254), (12, 33221), (13, 33218), (15, 33176), (17, 33062), (18, 33053), (19, 33047), (20, 33020), (22, 32966), (26, 32912), (29, 32843), (30, 32789), (32, 32696), (33, 32657), (34, 32642),

Gene: Ajay_51 Start: 36816, Stop: 36025, Start Num: 2

Candidate Starts for Ajay_51:

(Start: 2 @36816 has 155 MA's), (Start: 4 @36801 has 2 MA's), (Start: 5 @36762 has 1 MA's), (11, 36681), (17, 36516), (18, 36507), (19, 36501), (20, 36474), (22, 36420), (26, 36366), (29, 36297), (32, 36150), (33, 36111), (34, 36096),

Gene: Alsfro_53 Start: 36822, Stop: 36031, Start Num: 2

Candidate Starts for Alsfro_53:

(Start: 2 @36822 has 155 MA's), (Start: 5 @36768 has 1 MA's), (11, 36687), (17, 36522), (18, 36513), (19, 36507), (20, 36480), (22, 36426), (26, 36372), (29, 36303), (30, 36249), (32, 36156), (33, 36117), (34, 36102),

Gene: Altman_52 Start: 37414, Stop: 36629, Start Num: 3

Candidate Starts for Altman_52:

(Start: 3 @37414 has 50 MA's), (7, 37327), (9, 37312), (12, 37279), (13, 37276), (15, 37234), (17, 37120), (18, 37111), (19, 37105), (20, 37078), (22, 37024), (26, 36970), (29, 36901), (30, 36847), (32, 36754), (33, 36715), (34, 36700),

Gene: Alvin_49 Start: 37098, Stop: 36283, Start Num: 2

Candidate Starts for Alvin_49:

(Start: 2 @37098 has 155 MA's), (Start: 4 @37083 has 2 MA's), (Start: 5 @37044 has 1 MA's), (11, 36963), (17, 36798), (18, 36789), (19, 36783), (21, 36705), (25, 36645), (28, 36591), (29, 36555), (32, 36408), (33, 36369), (34, 36354),

Gene: Anglerfish_51 Start: 36970, Stop: 36179, Start Num: 2

Candidate Starts for Anglerfish_51:

(Start: 2 @36970 has 155 MA's), (8, 36868), (9, 36862), (16, 36754), (18, 36661), (19, 36655), (27, 36499), (28, 36487), (29, 36451), (32, 36304), (33, 36265), (34, 36250),

Gene: Applejack_44 Start: 32978, Stop: 32193, Start Num: 3

Candidate Starts for Applejack_44:

(Start: 3 @32978 has 50 MA's), (9, 32876), (12, 32843), (13, 32840), (15, 32798), (17, 32684), (18, 32675), (19, 32669), (20, 32642), (22, 32588), (23, 32561), (24, 32558), (29, 32465), (30, 32411), (32, 32318), (33, 32279), (34, 32264),

Gene: Arcanine_50 Start: 36294, Stop: 35503, Start Num: 2

Candidate Starts for Arcanine_50:

(Start: 2 @36294 has 155 MA's), (8, 36192), (9, 36186), (16, 36078), (18, 35985), (19, 35979), (22, 35898), (23, 35871), (24, 35868), (27, 35823), (28, 35811), (29, 35775), (32, 35628), (33, 35589), (34, 35574),

Gene: Arlo_47 Start: 35951, Stop: 35160, Start Num: 2

Candidate Starts for Arlo_47:

(Start: 2 @35951 has 155 MA's), (8, 35849), (9, 35843), (16, 35735), (18, 35642), (19, 35636), (27, 35480), (28, 35468), (29, 35432), (32, 35285), (33, 35246), (34, 35231),

Gene: Ashballer_51 Start: 37447, Stop: 36656, Start Num: 2

Candidate Starts for Ashballer_51:

(Start: 2 @37447 has 155 MA's), (Start: 4 @37432 has 2 MA's), (Start: 5 @37393 has 1 MA's), (11, 37312), (17, 37147), (18, 37138), (19, 37132), (20, 37105), (22, 37051), (26, 36997), (29, 36928), (30, 36874), (32, 36781), (33, 36742),

Gene: Atkinbua_52 Start: 37074, Stop: 36283, Start Num: 2

Candidate Starts for Atkinbua_52:

(Start: 2 @37074 has 155 MA's), (Start: 5 @37020 has 1 MA's), (6, 36993), (11, 36939), (17, 36774), (18, 36765), (19, 36759), (20, 36732), (22, 36678), (26, 36624), (29, 36555), (30, 36501), (32, 36408), (33, 36369), (34, 36354),

Gene: BK1_45 Start: 35301, Stop: 34516, Start Num: 3

Candidate Starts for BK1_45:

(Start: 3 @35301 has 50 MA's), (9, 35199), (12, 35166), (13, 35163), (15, 35121), (17, 35007), (18, 34998), (19, 34992), (20, 34965), (22, 34911), (29, 34788), (30, 34734), (32, 34641), (33, 34602), (34, 34587),

Gene: BPBiebs31_50 Start: 36666, Stop: 35875, Start Num: 2

Candidate Starts for BPBiebs31_50:

(Start: 2 @36666 has 155 MA's), (8, 36564), (9, 36558), (14, 36513), (16, 36450), (18, 36357), (25, 36237), (27, 36195), (28, 36183), (29, 36147), (32, 36000), (33, 35961),

Gene: BaconJack_52 Start: 37368, Stop: 36583, Start Num: 3

Candidate Starts for BaconJack_52:

(Start: 3 @37368 has 50 MA's), (9, 37266), (12, 37233), (13, 37230), (15, 37188), (17, 37074), (18, 37065), (19, 37059), (20, 37032), (22, 36978), (29, 36855), (30, 36801), (32, 36708), (33, 36669), (34, 36654),

Gene: Barriga_50 Start: 36212, Stop: 35421, Start Num: 2

Candidate Starts for Barriga_50:

(Start: 2 @36212 has 155 MA's), (Start: 5 @36158 has 1 MA's), (11, 36077), (17, 35912), (18, 35903), (19, 35897), (20, 35870), (22, 35816), (26, 35762), (29, 35693), (30, 35639), (32, 35546), (33, 35507), (34, 35492),

Gene: Beatrix_49 Start: 37922, Stop: 37131, Start Num: 2

Candidate Starts for Beatrix_49:

(Start: 2 @37922 has 155 MA's), (Start: 5 @37868 has 1 MA's), (11, 37787), (17, 37622), (18, 37613), (19, 37607), (20, 37580), (22, 37526), (26, 37472), (29, 37403), (30, 37349), (33, 37217), (34, 37202),

Gene: BeesKnees_51 Start: 36776, Stop: 35991, Start Num: 3

Candidate Starts for BeesKnees_51:

(Start: 1 @36782 has 1 MA's), (Start: 3 @36776 has 50 MA's), (9, 36674), (12, 36641), (13, 36638), (15, 36596), (17, 36482), (18, 36473), (19, 36467), (22, 36386), (23, 36359), (24, 36356), (29, 36263), (30, 36209), (32, 36116), (33, 36077), (34, 36062),

Gene: Bethlehem_50 Start: 37439, Stop: 36648, Start Num: 2

Candidate Starts for Bethlehem_50:

(Start: 2 @37439 has 155 MA's), (Start: 5 @37385 has 1 MA's), (11, 37304), (17, 37139), (18, 37130), (19, 37124), (20, 37097), (22, 37043), (26, 36989), (29, 36920), (32, 36773), (33, 36734), (34, 36719),

Gene: Bexan_48 Start: 37600, Stop: 36809, Start Num: 2

Candidate Starts for Bexan_48:

(Start: 2 @37600 has 155 MA's), (Start: 5 @37546 has 1 MA's), (11, 37465), (17, 37300), (18, 37291), (19, 37285), (20, 37258), (22, 37204), (26, 37150), (29, 37081), (30, 37027), (33, 36895), (34, 36880),

Gene: Big3_49 Start: 36839, Stop: 36048, Start Num: 2

Candidate Starts for Big3_49:

(Start: 2 @36839 has 155 MA's), (Start: 4 @36824 has 2 MA's), (Start: 5 @36785 has 1 MA's), (11, 36704), (17, 36539), (18, 36530), (19, 36524), (20, 36497), (22, 36443), (26, 36389), (29, 36320), (32, 36173), (33, 36134), (34, 36119),

Gene: BigMau_50 Start: 36205, Stop: 35390, Start Num: 2

Candidate Starts for BigMau_50:

(Start: 2 @36205 has 155 MA's), (Start: 5 @36151 has 1 MA's), (11, 36070), (17, 35905), (18, 35896), (19, 35890), (21, 35812), (25, 35752), (27, 35710), (28, 35698), (29, 35662), (30, 35608), (32, 35515), (33, 35476), (34, 35461),

Gene: BigPaolini_49 Start: 35364, Stop: 34573, Start Num: 2

Candidate Starts for BigPaolini_49:

(Start: 2 @35364 has 155 MA's), (Start: 4 @35349 has 2 MA's), (Start: 5 @35310 has 1 MA's), (11, 35229), (17, 35064), (18, 35055), (19, 35049), (20, 35022), (22, 34968), (26, 34914), (29, 34845), (33, 34659), (34, 34644),

Gene: Bigfoot_45 Start: 35585, Stop: 34794, Start Num: 2

Candidate Starts for Bigfoot_45:

(Start: 2 @35585 has 155 MA's), (Start: 4 @35570 has 2 MA's), (Start: 5 @35531 has 1 MA's), (11, 35450), (17, 35285), (18, 35276), (19, 35270), (20, 35243), (22, 35189), (26, 35135), (29, 35066), (32,

34919), (33, 34880), (34, 34865),

Gene: BillKnuckles_50 Start: 37476, Stop: 36700, Start Num: 4

Candidate Starts for BillKnuckles_50:

(Start: 2 @37491 has 155 MA's), (Start: 4 @37476 has 2 MA's), (Start: 5 @37437 has 1 MA's), (11, 37356), (17, 37191), (18, 37182), (19, 37176), (20, 37149), (22, 37095), (26, 37041), (29, 36972), (30, 36918), (32, 36825), (33, 36786), (34, 36771),

Gene: Bircsak_48 Start: 36932, Stop: 36147, Start Num: 3

Candidate Starts for Bircsak_48:

(Start: 3 @36932 has 50 MA's), (9, 36830), (12, 36797), (13, 36794), (15, 36752), (17, 36638), (18, 36629), (19, 36623), (20, 36596), (22, 36542), (26, 36488), (29, 36419), (30, 36365), (32, 36272), (33, 36233), (34, 36218),

Gene: BluSpix_48 Start: 33150, Stop: 32359, Start Num: 2

Candidate Starts for BluSpix_48:

(Start: 2 @33150 has 155 MA's), (Start: 5 @33096 has 1 MA's), (11, 33015), (17, 32850), (18, 32841), (19, 32835), (22, 32754), (26, 32700), (29, 32631), (32, 32484), (33, 32445), (34, 32430),

Gene: Blue_49 Start: 36851, Stop: 36060, Start Num: 2

Candidate Starts for Blue_49:

(Start: 2 @36851 has 155 MA's), (Start: 5 @36797 has 1 MA's), (11, 36716), (17, 36551), (18, 36542), (19, 36536), (20, 36509), (22, 36455), (26, 36401), (29, 36332), (30, 36278), (32, 36185), (33, 36146), (34, 36131),

Gene: Bob3_47 Start: 35555, Stop: 34740, Start Num: 2

Candidate Starts for Bob3_47:

(Start: 2 @35555 has 155 MA's), (Start: 5 @35501 has 1 MA's), (11, 35420), (17, 35255), (18, 35246), (19, 35240), (21, 35162), (25, 35102), (27, 35060), (28, 35048), (29, 35012), (30, 34958), (32, 34865), (33, 34826), (34, 34811),

Gene: Bones_50 Start: 37251, Stop: 36436, Start Num: 2

Candidate Starts for Bones_50:

(Start: 2 @37251 has 155 MA's), (Start: 5 @37197 has 1 MA's), (11, 37116), (17, 36951), (18, 36942), (19, 36936), (21, 36858), (25, 36798), (27, 36756), (28, 36744), (29, 36708), (30, 36654), (32, 36561), (33, 36522), (34, 36507),

Gene: Briton15_52 Start: 37002, Stop: 36217, Start Num: 3

Candidate Starts for Briton15_52:

(Start: 1 @37008 has 1 MA's), (Start: 3 @37002 has 50 MA's), (7, 36915), (9, 36900), (12, 36867), (13, 36864), (15, 36822), (17, 36708), (18, 36699), (19, 36693), (20, 36666), (22, 36612), (26, 36558), (29, 36489), (30, 36435), (32, 36342), (33, 36303), (34, 36288),

Gene: Bruns_48 Start: 36137, Stop: 35352, Start Num: 3

Candidate Starts for Bruns_48:

(Start: 3 @36137 has 50 MA's), (7, 36050), (9, 36035), (12, 36002), (13, 35999), (15, 35957), (17, 35843), (18, 35834), (19, 35828), (20, 35801), (22, 35747), (26, 35693), (29, 35624), (30, 35570), (32, 35477), (33, 35438), (34, 35423),

Gene: Burton_49 Start: 36103, Stop: 35288, Start Num: 2

Candidate Starts for Burton_49:

(Start: 2 @36103 has 155 MA's), (Start: 5 @36049 has 1 MA's), (11, 35968), (18, 35794), (19, 35788), (21, 35710), (25, 35650), (27, 35608), (28, 35596), (29, 35560), (32, 35413), (33, 35374), (34, 35359),

Gene: Buttons_48 Start: 35073, Stop: 34282, Start Num: 2

Candidate Starts for Buttons_48:

(Start: 2 @35073 has 155 MA's), (Start: 4 @35058 has 2 MA's), (Start: 5 @35019 has 1 MA's), (11, 34938), (17, 34773), (18, 34764), (19, 34758), (20, 34731), (22, 34677), (26, 34623), (29, 34554), (32, 34407), (33, 34368), (34, 34353),

Gene: Bxb1_45 Start: 35882, Stop: 35097, Start Num: 3

Candidate Starts for Bxb1_45:

(Start: 3 @35882 has 50 MA's), (9, 35780), (12, 35747), (13, 35744), (15, 35702), (17, 35588), (18, 35579), (19, 35573), (20, 35546), (22, 35492), (26, 35438), (29, 35369), (30, 35315), (32, 35222), (33, 35183), (34, 35168),

Gene: CactusRose_47 Start: 36080, Stop: 35289, Start Num: 2

Candidate Starts for CactusRose_47:

(Start: 2 @36080 has 155 MA's), (Start: 5 @36026 has 1 MA's), (11, 35945), (17, 35780), (18, 35771), (19, 35765), (20, 35738), (22, 35684), (26, 35630), (29, 35561), (32, 35414), (33, 35375), (34, 35360),

Gene: Carlyle_48 Start: 34577, Stop: 33786, Start Num: 2

Candidate Starts for Carlyle_48:

(Start: 2 @34577 has 155 MA's), (Start: 5 @34523 has 1 MA's), (11, 34442), (17, 34277), (18, 34268), (19, 34262), (20, 34235), (22, 34181), (26, 34127), (29, 34058), (30, 34004), (32, 33911), (33, 33872),

Gene: Chanagan_46 Start: 35380, Stop: 34589, Start Num: 2

Candidate Starts for Chanagan_46:

(Start: 2 @35380 has 155 MA's), (Start: 4 @35365 has 2 MA's), (Start: 5 @35326 has 1 MA's), (11, 35245), (17, 35080), (18, 35071), (19, 35065), (22, 34984), (26, 34930), (29, 34861), (30, 34807), (33, 34675), (34, 34660),

Gene: Ciao_49 Start: 36531, Stop: 35740, Start Num: 2

Candidate Starts for Ciao_49:

(Start: 2 @36531 has 155 MA's), (Start: 4 @36516 has 2 MA's), (Start: 5 @36477 has 1 MA's), (11, 36396), (17, 36231), (18, 36222), (19, 36216), (22, 36135), (26, 36081), (29, 36012), (32, 35865), (33, 35826), (34, 35811),

Gene: ConceptII_51 Start: 37247, Stop: 36432, Start Num: 2

Candidate Starts for ConceptII_51:

(Start: 2 @37247 has 155 MA's), (Start: 4 @37232 has 2 MA's), (Start: 5 @37193 has 1 MA's), (11, 37112), (17, 36947), (18, 36938), (19, 36932), (21, 36854), (25, 36794), (27, 36752), (28, 36740), (29, 36704), (32, 36557), (33, 36518), (34, 36503),

Gene: Corvo_50 Start: 37083, Stop: 36292, Start Num: 2

Candidate Starts for Corvo_50:

(Start: 2 @37083 has 155 MA's), (Start: 5 @37029 has 1 MA's), (11, 36948), (17, 36783), (18, 36774), (19, 36768), (20, 36741), (22, 36687), (26, 36633), (29, 36564), (30, 36510), (33, 36378), (34, 36363),

Gene: Crispicous1_47 Start: 35700, Stop: 34915, Start Num: 3

Candidate Starts for Crispicous1_47:

(Start: 3 @35700 has 50 MA's), (7, 35613), (9, 35598), (12, 35565), (13, 35562), (15, 35520), (17, 35406), (18, 35397), (19, 35391), (20, 35364), (22, 35310), (26, 35256), (29, 35187), (30, 35133), (32, 35040), (33, 35001), (34, 34986),

Gene: Cueyllyss_51 Start: 38384, Stop: 37569, Start Num: 2

Candidate Starts for Cueylyss_51:

(Start: 2 @38384 has 155 MA's), (Start: 5 @38330 has 1 MA's), (11, 38249), (17, 38084), (18, 38075), (19, 38069), (21, 37991), (25, 37931), (27, 37889), (28, 37877), (29, 37841), (30, 37787), (32, 37694), (33, 37655), (34, 37640),

Gene: DD5_48 Start: 37089, Stop: 36298, Start Num: 1

Candidate Starts for DD5_48:

(Start: 1 @37089 has 1 MA's), (Start: 3 @37083 has 50 MA's), (9, 36981), (12, 36948), (13, 36945), (15, 36903), (17, 36789), (18, 36780), (19, 36774), (22, 36693), (23, 36666), (24, 36663), (29, 36570), (30, 36516), (32, 36423), (33, 36384), (34, 36369),

Gene: Dexes_50 Start: 37436, Stop: 36645, Start Num: 2

Candidate Starts for Dexes_50:

(Start: 2 @37436 has 155 MA's), (Start: 4 @37421 has 2 MA's), (Start: 5 @37382 has 1 MA's), (11, 37301), (17, 37136), (18, 37127), (19, 37121), (22, 37040), (23, 37013), (24, 37010), (29, 36917), (30, 36863), (33, 36731), (34, 36716),

Gene: Doom_49 Start: 36867, Stop: 36076, Start Num: 2

Candidate Starts for Doom_49:

(Start: 2 @36867 has 155 MA's), (Start: 5 @36813 has 1 MA's), (11, 36732), (17, 36567), (18, 36558), (19, 36552), (20, 36525), (22, 36471), (26, 36417), (29, 36348), (33, 36162), (34, 36147),

Gene: DrFeelGood_47 Start: 36551, Stop: 35760, Start Num: 2

Candidate Starts for DrFeelGood_47:

(Start: 2 @36551 has 155 MA's), (Start: 5 @36497 has 1 MA's), (11, 36416), (17, 36251), (18, 36242), (19, 36236), (22, 36155), (26, 36101), (29, 36032), (32, 35885), (33, 35846), (34, 35831),

Gene: DreamCatcher_53 Start: 37957, Stop: 37166, Start Num: 2

Candidate Starts for DreamCatcher_53:

(Start: 2 @37957 has 155 MA's), (8, 37855), (9, 37849), (16, 37741), (18, 37648), (25, 37528), (27, 37486), (28, 37474), (29, 37438), (30, 37384), (32, 37291), (33, 37252), (34, 37237),

Gene: Dreamboat_51 Start: 36307, Stop: 35516, Start Num: 2

Candidate Starts for Dreamboat_51:

(Start: 2 @36307 has 155 MA's), (Start: 5 @36253 has 1 MA's), (11, 36172), (17, 36007), (18, 35998), (19, 35992), (20, 35965), (22, 35911), (26, 35857), (29, 35788), (32, 35641), (33, 35602), (34, 35587),

Gene: Dulcie_50 Start: 36755, Stop: 35964, Start Num: 2

Candidate Starts for Dulcie_50:

(Start: 2 @36755 has 155 MA's), (Start: 4 @36740 has 2 MA's), (Start: 5 @36701 has 1 MA's), (11, 36620), (17, 36455), (18, 36446), (19, 36440), (20, 36413), (22, 36359), (26, 36305), (29, 36236), (30, 36182), (33, 36050),

Gene: Dussy_51 Start: 36767, Stop: 35976, Start Num: 2

Candidate Starts for Dussy_51:

(Start: 2 @36767 has 155 MA's), (Start: 4 @36752 has 2 MA's), (Start: 5 @36713 has 1 MA's), (11, 36632), (17, 36467), (18, 36458), (19, 36452), (20, 36425), (22, 36371), (26, 36317), (29, 36248), (32, 36101), (33, 36062), (34, 36047),

Gene: Dynamix_51 Start: 36777, Stop: 35962, Start Num: 2

Candidate Starts for Dynamix_51:

(Start: 2 @36777 has 155 MA's), (Start: 5 @36723 has 1 MA's), (11, 36642), (17, 36477), (18, 36468), (19, 36462), (21, 36384), (25, 36324), (27, 36282), (28, 36270), (29, 36234), (30, 36180), (33, 36048),

(34, 36033),

Gene: Edtherson_49 Start: 37031, Stop: 36240, Start Num: 2

Candidate Starts for Edtherson_49:

(Start: 2 @37031 has 155 MA's), (Start: 4 @37016 has 2 MA's), (11, 36896), (17, 36731), (18, 36722), (19, 36716), (22, 36635), (26, 36581), (29, 36512), (32, 36365), (33, 36326), (34, 36311),

Gene: Espresso_49 Start: 36636, Stop: 35845, Start Num: 2

Candidate Starts for Espresso_49:

(Start: 2 @36636 has 155 MA's), (Start: 5 @36582 has 1 MA's), (11, 36501), (17, 36336), (18, 36327), (19, 36321), (20, 36294), (22, 36240), (26, 36186), (29, 36117), (30, 36063), (32, 35970), (33, 35931), (34, 35916),

Gene: Euphoria_47 Start: 35887, Stop: 35096, Start Num: 2

Candidate Starts for Euphoria_47:

(Start: 2 @35887 has 155 MA's), (Start: 4 @35872 has 2 MA's), (Start: 5 @35833 has 1 MA's), (11, 35752), (17, 35587), (18, 35578), (19, 35572), (20, 35545), (22, 35491), (26, 35437), (29, 35368), (31, 35248), (32, 35221), (33, 35182),

Gene: Eyeball_51 Start: 37131, Stop: 36346, Start Num: 3

Candidate Starts for Eyeball_51:

(Start: 3 @37131 has 50 MA's), (9, 37029), (12, 36996), (13, 36993), (15, 36951), (17, 36837), (18, 36828), (19, 36822), (20, 36795), (22, 36741), (26, 36687), (29, 36618), (30, 36564), (32, 36471), (33, 36432), (34, 36417),

Gene: Fajezeel_51 Start: 36880, Stop: 36089, Start Num: 2

Candidate Starts for Fajezeel_51:

(Start: 2 @36880 has 155 MA's), (Start: 4 @36865 has 2 MA's), (Start: 5 @36826 has 1 MA's), (11, 36745), (17, 36580), (18, 36571), (19, 36565), (22, 36484), (26, 36430), (29, 36361), (32, 36214), (33, 36175), (34, 36160),

Gene: Fascinus_45 Start: 35806, Stop: 34991, Start Num: 2

Candidate Starts for Fascinus_45:

(Start: 2 @35806 has 155 MA's), (Start: 4 @35791 has 2 MA's), (Start: 5 @35752 has 1 MA's), (11, 35671), (17, 35506), (18, 35497), (19, 35491), (21, 35413), (25, 35353), (27, 35311), (28, 35299), (29, 35263), (30, 35209), (32, 35116), (33, 35077), (34, 35062),

Gene: Fenn_52 Start: 38708, Stop: 37917, Start Num: 2

Candidate Starts for Fenn_52:

(Start: 2 @38708 has 155 MA's), (Start: 5 @38654 has 1 MA's), (11, 38573), (17, 38408), (18, 38399), (19, 38393), (20, 38366), (22, 38312), (26, 38258), (29, 38189), (32, 38042), (33, 38003), (34, 37988),

Gene: Forsytheast_49 Start: 36355, Stop: 35570, Start Num: 3

Candidate Starts for Forsytheast_49:

(Start: 3 @36355 has 50 MA's), (7, 36268), (9, 36253), (12, 36220), (13, 36217), (15, 36175), (17, 36061), (18, 36052), (19, 36046), (20, 36019), (22, 35965), (26, 35911), (29, 35842), (30, 35788), (32, 35695), (33, 35656), (34, 35641),

Gene: Francis47_48 Start: 37200, Stop: 36415, Start Num: 3

Candidate Starts for Francis47_48:

(Start: 3 @37200 has 50 MA's), (9, 37098), (12, 37065), (13, 37062), (15, 37020), (17, 36906), (18, 36897), (19, 36891), (20, 36864), (22, 36810), (26, 36756), (29, 36687), (30, 36633), (32, 36540), (33, 36501), (34, 36486),

Gene: Froghopper_47 Start: 35876, Stop: 35085, Start Num: 2

Candidate Starts for Froghopper_47:

(Start: 2 @35876 has 155 MA's), (Start: 4 @35861 has 2 MA's), (Start: 5 @35822 has 1 MA's), (11, 35741), (17, 35576), (18, 35567), (19, 35561), (20, 35534), (22, 35480), (26, 35426), (29, 35357), (33, 35171), (34, 35156),

Gene: Fushigi_48 Start: 34837, Stop: 34046, Start Num: 2

Candidate Starts for Fushigi_48:

(Start: 2 @34837 has 155 MA's), (Start: 4 @34822 has 2 MA's), (Start: 5 @34783 has 1 MA's), (11, 34702), (17, 34537), (18, 34528), (19, 34522), (20, 34495), (22, 34441), (26, 34387), (29, 34318), (31, 34198), (32, 34171), (33, 34132), (34, 34117),

Gene: GMonster_46 Start: 35199, Stop: 34414, Start Num: 3

Candidate Starts for GMonster_46:

(Start: 3 @35199 has 50 MA's), (9, 35097), (12, 35064), (13, 35061), (15, 35019), (17, 34905), (18, 34896), (19, 34890), (20, 34863), (22, 34809), (23, 34782), (24, 34779), (29, 34686), (30, 34632), (32, 34539), (33, 34500), (34, 34485),

Gene: GageAP_50 Start: 36676, Stop: 35885, Start Num: 2

Candidate Starts for GageAP_50:

(Start: 2 @36676 has 155 MA's), (Start: 4 @36661 has 2 MA's), (Start: 5 @36622 has 1 MA's), (11, 36541), (17, 36376), (18, 36367), (19, 36361), (20, 36334), (22, 36280), (23, 36253), (24, 36250), (29, 36157), (30, 36103), (32, 36010), (33, 35971), (34, 35956),

Gene: Gandalf20_52 Start: 37729, Stop: 36938, Start Num: 2

Candidate Starts for Gandalf20_52:

(Start: 2 @37729 has 155 MA's), (Start: 5 @37675 has 1 MA's), (11, 37594), (17, 37429), (18, 37420), (19, 37414), (20, 37387), (22, 37333), (26, 37279), (29, 37210), (30, 37156), (32, 37063), (33, 37024), (34, 37009),

Gene: Gompeii16_48 Start: 36933, Stop: 36148, Start Num: 3

Candidate Starts for Gompeii16_48:

(Start: 3 @36933 has 50 MA's), (9, 36831), (12, 36798), (13, 36795), (15, 36753), (17, 36639), (18, 36630), (19, 36624), (20, 36597), (22, 36543), (26, 36489), (29, 36420), (30, 36366), (32, 36273), (33, 36234), (34, 36219),

Gene: Graduation_53 Start: 38456, Stop: 37665, Start Num: 2

Candidate Starts for Graduation_53:

(Start: 2 @38456 has 155 MA's), (Start: 5 @38402 has 1 MA's), (11, 38321), (17, 38156), (18, 38147), (19, 38141), (20, 38114), (22, 38060), (26, 38006), (29, 37937), (30, 37883), (32, 37790), (33, 37751), (34, 37736),

Gene: GrecoEtereo_50 Start: 36688, Stop: 35897, Start Num: 2

Candidate Starts for GrecoEtereo_50:

(Start: 2 @36688 has 155 MA's), (8, 36586), (9, 36580), (16, 36472), (18, 36379), (19, 36373), (22, 36292), (23, 36265), (24, 36262), (27, 36217), (28, 36205), (29, 36169), (32, 36022), (33, 35983), (34, 35968),

Gene: Greg_51 Start: 36880, Stop: 36089, Start Num: 2

Candidate Starts for Greg_51:

(Start: 2 @36880 has 155 MA's), (Start: 4 @36865 has 2 MA's), (Start: 5 @36826 has 1 MA's), (11, 36745), (17, 36580), (18, 36571), (19, 36565), (22, 36484), (26, 36430), (29, 36361), (32, 36214), (33,

36175), (34, 36160),

Gene: Gwendoluna_53 Start: 38892, Stop: 38101, Start Num: 2

Candidate Starts for Gwendoluna_53:

(Start: 2 @38892 has 155 MA's), (Start: 5 @38838 has 1 MA's), (11, 38757), (16, 38676), (17, 38592), (18, 38583), (19, 38577), (20, 38550), (22, 38496), (26, 38442), (29, 38373), (32, 38226), (33, 38187), (34, 38172),

Gene: Gyzlar_45 Start: 34602, Stop: 33811, Start Num: 2

Candidate Starts for Gyzlar_45:

(Start: 2 @34602 has 155 MA's), (Start: 4 @34587 has 2 MA's), (Start: 5 @34548 has 1 MA's), (11, 34467), (17, 34302), (18, 34293), (19, 34287), (20, 34260), (22, 34206), (26, 34152), (29, 34083), (32, 33936), (33, 33897), (34, 33882),

Gene: Hami1_43 Start: 30983, Stop: 30192, Start Num: 2

Candidate Starts for Hami1_43:

(Start: 2 @30983 has 155 MA's), (Start: 5 @30929 has 1 MA's), (11, 30848), (17, 30683), (18, 30674), (19, 30668), (20, 30641), (22, 30587), (26, 30533), (29, 30464), (30, 30410), (32, 30317), (33, 30278), (34, 30263),

Gene: HanShotFirst_49 Start: 36074, Stop: 35289, Start Num: 3

Candidate Starts for HanShotFirst_49:

(Start: 1 @36080 has 1 MA's), (Start: 3 @36074 has 50 MA's), (7, 35987), (9, 35972), (12, 35939), (13, 35936), (15, 35894), (17, 35780), (18, 35771), (19, 35765), (20, 35738), (22, 35684), (26, 35630), (29, 35561), (30, 35507), (32, 35414), (33, 35375), (34, 35360),

Gene: HarryOW_48 Start: 35860, Stop: 35069, Start Num: 2

Candidate Starts for HarryOW_48:

(Start: 2 @35860 has 155 MA's), (8, 35758), (9, 35752), (16, 35644), (18, 35551), (19, 35545), (22, 35464), (23, 35437), (24, 35434), (27, 35389), (28, 35377), (29, 35341), (32, 35194), (33, 35155), (34, 35140),

Gene: Hermia_50 Start: 37307, Stop: 36516, Start Num: 2

Candidate Starts for Hermia_50:

(Start: 2 @37307 has 155 MA's), (8, 37205), (9, 37199), (16, 37091), (18, 36998), (19, 36992), (22, 36911), (23, 36884), (24, 36881), (27, 36836), (28, 36824), (29, 36788), (32, 36641), (33, 36602), (34, 36587),

Gene: HermioneGrange_49 Start: 36699, Stop: 35884, Start Num: 2

Candidate Starts for HermioneGrange_49:

(Start: 2 @36699 has 155 MA's), (Start: 5 @36645 has 1 MA's), (11, 36564), (17, 36399), (18, 36390), (19, 36384), (21, 36306), (25, 36246), (27, 36204), (28, 36192), (29, 36156), (30, 36102), (32, 36009), (33, 35970), (34, 35955),

Gene: Homines_42 Start: 32873, Stop: 32088, Start Num: 3

Candidate Starts for Homines_42:

(Start: 3 @32873 has 50 MA's), (9, 32771), (12, 32738), (13, 32735), (15, 32693), (17, 32579), (18, 32570), (19, 32564), (20, 32537), (22, 32483), (26, 32429), (29, 32360), (30, 32306), (32, 32213), (33, 32174), (34, 32159),

Gene: Hope4ever_52 Start: 37516, Stop: 36701, Start Num: 2

Candidate Starts for Hope4ever_52:

(Start: 2 @37516 has 155 MA's), (Start: 5 @37462 has 1 MA's), (11, 37381), (17, 37216), (18, 37207), (19, 37201), (21, 37123), (25, 37063), (27, 37021), (28, 37009), (29, 36973), (30, 36919), (32, 36826), (33, 36787),

Gene: ILeeKay_53 Start: 37469, Stop: 36678, Start Num: 2

Candidate Starts for ILeeKay_53:

(Start: 2 @37469 has 155 MA's), (8, 37367), (9, 37361), (16, 37253), (18, 37160), (19, 37154), (27, 36998), (28, 36986), (29, 36950), (32, 36803), (33, 36764), (34, 36749),

Gene: Ichabod_52 Start: 37098, Stop: 36307, Start Num: 2

Candidate Starts for Ichabod_52:

(Start: 2 @37098 has 155 MA's), (8, 36996), (9, 36990), (14, 36945), (16, 36882), (18, 36789), (25, 36669), (27, 36627), (28, 36615), (29, 36579), (32, 36432), (33, 36393), (34, 36378),

Gene: IgnatiusPatJac_50 Start: 37095, Stop: 36304, Start Num: 2

Candidate Starts for IgnatiusPatJac_50:

(Start: 2 @37095 has 155 MA's), (Start: 5 @37041 has 1 MA's), (11, 36960), (17, 36795), (18, 36786), (19, 36780), (22, 36699), (26, 36645), (29, 36576), (32, 36429), (33, 36390), (34, 36375),

Gene: Inyanga_46 Start: 35329, Stop: 34538, Start Num: 2

Candidate Starts for Inyanga_46:

(Start: 2 @35329 has 155 MA's), (Start: 4 @35314 has 2 MA's), (Start: 5 @35275 has 1 MA's), (11, 35194), (17, 35029), (18, 35020), (19, 35014), (22, 34933), (29, 34810), (32, 34663), (33, 34624), (34, 34609),

Gene: JC27_51 Start: 37136, Stop: 36345, Start Num: 2

Candidate Starts for JC27_51:

(Start: 2 @37136 has 155 MA's), (Start: 4 @37121 has 2 MA's), (Start: 5 @37082 has 1 MA's), (11, 37001), (17, 36836), (18, 36827), (19, 36821), (20, 36794), (22, 36740), (26, 36686), (29, 36617), (30, 36563), (32, 36470), (33, 36431),

Gene: JackSparrow_50 Start: 36905, Stop: 36120, Start Num: 3

Candidate Starts for JackSparrow_50:

(Start: 1 @36911 has 1 MA's), (Start: 3 @36905 has 50 MA's), (9, 36803), (12, 36770), (13, 36767), (15, 36725), (17, 36611), (18, 36602), (19, 36596), (20, 36569), (22, 36515), (23, 36488), (24, 36485), (29, 36392), (30, 36338), (32, 36245), (33, 36206), (34, 36191),

Gene: Jasper_51 Start: 36193, Stop: 35402, Start Num: 2

Candidate Starts for Jasper_51:

(Start: 2 @36193 has 155 MA's), (Start: 5 @36139 has 1 MA's), (11, 36058), (17, 35893), (18, 35884), (19, 35878), (20, 35851), (22, 35797), (26, 35743), (29, 35674), (32, 35527), (33, 35488), (34, 35473),

Gene: Jerm2_50 Start: 36954, Stop: 36139, Start Num: 2

Candidate Starts for Jerm2_50:

(Start: 2 @36954 has 155 MA's), (Start: 5 @36900 has 1 MA's), (11, 36819), (17, 36654), (18, 36645), (19, 36639), (21, 36561), (25, 36501), (27, 36459), (28, 36447), (29, 36411), (30, 36357), (32, 36264), (33, 36225), (34, 36210),

Gene: Jorgensen_51 Start: 36836, Stop: 36045, Start Num: 2

Candidate Starts for Jorgensen_51:

(Start: 2 @36836 has 155 MA's), (Start: 5 @36782 has 1 MA's), (11, 36701), (17, 36536), (18, 36527), (19, 36521), (20, 36494), (22, 36440), (26, 36386), (29, 36317), (30, 36263), (33, 36131), (34, 36116),

Gene: JuliaChild_50 Start: 36549, Stop: 35764, Start Num: 3

Candidate Starts for JuliaChild_50:

(Start: 3 @36549 has 50 MA's), (9, 36447), (12, 36414), (13, 36411), (15, 36369), (17, 36255), (18, 36246), (19, 36240), (20, 36213), (22, 36159), (26, 36105), (29, 36036), (30, 35982), (32, 35889), (33, 35850), (34, 35835),

Gene: KBG_51 Start: 37876, Stop: 37085, Start Num: 2

Candidate Starts for KBG_51:

(Start: 2 @37876 has 155 MA's), (8, 37774), (9, 37768), (16, 37660), (18, 37567), (19, 37561), (22, 37480), (23, 37453), (24, 37450), (27, 37405), (28, 37393), (29, 37357), (32, 37210), (33, 37171), (34, 37156),

Gene: KSSJEB_49 Start: 36542, Stop: 35751, Start Num: 2

Candidate Starts for KSSJEB_49:

(Start: 2 @36542 has 155 MA's), (8, 36440), (9, 36434), (16, 36326), (18, 36233), (27, 36071), (28, 36059), (29, 36023), (30, 35969), (32, 35876), (33, 35837), (34, 35822),

Gene: Kanely_51 Start: 37191, Stop: 36406, Start Num: 3

Candidate Starts for Kanely_51:

(Start: 3 @37191 has 50 MA's), (7, 37104), (9, 37089), (12, 37056), (13, 37053), (15, 37011), (17, 36897), (18, 36888), (19, 36882), (20, 36855), (22, 36801), (26, 36747), (29, 36678), (30, 36624), (32, 36531), (33, 36492), (34, 36477),

Gene: Kenmech_53 Start: 37893, Stop: 37102, Start Num: 2

Candidate Starts for Kenmech_53:

(Start: 2 @37893 has 155 MA's), (Start: 5 @37839 has 1 MA's), (11, 37758), (17, 37593), (18, 37584), (19, 37578), (20, 37551), (22, 37497), (26, 37443), (29, 37374), (30, 37320), (32, 37227), (33, 37188), (34, 37173),

Gene: Killigrew_49 Start: 36603, Stop: 35818, Start Num: 3

Candidate Starts for Killigrew_49:

(Start: 3 @36603 has 50 MA's), (9, 36501), (12, 36468), (13, 36465), (15, 36423), (17, 36309), (18, 36300), (19, 36294), (20, 36267), (22, 36213), (29, 36090), (30, 36036), (32, 35943), (33, 35904), (34, 35889),

Gene: Kugel_50 Start: 36874, Stop: 36059, Start Num: 2

Candidate Starts for Kugel_50:

(Start: 2 @36874 has 155 MA's), (Start: 4 @36859 has 2 MA's), (Start: 5 @36820 has 1 MA's), (11, 36739), (17, 36574), (18, 36565), (19, 36559), (21, 36481), (29, 36331), (30, 36277), (33, 36145), (34, 36130),

Gene: KyMonks1A_51 Start: 36749, Stop: 35958, Start Num: 2

Candidate Starts for KyMonks1A_51:

(Start: 2 @36749 has 155 MA's), (Start: 4 @36734 has 2 MA's), (Start: 5 @36695 has 1 MA's), (11, 36614), (17, 36449), (18, 36440), (19, 36434), (20, 36407), (22, 36353), (26, 36299), (29, 36230), (30, 36176), (32, 36083), (33, 36044),

Gene: Kykar_49 Start: 36526, Stop: 35741, Start Num: 3

Candidate Starts for Kykar_49:

(Start: 3 @36526 has 50 MA's), (7, 36439), (9, 36424), (12, 36391), (13, 36388), (15, 36346), (17, 36232), (18, 36223), (19, 36217), (20, 36190), (22, 36136), (26, 36082), (29, 36013), (32, 35866), (33, 35827), (34, 35812),

Gene: Lamina13_50 Start: 36488, Stop: 35712, Start Num: 4

Candidate Starts for Lamina13_50:

(Start: 2 @36503 has 155 MA's), (Start: 4 @36488 has 2 MA's), (Start: 5 @36449 has 1 MA's), (11, 36368), (17, 36203), (18, 36194), (19, 36188), (20, 36161), (22, 36107), (26, 36053), (29, 35984), (33, 35798), (34, 35783),

Gene: Lesedi_46 Start: 35721, Stop: 34936, Start Num: 3

Candidate Starts for Lesedi_46:

(Start: 3 @35721 has 50 MA's), (9, 35619), (12, 35586), (13, 35583), (15, 35541), (17, 35427), (18, 35418), (19, 35412), (20, 35385), (22, 35331), (26, 35277), (29, 35208), (30, 35154), (32, 35061), (33, 35022), (34, 35007),

Gene: Licorice_52 Start: 37966, Stop: 37175, Start Num: 2

Candidate Starts for Licorice_52:

(Start: 2 @37966 has 155 MA's), (Start: 4 @37951 has 2 MA's), (Start: 5 @37912 has 1 MA's), (11, 37831), (17, 37666), (18, 37657), (19, 37651), (20, 37624), (22, 37570), (26, 37516), (29, 37447), (33, 37261), (34, 37246),

Gene: LilBib_49 Start: 37024, Stop: 36233, Start Num: 2

Candidate Starts for LilBib_49:

(Start: 2 @37024 has 155 MA's), (Start: 4 @37009 has 2 MA's), (Start: 5 @36970 has 1 MA's), (11, 36889), (18, 36715), (19, 36709), (20, 36682), (22, 36628), (26, 36574), (29, 36505), (33, 36319), (34, 36304),

Gene: Lockley_48 Start: 36245, Stop: 35460, Start Num: 3

Candidate Starts for Lockley_48:

(Start: 1 @36251 has 1 MA's), (Start: 3 @36245 has 50 MA's), (9, 36143), (12, 36110), (13, 36107), (15, 36065), (17, 35951), (18, 35942), (19, 35936), (22, 35855), (23, 35828), (24, 35825), (29, 35732), (30, 35678), (32, 35585), (33, 35546), (34, 35531),

Gene: Lopton_50 Start: 37851, Stop: 37060, Start Num: 2

Candidate Starts for Lopton_50:

(Start: 2 @37851 has 155 MA's), (8, 37749), (9, 37743), (16, 37635), (18, 37542), (27, 37380), (28, 37368), (29, 37332), (30, 37278), (32, 37185), (33, 37146), (34, 37131),

Gene: MPlant7149_48 Start: 35817, Stop: 35002, Start Num: 2

Candidate Starts for MPlant7149_48:

(Start: 2 @35817 has 155 MA's), (Start: 5 @35763 has 1 MA's), (11, 35682), (18, 35508), (19, 35502), (21, 35424), (25, 35364), (27, 35322), (28, 35310), (29, 35274), (30, 35220), (32, 35127), (33, 35088), (34, 35073),

Gene: Magnar_49 Start: 37267, Stop: 36476, Start Num: 2

Candidate Starts for Magnar_49:

(Start: 2 @37267 has 155 MA's), (Start: 4 @37252 has 2 MA's), (Start: 5 @37213 has 1 MA's), (11, 37132), (17, 36967), (18, 36958), (19, 36952), (20, 36925), (22, 36871), (26, 36817), (29, 36748), (30, 36694), (32, 36601), (33, 36562), (34, 36547),

Gene: Magnito_48 Start: 35871, Stop: 35080, Start Num: 2

Candidate Starts for Magnito_48:

(Start: 2 @35871 has 155 MA's), (Start: 5 @35817 has 1 MA's), (11, 35736), (17, 35571), (18, 35562), (19, 35556), (20, 35529), (22, 35475), (26, 35421), (29, 35352), (30, 35298), (32, 35205), (33, 35166), (34, 35151),

Gene: Makemake_49 Start: 37321, Stop: 36530, Start Num: 2

Candidate Starts for Makemake_49:

(Start: 2 @37321 has 155 MA's), (Start: 5 @37267 has 1 MA's), (11, 37186), (17, 37021), (18, 37012), (19, 37006), (20, 36979), (22, 36925), (26, 36871), (29, 36802), (30, 36748), (33, 36616), (34, 36601),

Gene: Manatee_51 Start: 36397, Stop: 35606, Start Num: 2

Candidate Starts for Manatee_51:

(Start: 2 @36397 has 155 MA's), (8, 36295), (9, 36289), (16, 36181), (18, 36088), (19, 36082), (27, 35926), (28, 35914), (29, 35878), (32, 35731), (33, 35692), (34, 35677),

Gene: Marcell_47 Start: 36187, Stop: 35396, Start Num: 2

Candidate Starts for Marcell_47:

(Start: 2 @36187 has 155 MA's), (Start: 4 @36172 has 2 MA's), (Start: 5 @36133 has 1 MA's), (10, 36070), (11, 36052), (17, 35887), (18, 35878), (19, 35872), (22, 35791), (23, 35764), (24, 35761), (29, 35668), (30, 35614), (32, 35521), (33, 35482), (34, 35467),

Gene: Marchy_44 Start: 33301, Stop: 32510, Start Num: 2

Candidate Starts for Marchy_44:

(Start: 2 @33301 has 155 MA's), (8, 33199), (9, 33193), (16, 33085), (18, 32992), (19, 32986), (27, 32830), (28, 32818), (29, 32782), (32, 32635), (33, 32596), (34, 32581),

Gene: Marge_49 Start: 36998, Stop: 36207, Start Num: 2

Candidate Starts for Marge_49:

(Start: 2 @36998 has 155 MA's), (Start: 4 @36983 has 2 MA's), (Start: 5 @36944 has 1 MA's), (11, 36863), (17, 36698), (18, 36689), (19, 36683), (20, 36656), (22, 36602), (26, 36548), (29, 36479), (32, 36332), (33, 36293), (34, 36278),

Gene: Maroc7_47 Start: 36115, Stop: 35300, Start Num: 2

Candidate Starts for Maroc7_47:

(Start: 2 @36115 has 155 MA's), (Start: 4 @36100 has 2 MA's), (Start: 5 @36061 has 1 MA's), (11, 35980), (17, 35815), (18, 35806), (19, 35800), (21, 35722), (25, 35662), (27, 35620), (28, 35608), (29, 35572), (30, 35518), (32, 35425), (33, 35386), (34, 35371),

Gene: Marsha_49 Start: 37554, Stop: 36763, Start Num: 2

Candidate Starts for Marsha_49:

(Start: 2 @37554 has 155 MA's), (Start: 4 @37539 has 2 MA's), (Start: 5 @37500 has 1 MA's), (11, 37419), (17, 37254), (18, 37245), (19, 37239), (20, 37212), (22, 37158), (26, 37104), (29, 37035), (33, 36849), (34, 36834),

Gene: MaryBeth_49 Start: 36460, Stop: 35669, Start Num: 2

Candidate Starts for MaryBeth_49:

(Start: 2 @36460 has 155 MA's), (Start: 5 @36406 has 1 MA's), (11, 36325), (17, 36160), (18, 36151), (19, 36145), (20, 36118), (22, 36064), (26, 36010), (29, 35941), (30, 35887), (33, 35755), (34, 35740),

Gene: McGuire_51 Start: 36646, Stop: 35855, Start Num: 2

Candidate Starts for McGuire_51:

(Start: 2 @36646 has 155 MA's), (8, 36544), (9, 36538), (14, 36493), (16, 36430), (18, 36337), (25, 36217), (27, 36175), (28, 36163), (29, 36127), (32, 35980), (33, 35941), (34, 35926),

Gene: MetalQZJ_48 Start: 36460, Stop: 35669, Start Num: 2

Candidate Starts for MetalQZJ_48:

(Start: 2 @36460 has 155 MA's), (Start: 5 @36406 has 1 MA's), (11, 36325), (17, 36160), (18, 36151), (19, 36145), (20, 36118), (22, 36064), (26, 36010), (29, 35941), (30, 35887), (33, 35755), (34, 35740),

Gene: Michley_49 Start: 36291, Stop: 35500, Start Num: 2

Candidate Starts for Michley_49:

(Start: 2 @36291 has 155 MA's), (Start: 4 @36276 has 2 MA's), (Start: 5 @36237 has 1 MA's), (11, 36156), (17, 35991), (18, 35982), (19, 35976), (22, 35895), (26, 35841), (29, 35772), (32, 35625), (33, 35586), (34, 35571),

Gene: Mkhuseleli_48 Start: 35863, Stop: 35072, Start Num: 2

Candidate Starts for Mkhuseleli_48:

(Start: 2 @35863 has 155 MA's), (Start: 4 @35848 has 2 MA's), (Start: 5 @35809 has 1 MA's), (11, 35728), (17, 35563), (18, 35554), (19, 35548), (22, 35467), (29, 35344), (30, 35290), (32, 35197), (33, 35158), (34, 35143),

Gene: Molly_50 Start: 35861, Stop: 35076, Start Num: 3

Candidate Starts for Molly_50:

(Start: 3 @35861 has 50 MA's), (9, 35759), (12, 35726), (13, 35723), (15, 35681), (17, 35567), (18, 35558), (19, 35552), (20, 35525), (22, 35471), (26, 35417), (29, 35348), (30, 35294), (32, 35201), (33, 35162), (34, 35147),

Gene: Monet_52 Start: 37990, Stop: 37199, Start Num: 2

Candidate Starts for Monet_52:

(Start: 2 @37990 has 155 MA's), (Start: 4 @37975 has 2 MA's), (11, 37855), (17, 37690), (18, 37681), (19, 37675), (22, 37594), (26, 37540), (29, 37471), (32, 37324), (33, 37285), (34, 37270),

Gene: Moose_49 Start: 36355, Stop: 35570, Start Num: 3

Candidate Starts for Moose_49:

(Start: 3 @36355 has 50 MA's), (7, 36268), (9, 36253), (12, 36220), (13, 36217), (15, 36175), (17, 36061), (18, 36052), (19, 36046), (20, 36019), (22, 35965), (26, 35911), (29, 35842), (30, 35788), (32, 35695), (33, 35656), (34, 35641),

Gene: MrGordo_49 Start: 36079, Stop: 35294, Start Num: 3

Candidate Starts for MrGordo_49:

(Start: 3 @36079 has 50 MA's), (9, 35977), (12, 35944), (13, 35941), (15, 35899), (17, 35785), (18, 35776), (19, 35770), (20, 35743), (22, 35689), (26, 35635), (29, 35566), (32, 35419), (33, 35380), (34, 35365),

Gene: Mryolo_47 Start: 35863, Stop: 35048, Start Num: 2

Candidate Starts for Mryolo_47:

(Start: 2 @35863 has 155 MA's), (Start: 4 @35848 has 2 MA's), (Start: 5 @35809 has 1 MA's), (11, 35728), (17, 35563), (18, 35554), (19, 35548), (21, 35470), (25, 35410), (27, 35368), (28, 35356), (29, 35320), (30, 35266), (32, 35173), (33, 35134), (34, 35119),

Gene: Mule_46 Start: 34004, Stop: 33219, Start Num: 3

Candidate Starts for Mule_46:

(Start: 3 @34004 has 50 MA's), (9, 33902), (12, 33869), (13, 33866), (15, 33824), (17, 33710), (18, 33701), (19, 33695), (20, 33668), (22, 33614), (23, 33587), (24, 33584), (29, 33491), (30, 33437), (32, 33344), (33, 33305), (34, 33290),

Gene: Museum_50 Start: 36042, Stop: 35227, Start Num: 2

Candidate Starts for Museum_50:

(Start: 2 @36042 has 155 MA's), (Start: 5 @35988 has 1 MA's), (11, 35907), (18, 35733), (19, 35727), (21, 35649), (25, 35589), (27, 35547), (28, 35535), (29, 35499), (32, 35352), (33, 35313), (34, 35298),

Gene: NEHalo_47 Start: 35779, Stop: 34994, Start Num: 3

Candidate Starts for NEHalo_47:

(Start: 3 @35779 has 50 MA's), (9, 35677), (12, 35644), (13, 35641), (15, 35599), (17, 35485), (18, 35476), (19, 35470), (20, 35443), (22, 35389), (29, 35266), (30, 35212), (32, 35119), (33, 35080), (34, 35065),

Gene: Naira_52 Start: 38755, Stop: 37964, Start Num: 2

Candidate Starts for Naira_52:

(Start: 2 @38755 has 155 MA's), (Start: 5 @38701 has 1 MA's), (11, 38620), (17, 38455), (18, 38446), (19, 38440), (20, 38413), (22, 38359), (26, 38305), (29, 38236), (32, 38089), (33, 38050), (34, 38035),

Gene: Nerujay_52 Start: 37444, Stop: 36659, Start Num: 3

Candidate Starts for Nerujay_52:

(Start: 1 @37450 has 1 MA's), (Start: 3 @37444 has 50 MA's), (9, 37342), (12, 37309), (13, 37306), (15, 37264), (17, 37150), (18, 37141), (19, 37135), (20, 37108), (22, 37054), (23, 37027), (24, 37024), (29, 36931), (30, 36877), (32, 36784), (33, 36745), (34, 36730),

Gene: Nhonho_50 Start: 36956, Stop: 36165, Start Num: 2

Candidate Starts for Nhonho_50:

(Start: 2 @36956 has 155 MA's), (Start: 5 @36902 has 1 MA's), (11, 36821), (17, 36656), (18, 36647), (19, 36641), (20, 36614), (22, 36560), (26, 36506), (29, 36437), (30, 36383), (32, 36290), (33, 36251), (34, 36236),

Gene: Niza_52 Start: 37862, Stop: 37071, Start Num: 2

Candidate Starts for Niza_52:

(Start: 2 @37862 has 155 MA's), (Start: 5 @37808 has 1 MA's), (11, 37727), (17, 37562), (18, 37553), (19, 37547), (20, 37520), (22, 37466), (26, 37412), (29, 37343), (30, 37289), (32, 37196), (33, 37157), (34, 37142),

Gene: Norz_50 Start: 37037, Stop: 36246, Start Num: 2

Candidate Starts for Norz_50:

(Start: 2 @37037 has 155 MA's), (Start: 5 @36983 has 1 MA's), (11, 36902), (17, 36737), (18, 36728), (19, 36722), (20, 36695), (22, 36641), (26, 36587), (29, 36518), (30, 36464), (32, 36371), (33, 36332), (34, 36317),

Gene: Ohno789_51 Start: 37546, Stop: 36761, Start Num: 3

Candidate Starts for Ohno789_51:

(Start: 3 @37546 has 50 MA's), (9, 37444), (12, 37411), (13, 37408), (15, 37366), (17, 37252), (18, 37243), (19, 37237), (20, 37210), (22, 37156), (26, 37102), (29, 37033), (30, 36979), (33, 36847), (34, 36832),

Gene: Oogway_48 Start: 35707, Stop: 34922, Start Num: 3

Candidate Starts for Oogway_48:

(Start: 3 @35707 has 50 MA's), (9, 35605), (12, 35572), (13, 35569), (15, 35527), (17, 35413), (18, 35404), (19, 35398), (20, 35371), (22, 35317), (29, 35194), (32, 35047), (34, 34993),

Gene: PSullivan_49 Start: 35823, Stop: 35038, Start Num: 3

Candidate Starts for PSullivan_49:

(Start: 3 @35823 has 50 MA's), (9, 35721), (12, 35688), (13, 35685), (15, 35643), (17, 35529), (18, 35520), (19, 35514), (20, 35487), (22, 35433), (26, 35379), (29, 35310), (30, 35256), (32, 35163), (33, 35124), (34, 35109),

Gene: PacerPaul_49 Start: 36567, Stop: 35782, Start Num: 3

Candidate Starts for PacerPaul_49:

(Start: 3 @36567 has 50 MA's), (9, 36465), (12, 36432), (13, 36429), (15, 36387), (17, 36273), (18, 36264), (19, 36258), (20, 36231), (22, 36177), (26, 36123), (29, 36054), (30, 36000), (32, 35907), (33, 35868), (34, 35853),

Gene: Papez_52 Start: 38953, Stop: 38162, Start Num: 2

Candidate Starts for Papez_52:

(Start: 2 @38953 has 155 MA's), (8, 38851), (9, 38845), (16, 38737), (18, 38644), (19, 38638), (22, 38557), (23, 38530), (24, 38527), (27, 38482), (28, 38470), (29, 38434), (32, 38287), (33, 38248), (34, 38233),

Gene: Paphu_47 Start: 36087, Stop: 35296, Start Num: 2

Candidate Starts for Paphu_47:

(Start: 2 @36087 has 155 MA's), (Start: 4 @36072 has 2 MA's), (Start: 5 @36033 has 1 MA's), (11, 35952), (18, 35778), (19, 35772), (20, 35745), (22, 35691), (26, 35637), (29, 35568), (32, 35421), (33, 35382), (34, 35367),

Gene: Paraselene_47 Start: 36451, Stop: 35660, Start Num: 2

Candidate Starts for Paraselene_47:

(Start: 2 @36451 has 155 MA's), (Start: 5 @36397 has 1 MA's), (11, 36316), (17, 36151), (18, 36142), (19, 36136), (20, 36109), (22, 36055), (26, 36001), (29, 35932), (30, 35878), (32, 35785), (33, 35746), (34, 35731),

Gene: Pari_51 Start: 36488, Stop: 35673, Start Num: 2

Candidate Starts for Pari_51:

(Start: 2 @36488 has 155 MA's), (Start: 5 @36434 has 1 MA's), (11, 36353), (17, 36188), (18, 36179), (19, 36173), (21, 36095), (25, 36035), (27, 35993), (28, 35981), (29, 35945), (30, 35891), (32, 35798), (33, 35759),

Gene: Parliament_49 Start: 37001, Stop: 36210, Start Num: 2

Candidate Starts for Parliament_49:

(Start: 2 @37001 has 155 MA's), (Start: 5 @36947 has 1 MA's), (11, 36866), (17, 36701), (18, 36692), (19, 36686), (20, 36659), (22, 36605), (26, 36551), (29, 36482), (30, 36428), (32, 36335), (33, 36296), (34, 36281),

Gene: PascalRango_50 Start: 36346, Stop: 35555, Start Num: 2

Candidate Starts for PascalRango_50:

(Start: 2 @36346 has 155 MA's), (8, 36244), (9, 36238), (14, 36193), (16, 36130), (18, 36037), (25, 35917), (27, 35875), (28, 35863), (29, 35827), (30, 35773), (32, 35680), (33, 35641), (34, 35626),

Gene: PattyP_50 Start: 36211, Stop: 35420, Start Num: 2

Candidate Starts for PattyP_50:

(Start: 2 @36211 has 155 MA's), (8, 36109), (9, 36103), (16, 35995), (18, 35902), (19, 35896), (22, 35815), (23, 35788), (24, 35785), (27, 35740), (28, 35728), (29, 35692), (32, 35545), (33, 35506), (34, 35491),

Gene: Payneful_49 Start: 36018, Stop: 35227, Start Num: 2

Candidate Starts for Payneful_49:

(Start: 2 @36018 has 155 MA's), (8, 35916), (9, 35910), (16, 35802), (18, 35709), (19, 35703), (27, 35547), (28, 35535), (29, 35499), (32, 35352), (33, 35313), (34, 35298),

Gene: Pelly_49 Start: 36925, Stop: 36134, Start Num: 2

Candidate Starts for Pelly_49:

(Start: 2 @36925 has 155 MA's), (Start: 4 @36910 has 2 MA's), (Start: 5 @36871 has 1 MA's), (11, 36790), (17, 36625), (18, 36616), (19, 36610), (22, 36529), (23, 36502), (24, 36499), (29, 36406), (30, 36352), (33, 36220), (34, 36205),

Gene: Pepe_46 Start: 34772, Stop: 33981, Start Num: 2

Candidate Starts for Pepe_46:

(Start: 2 @34772 has 155 MA's), (Start: 5 @34718 has 1 MA's), (11, 34637), (17, 34472), (18, 34463), (19, 34457), (20, 34430), (22, 34376), (26, 34322), (29, 34253), (30, 34199), (32, 34106), (33, 34067), (34, 34052),

Gene: Perseus_49 Start: 36890, Stop: 36105, Start Num: 3

Candidate Starts for Perseus_49:

(Start: 3 @36890 has 50 MA's), (9, 36788), (12, 36755), (13, 36752), (15, 36710), (17, 36596), (18, 36587), (19, 36581), (20, 36554), (22, 36500), (23, 36473), (24, 36470), (29, 36377), (30, 36323), (32, 36230), (33, 36191), (34, 36176),

Gene: Peterson_54 Start: 39194, Stop: 38403, Start Num: 2

Candidate Starts for Peterson_54:

(Start: 2 @39194 has 155 MA's), (Start: 4 @39179 has 2 MA's), (Start: 5 @39140 has 1 MA's), (11, 39059), (17, 38894), (18, 38885), (19, 38879), (20, 38852), (22, 38798), (26, 38744), (29, 38675), (30, 38621), (32, 38528), (33, 38489), (34, 38474),

Gene: Petp2012_50 Start: 36820, Stop: 36035, Start Num: 3

Candidate Starts for Petp2012_50:

(Start: 3 @36820 has 50 MA's), (9, 36718), (12, 36685), (13, 36682), (15, 36640), (17, 36526), (18, 36517), (19, 36511), (20, 36484), (22, 36430), (26, 36376), (29, 36307), (30, 36253), (32, 36160), (33, 36121), (34, 36106),

Gene: Petruccio_49 Start: 36557, Stop: 35766, Start Num: 2

Candidate Starts for Petruccio_49:

(Start: 2 @36557 has 155 MA's), (Start: 4 @36542 has 2 MA's), (Start: 5 @36503 has 1 MA's), (11, 36422), (17, 36257), (18, 36248), (19, 36242), (20, 36215), (22, 36161), (26, 36107), (29, 36038), (32, 35891), (33, 35852), (34, 35837),

Gene: PherrisBueller_49 Start: 35826, Stop: 35035, Start Num: 2

Candidate Starts for PherrisBueller_49:

(Start: 2 @35826 has 155 MA's), (Start: 5 @35772 has 1 MA's), (11, 35691), (17, 35526), (18, 35517), (19, 35511), (20, 35484), (22, 35430), (26, 35376), (29, 35307), (32, 35160), (33, 35121), (34, 35106),

Gene: PhrostyMug_48 Start: 36169, Stop: 35384, Start Num: 3

Candidate Starts for PhrostyMug_48:

(Start: 3 @36169 has 50 MA's), (9, 36067), (12, 36034), (13, 36031), (15, 35989), (17, 35875), (18, 35866), (19, 35860), (20, 35833), (22, 35779), (23, 35752), (24, 35749), (29, 35656), (30, 35602), (32, 35509), (33, 35470), (34, 35455),

Gene: PinkPlastic_49 Start: 36394, Stop: 35609, Start Num: 3

Candidate Starts for PinkPlastic_49:

(Start: 1 @36400 has 1 MA's), (Start: 3 @36394 has 50 MA's), (7, 36307), (9, 36292), (12, 36259), (13, 36256), (15, 36214), (17, 36100), (18, 36091), (19, 36085), (20, 36058), (22, 36004), (26, 35950), (29, 35881), (30, 35827), (32, 35734), (33, 35695), (34, 35680),

Gene: Pinto_49 Start: 36038, Stop: 35223, Start Num: 2

Candidate Starts for Pinto_49:

(Start: 2 @36038 has 155 MA's), (Start: 5 @35984 has 1 MA's), (11, 35903), (17, 35738), (18, 35729), (19, 35723), (21, 35645), (25, 35585), (27, 35543), (28, 35531), (29, 35495), (30, 35441), (33, 35309), (34, 35294),

Gene: Pippin_51 Start: 36924, Stop: 36133, Start Num: 2

Candidate Starts for Pippin_51:

(Start: 2 @36924 has 155 MA's), (Start: 4 @36909 has 2 MA's), (Start: 5 @36870 has 1 MA's), (11, 36789), (17, 36624), (18, 36615), (19, 36609), (22, 36528), (26, 36474), (29, 36405), (32, 36258), (33, 36219), (34, 36204),

Gene: Pita2_52 Start: 37320, Stop: 36535, Start Num: 3

Candidate Starts for Pita2_52:

(Start: 3 @37320 has 50 MA's), (9, 37218), (12, 37185), (13, 37182), (15, 37140), (17, 37026), (18, 37017), (19, 37011), (20, 36984), (22, 36930), (26, 36876), (29, 36807), (30, 36753), (32, 36660), (33, 36621), (34, 36606),

Gene: ProMouse_50 Start: 37031, Stop: 36246, Start Num: 3

Candidate Starts for ProMouse_50:

(Start: 3 @37031 has 50 MA's), (9, 36929), (12, 36896), (13, 36893), (15, 36851), (18, 36728), (19, 36722), (20, 36695), (22, 36641), (23, 36614), (24, 36611), (29, 36518), (30, 36464), (32, 36371), (33, 36332), (34, 36317),

Gene: QTRlifeCrisis_49 Start: 37022, Stop: 36231, Start Num: 2

Candidate Starts for QTRlifeCrisis_49:

(Start: 2 @37022 has 155 MA's), (Start: 4 @37007 has 2 MA's), (Start: 5 @36968 has 1 MA's), (11, 36887), (17, 36722), (18, 36713), (19, 36707), (22, 36626), (26, 36572), (29, 36503), (30, 36449), (32, 36356), (33, 36317), (34, 36302),

Gene: Raid_50 Start: 36614, Stop: 35823, Start Num: 2

Candidate Starts for Raid_50:

(Start: 2 @36614 has 155 MA's), (Start: 5 @36560 has 1 MA's), (11, 36479), (17, 36314), (18, 36305), (19, 36299), (20, 36272), (22, 36218), (26, 36164), (29, 36095), (30, 36041), (33, 35909), (34, 35894),

Gene: Rajelicia_50 Start: 36980, Stop: 36165, Start Num: 2

Candidate Starts for Rajelicia_50:

(Start: 2 @36980 has 155 MA's), (Start: 5 @36926 has 1 MA's), (11, 36845), (17, 36680), (18, 36671), (19, 36665), (21, 36587), (25, 36527), (27, 36485), (28, 36473), (29, 36437), (30, 36383), (32, 36290), (33, 36251),

Gene: Rhynn_48 Start: 36257, Stop: 35466, Start Num: 2

Candidate Starts for Rhynn_48:

(Start: 2 @36257 has 155 MA's), (Start: 5 @36203 has 1 MA's), (11, 36122), (17, 35957), (18, 35948), (19, 35942), (20, 35915), (22, 35861), (26, 35807), (29, 35738), (30, 35684), (32, 35591), (33, 35552), (34, 35537),

Gene: RidgeCB_49 Start: 36166, Stop: 35381, Start Num: 3

Candidate Starts for RidgeCB_49:

(Start: 3 @36166 has 50 MA's), (7, 36079), (9, 36064), (12, 36031), (13, 36028), (15, 35986), (17, 35872), (18, 35863), (19, 35857), (20, 35830), (22, 35776), (26, 35722), (29, 35653), (30, 35599), (32, 35506), (33, 35467), (34, 35452),

Gene: Ringer_50 Start: 37234, Stop: 36497, Start Num: 5

Candidate Starts for Ringer_50:

(Start: 2 @37288 has 155 MA's), (Start: 4 @37273 has 2 MA's), (Start: 5 @37234 has 1 MA's), (11, 37153), (17, 36988), (18, 36979), (19, 36973), (20, 36946), (22, 36892), (26, 36838), (29, 36769), (30, 36715), (33, 36583), (34, 36568),

Gene: Rohr_50 Start: 37000, Stop: 36185, Start Num: 2

Candidate Starts for Rohr_50:

(Start: 2 @37000 has 155 MA's), (Start: 5 @36946 has 1 MA's), (11, 36865), (17, 36700), (18, 36691), (19, 36685), (21, 36607), (25, 36547), (27, 36505), (28, 36493), (29, 36457), (30, 36403), (32, 36310), (33, 36271), (34, 36256),

Gene: Rubeus_49 Start: 34857, Stop: 34042, Start Num: 2

Candidate Starts for Rubeus_49:

(Start: 2 @34857 has 155 MA's), (Start: 4 @34842 has 2 MA's), (Start: 5 @34803 has 1 MA's), (11, 34722), (18, 34548), (19, 34542), (21, 34464), (25, 34404), (27, 34362), (28, 34350), (29, 34314), (30, 34260), (33, 34128), (34, 34113),

Gene: Rufus_50 Start: 36627, Stop: 35812, Start Num: 2

Candidate Starts for Rufus_50:

(Start: 2 @36627 has 155 MA's), (Start: 4 @36612 has 2 MA's), (Start: 5 @36573 has 1 MA's), (11, 36492), (18, 36318), (19, 36312), (20, 36285), (21, 36234), (25, 36174), (27, 36132), (28, 36120), (29, 36084), (30, 36030), (33, 35898), (34, 35883),

Gene: Ruotula_52 Start: 38093, Stop: 37302, Start Num: 2

Candidate Starts for Ruotula_52:

(Start: 2 @38093 has 155 MA's), (8, 37991), (9, 37985), (16, 37877), (18, 37784), (19, 37778), (22, 37697), (23, 37670), (24, 37667), (27, 37622), (28, 37610), (29, 37574), (32, 37427), (34, 37373),

Gene: Rutherferd_51 Start: 37473, Stop: 36682, Start Num: 2

Candidate Starts for Rutherferd_51:

(Start: 2 @37473 has 155 MA's), (Start: 4 @37458 has 2 MA's), (Start: 5 @37419 has 1 MA's), (11, 37338), (17, 37173), (18, 37164), (19, 37158), (20, 37131), (22, 37077), (26, 37023), (29, 36954), (30, 36900), (33, 36768), (34, 36753),

Gene: STLscum_52 Start: 37869, Stop: 37078, Start Num: 2

Candidate Starts for STLscum_52:

(Start: 2 @37869 has 155 MA's), (Start: 5 @37815 has 1 MA's), (11, 37734), (17, 37569), (18, 37560), (19, 37554), (20, 37527), (22, 37473), (26, 37419), (29, 37350), (30, 37296), (32, 37203), (33, 37164), (34, 37149),

Gene: Sagefire_52 Start: 37842, Stop: 37051, Start Num: 2

Candidate Starts for Sagefire_52:

(Start: 2 @37842 has 155 MA's), (8, 37740), (9, 37734), (16, 37626), (18, 37533), (19, 37527), (22, 37446), (23, 37419), (24, 37416), (27, 37371), (28, 37359), (29, 37323), (33, 37137), (34, 37122),

Gene: Sandaddy_48 Start: 36643, Stop: 35852, Start Num: 2

Candidate Starts for Sandaddy_48:

(Start: 2 @36643 has 155 MA's), (Start: 4 @36628 has 2 MA's), (Start: 5 @36589 has 1 MA's), (11, 36508), (17, 36343), (18, 36334), (19, 36328), (20, 36301), (22, 36247), (23, 36220), (24, 36217), (29, 36124), (30, 36070), (32, 35977), (33, 35938), (34, 35923),

Gene: Sanya_47 Start: 36936, Stop: 36151, Start Num: 3

Candidate Starts for Sanya_47:

(Start: 3 @36936 has 50 MA's), (9, 36834), (12, 36801), (13, 36798), (15, 36756), (17, 36642), (18, 36633), (19, 36627), (20, 36600), (22, 36546), (23, 36519), (24, 36516), (29, 36423), (30, 36369), (32, 36276), (33, 36237), (34, 36222),

Gene: SarFire_47 Start: 36194, Stop: 35403, Start Num: 2

Candidate Starts for SarFire_47:

(Start: 2 @36194 has 155 MA's), (Start: 5 @36140 has 1 MA's), (11, 36059), (17, 35894), (18, 35885), (19, 35879), (20, 35852), (22, 35798), (26, 35744), (29, 35675), (30, 35621), (32, 35528), (33, 35489), (34, 35474),

Gene: Scowl_50 Start: 37130, Stop: 36339, Start Num: 2

Candidate Starts for Scowl_50:

(Start: 2 @37130 has 155 MA's), (Start: 5 @37076 has 1 MA's), (11, 36995), (17, 36830), (18, 36821), (19, 36815), (20, 36788), (22, 36734), (26, 36680), (29, 36611), (30, 36557), (32, 36464), (33, 36425), (34, 36410),

Gene: Seabiscuit_52 Start: 36733, Stop: 35942, Start Num: 2

Candidate Starts for Seabiscuit_52:

(Start: 2 @36733 has 155 MA's), (8, 36631), (9, 36625), (14, 36580), (16, 36517), (18, 36424), (25, 36304), (27, 36262), (28, 36250), (29, 36214), (32, 36067), (33, 36028), (34, 36013),

Gene: Seanderson_51 Start: 37551, Stop: 36742, Start Num: 3

Candidate Starts for Seanderson_51:

(Start: 3 @37551 has 50 MA's), (9, 37449), (12, 37416), (13, 37413), (15, 37371), (17, 37257), (18, 37248), (19, 37242), (21, 37164), (25, 37104), (27, 37062), (28, 37050), (29, 37014), (32, 36867), (33, 36828), (34, 36813),

Gene: ShortQueendom_43 Start: 32707, Stop: 31916, Start Num: 2

Candidate Starts for ShortQueendom_43:

(Start: 2 @32707 has 155 MA's), (Start: 5 @32653 has 1 MA's), (11, 32572), (17, 32407), (18, 32398), (19, 32392), (20, 32365), (22, 32311), (26, 32257), (29, 32188), (30, 32134), (33, 32002), (34, 31987),

Gene: Sibs6_50 Start: 35458, Stop: 34673, Start Num: 3

Candidate Starts for Sibs6_50:

(Start: 3 @35458 has 50 MA's), (9, 35356), (12, 35323), (13, 35320), (15, 35278), (17, 35164), (18, 35155), (20, 35122), (22, 35068), (29, 34945), (30, 34891), (32, 34798), (33, 34759), (34, 34744),

Gene: SkiPole_54 Start: 37590, Stop: 36799, Start Num: 2

Candidate Starts for SkiPole_54:

(Start: 2 @37590 has 155 MA's), (Start: 5 @37536 has 1 MA's), (11, 37455), (17, 37290), (18, 37281), (19, 37275), (20, 37248), (22, 37194), (26, 37140), (29, 37071), (30, 37017), (32, 36924), (33, 36885), (34, 36870),

Gene: Slagathor_51 Start: 36881, Stop: 36090, Start Num: 2

Candidate Starts for Slagathor_51:

(Start: 2 @36881 has 155 MA's), (8, 36779), (9, 36773), (16, 36665), (18, 36572), (19, 36566), (22, 36485), (23, 36458), (24, 36455), (27, 36410), (28, 36398), (29, 36362), (32, 36215), (33, 36176), (34, 36161),

Gene: Smairt_51 Start: 37162, Stop: 36377, Start Num: 3

Candidate Starts for Smairt_51:

(Start: 3 @37162 has 50 MA's), (9, 37060), (12, 37027), (13, 37024), (15, 36982), (17, 36868), (18, 36859), (19, 36853), (20, 36826), (22, 36772), (23, 36745), (24, 36742), (29, 36649), (30, 36595), (32,

36502), (33, 36463), (34, 36448),

Gene: Smeagol_51 Start: 38091, Stop: 37276, Start Num: 2

Candidate Starts for Smeagol_51:

(Start: 2 @38091 has 155 MA's), (Start: 4 @38076 has 2 MA's), (Start: 5 @38037 has 1 MA's), (11, 37956), (18, 37782), (19, 37776), (21, 37698), (29, 37548), (32, 37401), (33, 37362), (34, 37347),

Gene: Snazzy_48 Start: 36267, Stop: 35476, Start Num: 2

Candidate Starts for Snazzy_48:

(Start: 2 @36267 has 155 MA's), (Start: 5 @36213 has 1 MA's), (11, 36132), (17, 35967), (18, 35958), (19, 35952), (20, 35925), (22, 35871), (26, 35817), (29, 35748), (30, 35694), (32, 35601), (33, 35562), (34, 35547),

Gene: Solon_48 Start: 36525, Stop: 35734, Start Num: 2

Candidate Starts for Solon_48:

(Start: 2 @36525 has 155 MA's), (8, 36423), (9, 36417), (16, 36309), (18, 36216), (19, 36210), (27, 36054), (28, 36042), (29, 36006), (32, 35859), (33, 35820), (34, 35805),

Gene: Sorpresa_48 Start: 36645, Stop: 35854, Start Num: 2

Candidate Starts for Sorpresa_48:

(Start: 2 @36645 has 155 MA's), (Start: 4 @36630 has 2 MA's), (Start: 5 @36591 has 1 MA's), (11, 36510), (17, 36345), (18, 36336), (19, 36330), (20, 36303), (22, 36249), (23, 36222), (24, 36219), (29, 36126), (30, 36072), (32, 35979), (33, 35940), (34, 35925),

Gene: SpikeBT_49 Start: 36885, Stop: 36094, Start Num: 2

Candidate Starts for SpikeBT_49:

(Start: 2 @36885 has 155 MA's), (Start: 4 @36870 has 2 MA's), (Start: 5 @36831 has 1 MA's), (11, 36750), (17, 36585), (18, 36576), (19, 36570), (20, 36543), (22, 36489), (23, 36462), (24, 36459), (29, 36366), (30, 36312), (32, 36219), (33, 36180), (34, 36165),

Gene: Squee_50 Start: 37222, Stop: 36431, Start Num: 2

Candidate Starts for Squee_50:

(Start: 2 @37222 has 155 MA's), (Start: 5 @37168 has 1 MA's), (11, 37087), (17, 36922), (18, 36913), (19, 36907), (20, 36880), (22, 36826), (26, 36772), (29, 36703), (32, 36556), (33, 36517), (34, 36502),

Gene: StewieG_48 Start: 34045, Stop: 33254, Start Num: 2

Candidate Starts for StewieG_48:

(Start: 2 @34045 has 155 MA's), (Start: 5 @33991 has 1 MA's), (11, 33910), (17, 33745), (18, 33736), (19, 33730), (20, 33703), (22, 33649), (26, 33595), (29, 33526), (30, 33472), (32, 33379), (33, 33340), (34, 33325),

Gene: StrongArm_49 Start: 37728, Stop: 36937, Start Num: 2

Candidate Starts for StrongArm_49:

(Start: 2 @37728 has 155 MA's), (Start: 5 @37674 has 1 MA's), (11, 37593), (17, 37428), (18, 37419), (19, 37413), (20, 37386), (22, 37332), (26, 37278), (29, 37209), (30, 37155), (33, 37023), (34, 37008),

Gene: Sumter_46 Start: 36230, Stop: 35439, Start Num: 2

Candidate Starts for Sumter_46:

(Start: 2 @36230 has 155 MA's), (Start: 5 @36176 has 1 MA's), (11, 36095), (17, 35930), (18, 35921), (19, 35915), (22, 35834), (26, 35780), (29, 35711), (33, 35525), (34, 35510),

Gene: Sunshine924_50 Start: 36142, Stop: 35357, Start Num: 3

Candidate Starts for Sunshine924_50:

(Start: 3 @36142 has 50 MA's), (9, 36040), (12, 36007), (13, 36004), (15, 35962), (18, 35839), (19, 35833), (20, 35806), (22, 35752), (23, 35725), (24, 35722), (29, 35629), (30, 35575), (32, 35482), (33, 35443), (34, 35428),

Gene: SwissCheese_51 Start: 36855, Stop: 36070, Start Num: 3

Candidate Starts for SwissCheese_51:

(Start: 3 @36855 has 50 MA's), (7, 36768), (9, 36753), (12, 36720), (13, 36717), (15, 36675), (17, 36561), (18, 36552), (19, 36546), (20, 36519), (22, 36465), (26, 36411), (29, 36342), (30, 36288), (32, 36195), (33, 36156), (34, 36141),

Gene: Switzer_51 Start: 36802, Stop: 36011, Start Num: 2

Candidate Starts for Switzer_51:

(Start: 2 @36802 has 155 MA's), (Start: 4 @36787 has 2 MA's), (11, 36667), (17, 36502), (18, 36493), (19, 36487), (20, 36460), (22, 36406), (26, 36352), (29, 36283), (30, 36229), (32, 36136), (33, 36097), (34, 36082),

Gene: Swole_50 Start: 36024, Stop: 35239, Start Num: 3

Candidate Starts for Swole_50:

(Start: 3 @36024 has 50 MA's), (9, 35922), (12, 35889), (13, 35886), (15, 35844), (17, 35730), (18, 35721), (19, 35715), (20, 35688), (22, 35634), (26, 35580), (29, 35511), (30, 35457), (32, 35364), (33, 35325), (34, 35310),

Gene: Target_50 Start: 35434, Stop: 34643, Start Num: 2

Candidate Starts for Target_50:

(Start: 2 @35434 has 155 MA's), (Start: 5 @35380 has 1 MA's), (11, 35299), (17, 35134), (18, 35125), (19, 35119), (20, 35092), (22, 35038), (26, 34984), (29, 34915), (30, 34861), (32, 34768), (33, 34729), (34, 34714),

Gene: Tasp14_51 Start: 37127, Stop: 36336, Start Num: 2

Candidate Starts for Tasp14_51:

(Start: 2 @37127 has 155 MA's), (Start: 4 @37112 has 2 MA's), (Start: 5 @37073 has 1 MA's), (11, 36992), (17, 36827), (18, 36818), (19, 36812), (20, 36785), (22, 36731), (26, 36677), (29, 36608), (33, 36422), (34, 36407),

Gene: Teodoridan_48 Start: 36321, Stop: 35530, Start Num: 2

Candidate Starts for Teodoridan_48:

(Start: 2 @36321 has 155 MA's), (Start: 5 @36267 has 1 MA's), (11, 36186), (17, 36021), (18, 36012), (19, 36006), (20, 35979), (22, 35925), (26, 35871), (29, 35802), (30, 35748), (32, 35655), (33, 35616), (34, 35601),

Gene: TheloniousMonk_50 Start: 37889, Stop: 37098, Start Num: 2

Candidate Starts for TheloniousMonk_50:

(Start: 2 @37889 has 155 MA's), (8, 37787), (9, 37781), (16, 37673), (18, 37580), (19, 37574), (27, 37418), (28, 37406), (29, 37370), (33, 37184), (34, 37169),

Gene: Thor_47 Start: 35552, Stop: 34761, Start Num: 2

Candidate Starts for Thor_47:

(Start: 2 @35552 has 155 MA's), (Start: 5 @35498 has 1 MA's), (11, 35417), (17, 35252), (18, 35243), (19, 35237), (20, 35210), (22, 35156), (26, 35102), (29, 35033), (30, 34979), (32, 34886), (33, 34847), (34, 34832),

Gene: Topgun_49 Start: 36413, Stop: 35622, Start Num: 2

Candidate Starts for Topgun_49:

(Start: 2 @36413 has 155 MA's), (Start: 5 @36359 has 1 MA's), (11, 36278), (17, 36113), (18, 36104), (19, 36098), (20, 36071), (22, 36017), (26, 35963), (29, 35894), (30, 35840), (32, 35747), (33, 35708), (34, 35693),

Gene: Tote_45 Start: 33291, Stop: 32506, Start Num: 3

Candidate Starts for Tote_45:

(Start: 3 @33291 has 50 MA's), (9, 33189), (12, 33156), (13, 33153), (15, 33111), (17, 32997), (18, 32988), (19, 32982), (20, 32955), (22, 32901), (26, 32847), (29, 32778), (30, 32724), (32, 32631), (33, 32592), (34, 32577),

Gene: Traft412_52 Start: 37748, Stop: 36933, Start Num: 2

Candidate Starts for Traft412_52:

(Start: 2 @37748 has 155 MA's), (Start: 4 @37733 has 2 MA's), (Start: 5 @37694 has 1 MA's), (11, 37613), (17, 37448), (18, 37439), (19, 37433), (21, 37355), (25, 37295), (27, 37253), (28, 37241), (29, 37205), (33, 37019), (34, 37004),

Gene: Treddle_50 Start: 37502, Stop: 36711, Start Num: 2

Candidate Starts for Treddle_50:

(Start: 2 @37502 has 155 MA's), (Start: 4 @37487 has 2 MA's), (11, 37367), (17, 37202), (18, 37193), (19, 37187), (22, 37106), (26, 37052), (29, 36983), (32, 36836), (33, 36797), (34, 36782),

Gene: Tripl3t_49 Start: 37173, Stop: 36382, Start Num: 2

Candidate Starts for Tripl3t_49:

(Start: 2 @37173 has 155 MA's), (Start: 4 @37158 has 2 MA's), (Start: 5 @37119 has 1 MA's), (11, 37038), (17, 36873), (18, 36864), (19, 36858), (20, 36831), (22, 36777), (26, 36723), (29, 36654), (32, 36507), (33, 36468), (34, 36453),

Gene: Trouble_52 Start: 38244, Stop: 37459, Start Num: 3

Candidate Starts for Trouble_52:

(Start: 3 @38244 has 50 MA's), (9, 38142), (12, 38109), (13, 38106), (15, 38064), (17, 37950), (18, 37941), (19, 37935), (20, 37908), (22, 37854), (29, 37731), (30, 37677), (32, 37584), (33, 37545), (34, 37530),

Gene: Turj99_48 Start: 36141, Stop: 35350, Start Num: 2

Candidate Starts for Turj99_48:

(Start: 2 @36141 has 155 MA's), (Start: 5 @36087 has 1 MA's), (11, 36006), (17, 35841), (18, 35832), (19, 35826), (20, 35799), (22, 35745), (26, 35691), (29, 35622), (30, 35568), (32, 35475), (33, 35436), (34, 35421),

Gene: TwoPeat_50 Start: 36615, Stop: 35830, Start Num: 3

Candidate Starts for TwoPeat_50:

(Start: 3 @36615 has 50 MA's), (9, 36513), (12, 36480), (13, 36477), (15, 36435), (17, 36321), (18, 36312), (19, 36306), (20, 36279), (22, 36225), (26, 36171), (29, 36102), (30, 36048), (32, 35955), (33, 35916), (34, 35901),

Gene: U2_49 Start: 36782, Stop: 35991, Start Num: 2

Candidate Starts for U2_49:

(Start: 2 @36782 has 155 MA's), (8, 36680), (9, 36674), (14, 36629), (16, 36566), (18, 36473), (25, 36353), (27, 36311), (28, 36299), (29, 36263), (32, 36116), (33, 36077), (34, 36062),

Gene: Violet_47 Start: 36559, Stop: 35768, Start Num: 2

Candidate Starts for Violet_47:

(Start: 2 @36559 has 155 MA's), (Start: 4 @36544 has 2 MA's), (Start: 5 @36505 has 1 MA's), (11, 36424), (17, 36259), (18, 36250), (19, 36244), (20, 36217), (22, 36163), (26, 36109), (29, 36040), (30, 35986), (32, 35893), (33, 35854), (34, 35839),

Gene: Watermelon_50 Start: 36951, Stop: 36160, Start Num: 2

Candidate Starts for Watermelon_50:

(Start: 2 @36951 has 155 MA's), (Start: 4 @36936 has 2 MA's), (Start: 5 @36897 has 1 MA's), (11, 36816), (17, 36651), (18, 36642), (19, 36636), (22, 36555), (26, 36501), (29, 36432), (30, 36378), (32, 36285), (33, 36246), (34, 36231),

Gene: Wheeler_50 Start: 36995, Stop: 36204, Start Num: 2

Candidate Starts for Wheeler_50:

(Start: 2 @36995 has 155 MA's), (8, 36893), (9, 36887), (16, 36779), (18, 36686), (22, 36599), (23, 36572), (24, 36569), (27, 36524), (28, 36512), (29, 36476), (32, 36329), (33, 36290), (34, 36275),

Gene: Wilkins_49 Start: 36343, Stop: 35552, Start Num: 2

Candidate Starts for Wilkins_49:

(Start: 2 @36343 has 155 MA's), (Start: 5 @36289 has 1 MA's), (11, 36208), (17, 36043), (18, 36034), (19, 36028), (20, 36001), (22, 35947), (26, 35893), (29, 35824), (30, 35770), (32, 35677), (33, 35638), (34, 35623),

Gene: Zeeculate_47 Start: 36604, Stop: 35813, Start Num: 2

Candidate Starts for Zeeculate_47:

(Start: 2 @36604 has 155 MA's), (Start: 4 @36589 has 2 MA's), (Start: 5 @36550 has 1 MA's), (11, 36469), (17, 36304), (18, 36295), (19, 36289), (22, 36208), (26, 36154), (29, 36085), (32, 35938), (33, 35899), (34, 35884),

Gene: Zephyr_49 Start: 36444, Stop: 35653, Start Num: 2

Candidate Starts for Zephyr_49:

(Start: 2 @36444 has 155 MA's), (Start: 4 @36429 has 2 MA's), (Start: 5 @36390 has 1 MA's), (11, 36309), (17, 36144), (18, 36135), (19, 36129), (20, 36102), (22, 36048), (26, 35994), (29, 35925), (30, 35871), (32, 35778), (33, 35739), (34, 35724),

Gene: Zeuska_48 Start: 36535, Stop: 35744, Start Num: 2

Candidate Starts for Zeuska_48:

(Start: 2 @36535 has 155 MA's), (Start: 5 @36481 has 1 MA's), (11, 36400), (17, 36235), (18, 36226), (19, 36220), (20, 36193), (22, 36139), (26, 36085), (29, 36016), (30, 35962), (32, 35869), (33, 35830), (34, 35815),