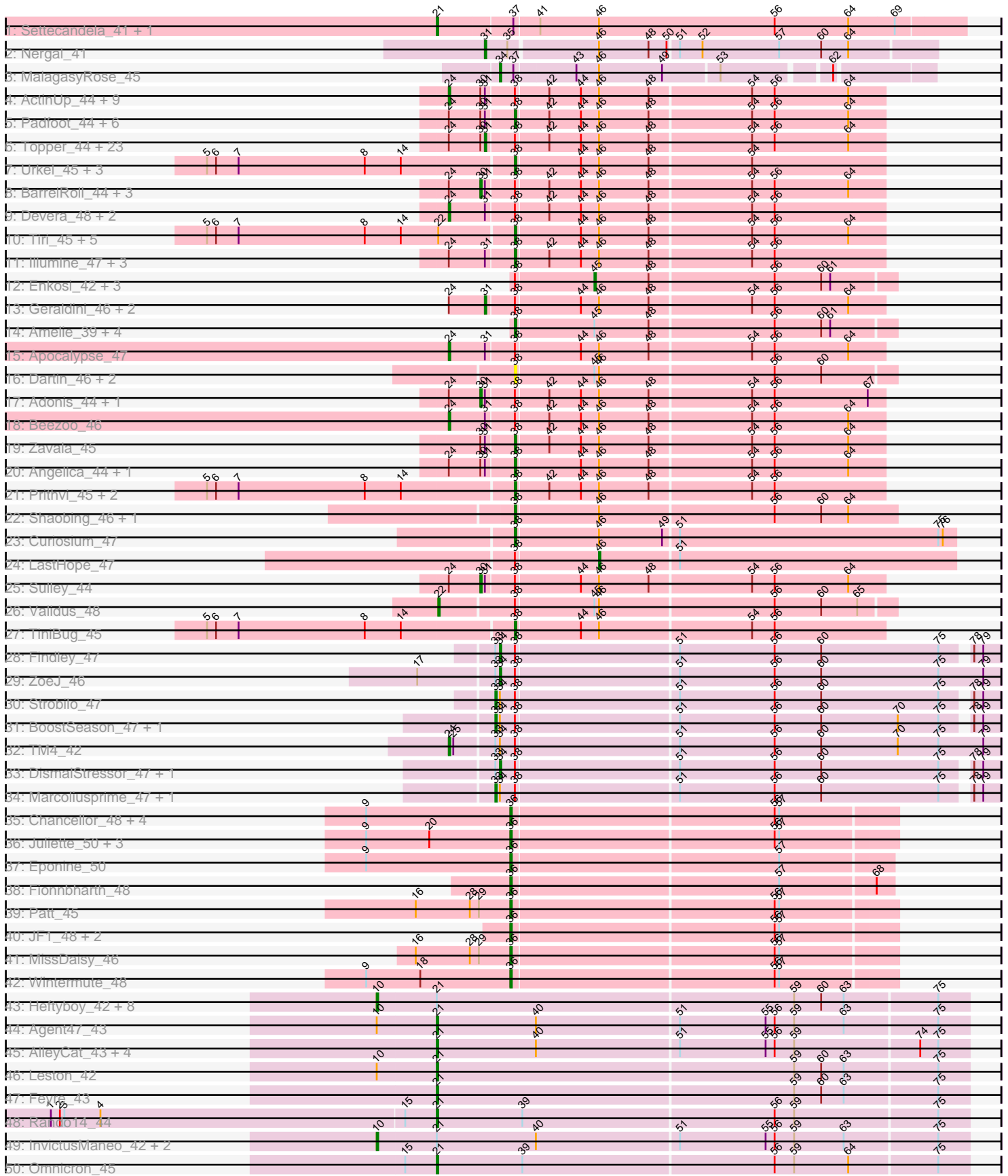
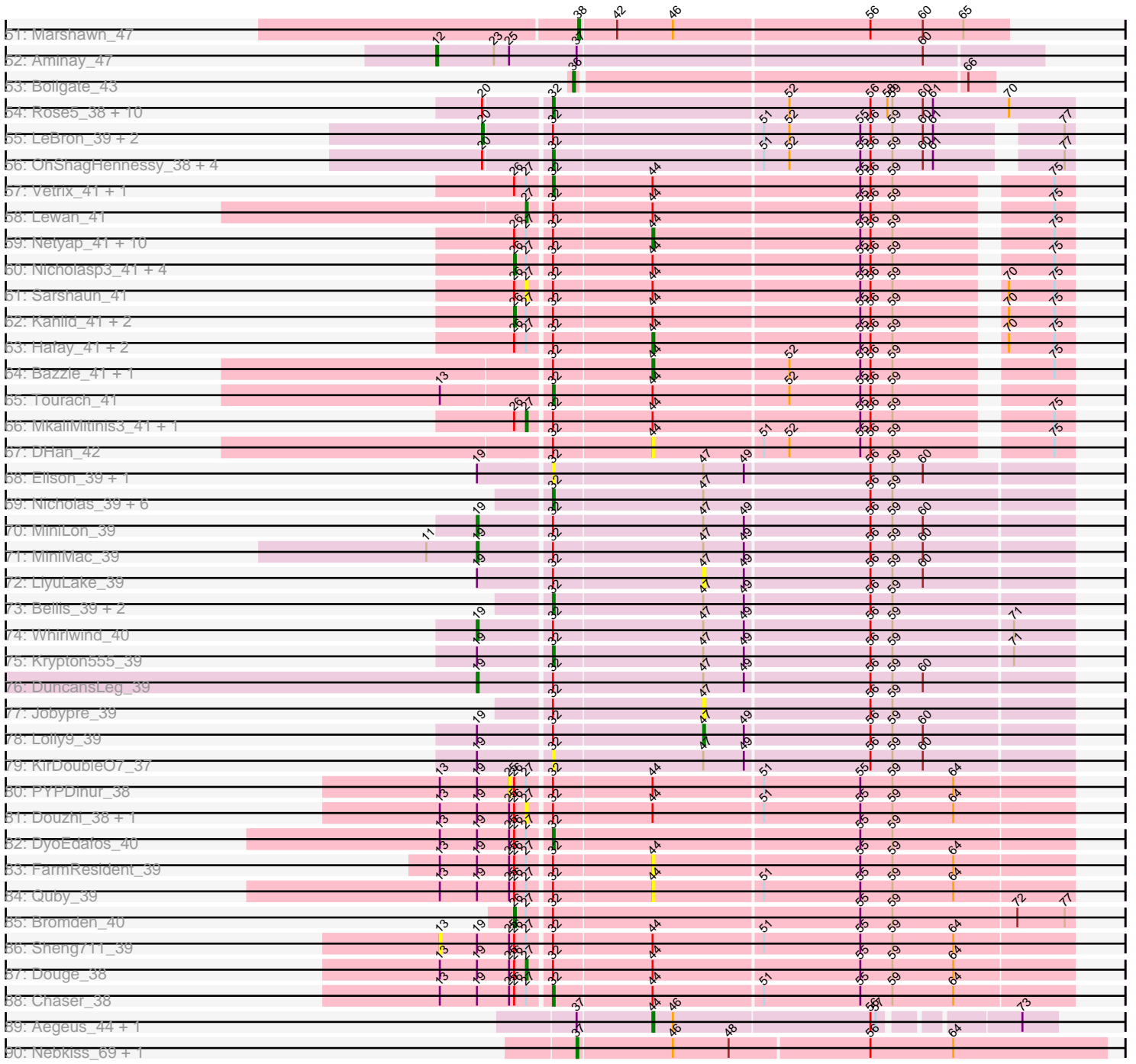


Pham 193710



Pham 193710



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 193710 Report

This analysis was run 11/02/24 on database version 579.

Pham number 193710 has 236 members, 20 are drafts.

Phages represented in each track:

- Track 1 : Settecandela_41, Phrappuccino_41
- Track 2 : Nergal_41
- Track 3 : MalagasyRose_45
- Track 4 : ActinUp_44, Piatt_44, Ramen_44, CaseJules_45, Joy99_44, Blizzard_44, Atiba_44, Zabiza_39, Hyperbowlee_44, Durfee_44
- Track 5 : Padfoot_44, BEEST_44, Jayhawk_45, Asayake_44, Mynx_45, Padpat_45, ShiaSurprise_45
- Track 6 : Topper_44, Slimphazie_44, Dalmuri_44, Jeckyll_44, Llorens_44, Rosmarinus_44, CREW_44, Boiii_44, BGlluviae_44, Belladonna_44, Veliki_44, Jarvi_44, Rapunzel97_44, Homura_44, Inky_44, Spock_44, Lunahalos_44, Capricorn_44, HedwigODU_44, TruffulaTree_44, YoureAdopted_43, Emerson_45, Twitch_44, Peel_44
- Track 7 : Urkel_45, Bella96_45, SamuelLPlaqson_45, DrHayes_45
- Track 8 : BarrelRoll_44, Adephagia_44, Tachez_44, JAWS_44
- Track 9 : Devera_48, Ageofdapage_46, Murucutumbu_45
- Track 10 : Tiri_45, Megsy_45, MeaningOfLife_45, Ganymede_45, QuincyRose_43, CrimD_44
- Track 11 : Illumine_47, LaterM_45, Stinson_45, Dole_47
- Track 12 : Enkosi_42, Nikao_42, Torres_42, SgtBeansprout_39
- Track 13 : Geraldini_46, BaghaKamala_43, Pokerus_43
- Track 14 : Amelie_39, Binglebops_39, Mdavu_40, Nutello_39, LilPharaoh_39
- Track 15 : Apocalypse_47
- Track 16 : Dartin_46, McMater_46, Richo_46
- Track 17 : Adonis_44, Anaya_46
- Track 18 : Beezoo_46
- Track 19 : Zavala_45
- Track 20 : Angelica_44, Deby_44
- Track 21 : Prithvi_45, TreyKay_45, LindNT_44
- Track 22 : Shaobing_46, Niklas_46
- Track 23 : Curiosium_47
- Track 24 : LastHope_47
- Track 25 : Sulley_44
- Track 26 : Validus_48
- Track 27 : TiniBug_45
- Track 28 : Findley_47
- Track 29 : ZoeJ_46
- Track 30 : Strobilo_47

- Track 31 : BoostSeason_47, Mufasa_47
- Track 32 : TM4_42
- Track 33 : DismalStressor_47, Milly_47
- Track 34 : Marcoliusprime_47, DismalFunk_47
- Track 35 : Chancellor_48, Slarp_48, Cheetobro_48, Taquito_48, Mitti_48
- Track 36 : Juliette_50, Reptar3000_46, OmniCritical_47, Malthus_49
- Track 37 : Eponine_50
- Track 38 : Fionnbharth_48
- Track 39 : Patt_45
- Track 40 : JF1_48, Y2_47, Y10_47
- Track 41 : MissDaisy_46
- Track 42 : Wintermute_48
- Track 43 : Heftyboy_42, Guillsminger_43, Gengar_42, OkiRoe_42, Waterfoul_43, Paola_42, Thyatira_44, Miryou_44, SoSeph_42
- Track 44 : Agent47_43
- Track 45 : AlleyCat_43, Edugator_42, Psycho_43, Dadosky_43, Larva_43
- Track 46 : Leston_42
- Track 47 : Feyre_43
- Track 48 : Rando14_44
- Track 49 : InvictusManeo_42, Collard_42, Kratio_41
- Track 50 : Omnicron_45
- Track 51 : Marshawn_47
- Track 52 : Aminay_47
- Track 53 : Boilgate_43
- Track 54 : Rose5_38, Calm_39, Halena_38, CicholasNage_39, Silverleaf_38, Wyatt2_39, MAckerman_39, Zaria_39, Tyson_38, Acquire49_39, AvadaKedavra_39
- Track 55 : LeBron_39, UPIE_39, JoeDirt_38
- Track 56 : OhShagHennessy_38, Wamburgxpress_39, Enceladus_38, Appletree2_38, DirkDirk_38
- Track 57 : Vetrix_41, DrSeegs_41
- Track 58 : Lewan_41
- Track 59 : Netyap_41, GuuelaD_41, Crossroads_41, Gabriela_41, Itos_40, Finemlucis_41, BobsGarage_41, Gardann_41, BigCheese_41, Miley16_41, Zakai_41
- Track 60 : Nicholasp3_41, Faith1_41, Breezona_41, Winky_41, Rumpelstiltskin_41
- Track 61 : Sarshaun_41
- Track 62 : Kahlid_41, Loadrie_41, Wigglewiggle_41
- Track 63 : Hafay_41, Soap141_41, Wilder_41
- Track 64 : Bazzle_41, Archie_41
- Track 65 : Tourach_41
- Track 66 : MkaliMitinis3_41, LilDestine_41
- Track 67 : DHan_42
- Track 68 : Ellson_39, BourbonZero_38
- Track 69 : Nicholas_39, Lumos_39, Jubie_39, Snenia_39, MsGreen_39, Kingsolomon_39, Clautastrophe_39
- Track 70 : MiniLon_39
- Track 71 : MiniMac_39
- Track 72 : LiyuLake_39
- Track 73 : Bellis_39, Finnry_39, Moostard_39
- Track 74 : Whirlwind_40
- Track 75 : Krypton555_39
- Track 76 : DuncansLeg_39
- Track 77 : Jobypre_39
- Track 78 : Lolly9_39

- Track 79 : KirDoubleO7_37
- Track 80 : PYPDinur_38
- Track 81 : Douzhi_38, BrainDrainer_39
- Track 82 : DyoEdafos_40
- Track 83 : FarmResident_39
- Track 84 : Quby_39
- Track 85 : Bromden_40
- Track 86 : Sheng711_39
- Track 87 : Douge_38
- Track 88 : Chaser_38
- Track 89 : Aegeus_44, Baudelaire_44
- Track 90 : Nebkiss_69, Gaia_69

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

The start number called the most often in the published annotations is 38, it was called in 37 of the 216 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amelie_39, Angelica_44, Asayake_44, BEEST_44, Bella96_45, Biglebops_39, CrimD_44, Curiosium_47, Dartin_46, Deby_44, Dole_47, DrHayes_45, Ganymede_45, Illumine_47, Jayhawk_45, LaterM_45, LilPharaoh_39, LindNT_44, Marshawn_47, McMater_46, Mdavu_40, MeaningOfLife_45, Megsy_45, Mynx_45, Niklas_46, Nutello_39, Padfoot_44, Padpat_45, Prithvi_45, QuincyRose_43, Richo_46, SamuelLPlaçon_45, Shaobing_46, ShiaSurprise_45, Stinson_45, TiniBug_45, Tiri_45, TreyKay_45, Urkel_45, Zavala_45,

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

- ActinUp_44, Adephegia_44, Adonis_44, Ageofdapage_46, Anaya_46, Apocalypse_47, Atiba_44, BGlluviae_44, BaghaKamala_43, BarrelRoll_44, Beezoo_46, Belladonna_44, Blizzard_44, Boiiii_44, BoostSeason_47, CREW_44, Capricorn_44, CaseJules_45, Dalmuri_44, Devera_48, DismalFunk_47, DismalStressor_47, Durfee_44, Emerson_45, Enkosi_42, Findley_47, Geraldini_46, HedwigODU_44, Homura_44, Hyperbowlee_44, Inky_44, JAWS_44, Jarvi_44, Jeckyll_44, Joy99_44, LastHope_47, Llorens_44, Lunahalos_44, Marcoliusprime_47, Milly_47, Mufasa_47, Murucutumbu_45, Nikao_42, Peel_44, Piatt_44, Pokerus_43, Ramen_44, Rapunzel97_44, Rosmarinus_44, SgtBeansprout_39, Slimphazie_44, Spock_44, Strobilo_47, Sulley_44, TM4_42, Tachez_44, Topper_44, Torres_42, TruffulaTree_44, Twitch_44, Validus_48, Veliki_44, YoureAdopted_43, Zabiza_39, ZoeJ_46,

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

- Acquire49_39, Aegeus_44, Agent47_43, AlleyCat_43, Aminay_47, Appletree2_38, Archie_41, AvadaKedavra_39, Baudelaire_44, Bazzle_41, Bellis_39, BigCheese_41, BobsGarage_41, Boilgate_43, BourbonZero_38, BrainDrainer_39, Breezona_41, Bromden_40, Calm_39, Chancellor_48, Chaser_38, Cheetobro_48, CicholasNage_39, Clautastrophe_39, Collard_42, Crossroads_41, DHan_42, Dadosky_43, DirkDirk_38, Douge_38, Douzhi_38, DrSeegs_41, DuncansLeg_39, DyoEdafos_40, Edugator_42, Ellson_39, Enceladus_38, Eponine_50, Faith1_41, FarmResident_39, Feyre_43, Finemlucis_41, Finnry_39, Fionnbharth_48,

Gabriela_41, Gaia_69, Gardann_41, Gengar_42, Guillsminger_43, GuuelaD_41, Hafay_41, Halena_38, Heftyboy_42, InvictusManeo_42, Itos_40, JF1_48, Jobypre_39, JoeDirt_38, Jubie_39, Juliette_50, Kahlid_41, Kingsolomon_39, KirDoubleO7_37, Kratio_41, Krypton555_39, Larva_43, LeBron_39, Leston_42, Lewan_41, LilDestine_41, LiyuLake_39, Loadrie_41, Lolly9_39, Lumos_39, MAckerman_39, MalagasyRose_45, Malthus_49, Miley16_41, MiniLon_39, MiniMac_39, Miryou_44, MissDaisy_46, Mitti_48, MkaliMitinis3_41, Moostard_39, MsGreen_39, Nebkiss_69, Nergal_41, Netyap_41, Nicholas_39, Nicholasp3_41, OhShagHennessy_38, OkiRoe_42, OmniCritical_47, Omnicron_45, PYPDinur_38, Paola_42, Patt_45, Phrappuccino_41, Psycho_43, Quby_39, Rando14_44, Reptar3000_46, Rose5_38, Rumpelstiltskin_41, Sarshaun_41, Settecandela_41, Sheng711_39, Silverleaf_38, Slarp_48, Slenia_39, SoSeph_42, Soap141_41, Taquito_48, Thyatira_44, Tourach_41, Tyson_38, UPIE_39, Vetrix_41, Wamburgexpress_39, Waterfoul_43, Whirlwind_40, Wigglewobble_41, Wilder_41, Winky_41, Wintermute_48, Wyatt2_39, Y10_47, Y2_47, Zakai_41, Zaria_39,

Summary by start number:

Start 10:

- Found in 14 of 236 (5.9%) of genes in pham
- Manual Annotations of this start: 12 of 216
- Called 85.7% of time when present
- Phage (with cluster) where this start called: Collard_42 (K5), Gengar_42 (K5), Guillsminger_43 (K5), Heftyboy_42 (K5), InvictusManeo_42 (K5), Kratio_41 (K5), Miryou_44 (K5), OkiRoe_42 (K5), Paola_42 (K5), SoSeph_42 (K5), Thyatira_44 (K5), Waterfoul_43 (K5),

Start 12:

- Found in 1 of 236 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 216
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aminay_47 (K7),

Start 13:

- Found in 10 of 236 (4.2%) of genes in pham
- No Manual Annotations of this start.
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Sheng711_39 (L4),

Start 19:

- Found in 19 of 236 (8.1%) of genes in pham
- Manual Annotations of this start: 4 of 216
- Called 21.1% of time when present
- Phage (with cluster) where this start called: DuncansLeg_39 (L3), MiniLon_39 (L3), MiniMac_39 (L3), Whirlwind_40 (L3),

Start 20:

- Found in 23 of 236 (9.7%) of genes in pham
- Manual Annotations of this start: 3 of 216
- Called 13.0% of time when present
- Phage (with cluster) where this start called: JoeDirt_38 (L1), LeBron_39 (L1), UPIE_39 (L1),

Start 21:

- Found in 24 of 236 (10.2%) of genes in pham
- Manual Annotations of this start: 12 of 216
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Agent47_43 (K5), AlleyCat_43 (K5), Dadosky_43 (K5), Edugator_42 (K5), Feyre_43 (K5), Larva_43 (K5), Leston_42 (K5), Omnicron_45 (K5), Phrappuccino_41 (AA), Psycho_43 (K5), Rando14_44 (K5), Settecandela_41 (AA),

Start 22:

- Found in 7 of 236 (3.0%) of genes in pham
- Manual Annotations of this start: 1 of 216
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Validus_48 (K1),

Start 24:

- Found in 63 of 236 (26.7%) of genes in pham
- Manual Annotations of this start: 16 of 216
- Called 25.4% of time when present
- Phage (with cluster) where this start called: ActinUp_44 (K1), Ageofdapage_46 (K1), Apocalypse_47 (K1), Atiba_44 (K1), Beezoo_46 (K1), Blizzard_44 (K1), CaseJules_45 (K1), Devera_48 (K1), Durfee_44 (K1), Hyperbowlee_44 (K1), Joy99_44 (K1), Murucutumbu_45 (K1), Piatt_44 (K1), Ramen_44 (K1), TM4_42 (K2), Zabiza_39 (K1),

Start 25:

- Found in 11 of 236 (4.7%) of genes in pham
- No Manual Annotations of this start.
- Called 9.1% of time when present
- Phage (with cluster) where this start called: PYPDinur_38 (L4),

Start 26:

- Found in 37 of 236 (15.7%) of genes in pham
- Manual Annotations of this start: 9 of 216
- Called 24.3% of time when present
- Phage (with cluster) where this start called: Breezona_41 (L2), Bromden_40 (L4), Faith1_41 (L2), Kahlid_41 (L2), Loadrie_41 (L2), Nicholasp3_41 (L2), Rumpelstiltskin_41 (L2), Wigglewiggles_41 (L2), Winky_41 (L2),

Start 27:

- Found in 38 of 236 (16.1%) of genes in pham
- Manual Annotations of this start: 4 of 216
- Called 18.4% of time when present
- Phage (with cluster) where this start called: BrainDrainer_39 (L4), Douge_38 (L4), Douzhi_38 (L4), Lewan_41 (L2), LilDestine_41 (L2), MkaliMitinis3_41 (L2), Sarshaun_41 (L2),

Start 30:

- Found in 51 of 236 (21.6%) of genes in pham
- Manual Annotations of this start: 7 of 216
- Called 13.7% of time when present
- Phage (with cluster) where this start called: Adephagia_44 (K1), Adonis_44 (K1), Anaya_46 (K1), BarrelRoll_44 (K1), JAWS_44 (K1), Sulley_44 (K1), Tachez_44 (K1),

Start 31:

- Found in 64 of 236 (27.1%) of genes in pham
- Manual Annotations of this start: 28 of 216
- Called 43.8% of time when present
- Phage (with cluster) where this start called: BGIlluviae_44 (K1), BaghaKamala_43 (K1), Belladonna_44 (K1), Boiii_44 (K1), CREW_44 (K1), Capricorn_44 (K1), Dalmuri_44 (K1), Emerson_45 (K1), Geraldini_46 (K1), HedwigODU_44 (K1), Homura_44 (K1), Inky_44 (K1), Jarvi_44 (K1), Jeckyll_44 (K1), Llorens_44 (K1), Lunahalos_44 (K1), Nergal_41 (AG), Peel_44 (K1), Pokerus_43 (K1), Rapunzel97_44 (K1), Rosmarinus_44 (K1), Slimphazie_44 (K1), Spock_44 (K1), Topper_44 (K1), TruffulaTree_44 (K1), Twitch_44 (K1), Veliki_44 (K1), YoureAdopted_43 (K1),

Start 32:

- Found in 82 of 236 (34.7%) of genes in pham
- Manual Annotations of this start: 31 of 216
- Called 42.7% of time when present
- Phage (with cluster) where this start called: Acquire49_39 (L1), Appletree2_38 (L1), AvadaKedavra_39 (L1), Bellis_39 (L3), BourbonZero_38 (L3), Calm_39 (L1), Chaser_38 (L4), CicholasNage_39 (L1), Clautastrophe_39 (L3), DirkDirk_38 (L1), DrSeegs_41 (L2), DyoEdafos_40 (L4), Ellson_39 (L3), Enceladus_38 (L1), Finnry_39 (L3), Halena_38 (L1), Jubie_39 (L3), Kingsolomon_39 (L3), KirDoubleO7_37 (L3), Krypton555_39 (L3), Lumos_39 (L3), MAckerman_39 (L1), Moostard_39 (L3), MsGreen_39 (L3), Nicholas_39 (L3), OhShagHennessy_38 (L1), Rose5_38 (L1), Silverleaf_38 (L1), Snenia_39 (L3), Tourach_41 (L2), Tyson_38 (L1), Vetrrix_41 (L2), Wamburgxpress_39 (L1), Wyatt2_39 (L1), Zaria_39 (L1),

Start 33:

- Found in 10 of 236 (4.2%) of genes in pham
- Manual Annotations of this start: 5 of 216
- Called 50.0% of time when present
- Phage (with cluster) where this start called: BoostSeason_47 (K2), DismalFunk_47 (K2), Marcoliusprime_47 (K2), Mufasa_47 (K2), Strobilo_47 (K2),

Start 34:

- Found in 11 of 236 (4.7%) of genes in pham
- Manual Annotations of this start: 5 of 216
- Called 45.5% of time when present
- Phage (with cluster) where this start called: DismalStressor_47 (K2), Findley_47 (K2), MalagasyRose_45 (AG), Milly_47 (K2), ZoeJ_46 (K2),

Start 36:

- Found in 18 of 236 (7.6%) of genes in pham
- Manual Annotations of this start: 18 of 216
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Boilgate_43 (K8), Chancellor_48 (K4), Cheetobro_48 (K4), Eponine_50 (K4), Fionnbharth_48 (K4), JF1_48 (K4), Juliette_50 (K4), Malthus_49 (K4), MissDaisy_46 (K4), Mitti_48 (K4), OmniCritical_47 (K4), Patt_45 (K4), Reptar3000_46 (K4), Slarp_48 (K4), Taquito_48 (K4), Wintermute_48 (K4), Y10_47 (K4), Y2_47 (K4),

Start 37:

- Found in 8 of 236 (3.4%) of genes in pham
- Manual Annotations of this start: 2 of 216
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Gaia_69 (X), Nebkiss_69 (X),

Start 38:

- Found in 105 of 236 (44.5%) of genes in pham
- Manual Annotations of this start: 37 of 216
- Called 38.1% of time when present
- Phage (with cluster) where this start called: Amelie_39 (K1), Angelica_44 (K1), Asayake_44 (K1), BEEST_44 (K1), Bella96_45 (K1), Binglebops_39 (K1), CrimD_44 (K1), Curiosium_47 (K1), Dartin_46 (K1), Deby_44 (K1), Dole_47 (K1), DrHayes_45 (K1), Ganymede_45 (K1), Illumine_47 (K1), Jayhawk_45 (K1), LaterM_45 (K1), LilPharaoh_39 (K1), LindNT_44 (K1), Marshawn_47 (K6), McMater_46 (K1), Mdavu_40 (K1), MeaningOfLife_45 (K1), Megsy_45 (K1), Mynx_45 (K1), Niklas_46 (K1), Nutello_39 (K1), Padfoot_44 (K1), Padpat_45 (K1), Prithvi_45 (K1), QuincyRose_43 (K1), Richo_46 (K1), SamuelLPlaqson_45 (K1), Shaobing_46 (K1), ShiaSurprise_45 (K1), Stinson_45 (K1), TiniBug_45 (K1), Tiri_45 (K1), TreyKay_45 (K1), Urkel_45 (K1), Zavala_45 (K1),

Start 44:

- Found in 119 of 236 (50.4%) of genes in pham
- Manual Annotations of this start: 16 of 216
- Called 17.6% of time when present
- Phage (with cluster) where this start called: Aegeus_44 (L5), Archie_41 (L2), Baudelaire_44 (L5), Bazzle_41 (L2), BigCheese_41 (L2), BobsGarage_41 (L2), Crossroads_41 (L2), DHan_42 (L2), FarmResident_39 (L4), Finemlucis_41 (L2), Gabriela_41 (L2), Gardann_41 (L2), GuuelaD_41 (L2), Hafay_41 (L2), Itos_40 (L2), Miley16_41 (L2), Netyap_41 (L2), Quby_39 (L4), Soap141_41 (L2), Wilder_41 (L2), Zakai_41 (L2),

Start 45:

- Found in 13 of 236 (5.5%) of genes in pham
- Manual Annotations of this start: 3 of 216
- Called 30.8% of time when present
- Phage (with cluster) where this start called: Enkosi_42 (K1), Nikao_42 (K1), SgtBeansprout_39 (K1), Torres_42 (K1),

Start 46:

- Found in 94 of 236 (39.8%) of genes in pham
- Manual Annotations of this start: 1 of 216
- Called 1.1% of time when present
- Phage (with cluster) where this start called: LastHope_47 (K1),

Start 47:

- Found in 21 of 236 (8.9%) of genes in pham
- Manual Annotations of this start: 1 of 216
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Jobypre_39 (L3), LiyuLake_39 (L3), Lolly9_39 (L3),

Summary by clusters:

There are 15 clusters represented in this pham: AA, AG, K4, L4, K2, K1, L5, L2, L3, K5, L1, X, K8, K7, K6,

Info for manual annotations of cluster AA:

- Start number 21 was manually annotated 2 times for cluster AA.

Info for manual annotations of cluster AG:

- Start number 31 was manually annotated 1 time for cluster AG.
- Start number 34 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster K1:

- Start number 22 was manually annotated 1 time for cluster K1.
- Start number 24 was manually annotated 15 times for cluster K1.
- Start number 30 was manually annotated 7 times for cluster K1.
- Start number 31 was manually annotated 27 times for cluster K1.
- Start number 38 was manually annotated 36 times for cluster K1.
- Start number 45 was manually annotated 3 times for cluster K1.
- Start number 46 was manually annotated 1 time for cluster K1.

Info for manual annotations of cluster K2:

- Start number 24 was manually annotated 1 time for cluster K2.
- Start number 33 was manually annotated 5 times for cluster K2.
- Start number 34 was manually annotated 4 times for cluster K2.

Info for manual annotations of cluster K4:

- Start number 36 was manually annotated 17 times for cluster K4.

Info for manual annotations of cluster K5:

- Start number 10 was manually annotated 12 times for cluster K5.
- Start number 21 was manually annotated 10 times for cluster K5.

Info for manual annotations of cluster K6:

- Start number 38 was manually annotated 1 time for cluster K6.

Info for manual annotations of cluster K7:

- Start number 12 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster K8:

- Start number 36 was manually annotated 1 time for cluster K8.

Info for manual annotations of cluster L1:

- Start number 20 was manually annotated 3 times for cluster L1.
- Start number 32 was manually annotated 16 times for cluster L1.

Info for manual annotations of cluster L2:

- Start number 26 was manually annotated 8 times for cluster L2.
- Start number 27 was manually annotated 3 times for cluster L2.
- Start number 32 was manually annotated 3 times for cluster L2.
- Start number 44 was manually annotated 14 times for cluster L2.

Info for manual annotations of cluster L3:

- Start number 19 was manually annotated 4 times for cluster L3.
- Start number 32 was manually annotated 10 times for cluster L3.

- Start number 47 was manually annotated 1 time for cluster L3.

Info for manual annotations of cluster L4:

- Start number 26 was manually annotated 1 time for cluster L4.
- Start number 27 was manually annotated 1 time for cluster L4.
- Start number 32 was manually annotated 2 times for cluster L4.

Info for manual annotations of cluster L5:

- Start number 44 was manually annotated 2 times for cluster L5.

Info for manual annotations of cluster X:

- Start number 37 was manually annotated 2 times for cluster X.

Gene Information:

Gene: Acquire49_39 Start: 33043, Stop: 33345, Start Num: 32

Candidate Starts for Acquire49_39:

(Start: 20 @33007 has 3 MA's), (Start: 32 @33043 has 31 MA's), (52, 33178), (56, 33226), (58, 33235), (59, 33238), (60, 33256), (61, 33262), (70, 33307),

Gene: ActinUp_44 Start: 35120, Stop: 35401, Start Num: 24

Candidate Starts for ActinUp_44:

(Start: 24 @35120 has 16 MA's), (Start: 30 @35141 has 7 MA's), (Start: 31 @35144 has 28 MA's), (Start: 38 @35162 has 37 MA's), (42, 35183), (Start: 44 @35204 has 16 MA's), (Start: 46 @35216 has 1 MA's), (48, 35249), (54, 35315), (56, 35330), (64, 35378),

Gene: Adephagia_44 Start: 35138, Stop: 35398, Start Num: 30

Candidate Starts for Adephagia_44:

(Start: 24 @35117 has 16 MA's), (Start: 30 @35138 has 7 MA's), (Start: 31 @35141 has 28 MA's), (Start: 38 @35159 has 37 MA's), (42, 35180), (Start: 44 @35201 has 16 MA's), (Start: 46 @35213 has 1 MA's), (48, 35246), (54, 35312), (56, 35327), (64, 35375),

Gene: Adonis_44 Start: 35436, Stop: 35696, Start Num: 30

Candidate Starts for Adonis_44:

(Start: 24 @35415 has 16 MA's), (Start: 30 @35436 has 7 MA's), (Start: 31 @35439 has 28 MA's), (Start: 38 @35457 has 37 MA's), (42, 35478), (Start: 44 @35499 has 16 MA's), (Start: 46 @35511 has 1 MA's), (48, 35544), (54, 35610), (56, 35625), (67, 35685),

Gene: Aegeus_44 Start: 36838, Stop: 37059, Start Num: 44

Candidate Starts for Aegeus_44:

(Start: 37 @36796 has 2 MA's), (Start: 44 @36838 has 16 MA's), (Start: 46 @36850 has 1 MA's), (56, 36964), (57, 36967), (73, 37039),

Gene: Agent47_43 Start: 34663, Stop: 35010, Start Num: 21

Candidate Starts for Agent47_43:

(Start: 10 @34624 has 12 MA's), (Start: 21 @34663 has 12 MA's), (40, 34729), (51, 34822), (55, 34879), (56, 34885), (59, 34897), (63, 34930), (75, 34990),

Gene: Ageofdapage_46 Start: 36088, Stop: 36369, Start Num: 24

Candidate Starts for Ageofdapage_46:

(Start: 24 @36088 has 16 MA's), (Start: 31 @36112 has 28 MA's), (Start: 38 @36130 has 37 MA's), (42, 36151), (Start: 44 @36172 has 16 MA's), (Start: 46 @36184 has 1 MA's), (48, 36217), (54, 36283), (56, 36298),

Gene: AlleyCat_43 Start: 34517, Stop: 34864, Start Num: 21

Candidate Starts for AlleyCat_43:

(Start: 21 @34517 has 12 MA's), (40, 34583), (51, 34676), (55, 34733), (56, 34739), (59, 34751), (74, 34832), (75, 34844),

Gene: Amelie_39 Start: 34739, Stop: 34984, Start Num: 38

Candidate Starts for Amelie_39:

(Start: 38 @34739 has 37 MA's), (Start: 45 @34790 has 3 MA's), (48, 34826), (56, 34907), (60, 34937), (61, 34943),

Gene: Aminay_47 Start: 36566, Stop: 36913, Start Num: 12

Candidate Starts for Aminay_47:

(Start: 12 @36566 has 1 MA's), (23, 36599), (25, 36608), (Start: 37 @36647 has 2 MA's), (60, 36845),

Gene: Anaya_46 Start: 35748, Stop: 36008, Start Num: 30

Candidate Starts for Anaya_46:

(Start: 24 @35727 has 16 MA's), (Start: 30 @35748 has 7 MA's), (Start: 31 @35751 has 28 MA's), (Start: 38 @35769 has 37 MA's), (42, 35790), (Start: 44 @35811 has 16 MA's), (Start: 46 @35823 has 1 MA's), (48, 35856), (54, 35922), (56, 35937), (67, 35997),

Gene: Angelica_44 Start: 35389, Stop: 35628, Start Num: 38

Candidate Starts for Angelica_44:

(Start: 24 @35347 has 16 MA's), (Start: 30 @35368 has 7 MA's), (Start: 31 @35371 has 28 MA's), (Start: 38 @35389 has 37 MA's), (Start: 44 @35431 has 16 MA's), (Start: 46 @35443 has 1 MA's), (48, 35476), (54, 35542), (56, 35557), (64, 35605),

Gene: Apocalypse_47 Start: 36132, Stop: 36413, Start Num: 24

Candidate Starts for Apocalypse_47:

(Start: 24 @36132 has 16 MA's), (Start: 31 @36156 has 28 MA's), (Start: 38 @36174 has 37 MA's), (Start: 44 @36216 has 16 MA's), (Start: 46 @36228 has 1 MA's), (48, 36261), (54, 36327), (56, 36342), (64, 36390),

Gene: Appletree2_38 Start: 32985, Stop: 33272, Start Num: 32

Candidate Starts for Appletree2_38:

(Start: 20 @32949 has 3 MA's), (Start: 32 @32985 has 31 MA's), (51, 33105), (52, 33120), (55, 33162), (56, 33168), (59, 33180), (60, 33198), (61, 33204), (77, 33267),

Gene: Archie_41 Start: 34671, Stop: 34901, Start Num: 44

Candidate Starts for Archie_41:

(Start: 32 @34614 has 31 MA's), (Start: 44 @34671 has 16 MA's), (52, 34749), (55, 34791), (56, 34797), (59, 34809), (75, 34890),

Gene: Asayake_44 Start: 35474, Stop: 35713, Start Num: 38

Candidate Starts for Asayake_44:

(Start: 24 @35432 has 16 MA's), (Start: 30 @35453 has 7 MA's), (Start: 31 @35456 has 28 MA's), (Start: 38 @35474 has 37 MA's), (42, 35495), (Start: 44 @35516 has 16 MA's), (Start: 46 @35528 has 1 MA's), (48, 35561), (54, 35627), (56, 35642), (64, 35690),

Gene: Atiba_44 Start: 35080, Stop: 35361, Start Num: 24

Candidate Starts for Atiba_44:

(Start: 24 @35080 has 16 MA's), (Start: 30 @35101 has 7 MA's), (Start: 31 @35104 has 28 MA's),
(Start: 38 @35122 has 37 MA's), (42, 35143), (Start: 44 @35164 has 16 MA's), (Start: 46 @35176 has
1 MA's), (48, 35209), (54, 35275), (56, 35290), (64, 35338),

Gene: AvadaKedavra_39 Start: 33052, Stop: 33354, Start Num: 32

Candidate Starts for AvadaKedavra_39:

(Start: 20 @33016 has 3 MA's), (Start: 32 @33052 has 31 MA's), (52, 33187), (56, 33235), (58,
33244), (59, 33247), (60, 33265), (61, 33271), (70, 33316),

Gene: BEEST_44 Start: 35474, Stop: 35713, Start Num: 38

Candidate Starts for BEEST_44:

(Start: 24 @35432 has 16 MA's), (Start: 30 @35453 has 7 MA's), (Start: 31 @35456 has 28 MA's),
(Start: 38 @35474 has 37 MA's), (42, 35495), (Start: 44 @35516 has 16 MA's), (Start: 46 @35528 has
1 MA's), (48, 35561), (54, 35627), (56, 35642), (64, 35690),

Gene: BGlluviae_44 Start: 35259, Stop: 35516, Start Num: 31

Candidate Starts for BGlluviae_44:

(Start: 24 @35235 has 16 MA's), (Start: 30 @35256 has 7 MA's), (Start: 31 @35259 has 28 MA's),
(Start: 38 @35277 has 37 MA's), (42, 35298), (Start: 44 @35319 has 16 MA's), (Start: 46 @35331 has
1 MA's), (48, 35364), (54, 35430), (56, 35445), (64, 35493),

Gene: BaghaKamala_43 Start: 34579, Stop: 34836, Start Num: 31

Candidate Starts for BaghaKamala_43:

(Start: 24 @34555 has 16 MA's), (Start: 31 @34579 has 28 MA's), (Start: 38 @34597 has 37 MA's),
(Start: 44 @34639 has 16 MA's), (Start: 46 @34651 has 1 MA's), (48, 34684), (54, 34750), (56,
34765), (64, 34813),

Gene: BarrelRoll_44 Start: 35124, Stop: 35384, Start Num: 30

Candidate Starts for BarrelRoll_44:

(Start: 24 @35103 has 16 MA's), (Start: 30 @35124 has 7 MA's), (Start: 31 @35127 has 28 MA's),
(Start: 38 @35145 has 37 MA's), (42, 35166), (Start: 44 @35187 has 16 MA's), (Start: 46 @35199 has
1 MA's), (48, 35232), (54, 35298), (56, 35313), (64, 35361),

Gene: Baudelaire_44 Start: 36838, Stop: 37059, Start Num: 44

Candidate Starts for Baudelaire_44:

(Start: 37 @36796 has 2 MA's), (Start: 44 @36838 has 16 MA's), (Start: 46 @36850 has 1 MA's), (56,
36964), (57, 36967), (73, 37039),

Gene: Bazzle_41 Start: 34703, Stop: 34933, Start Num: 44

Candidate Starts for Bazzle_41:

(Start: 32 @34646 has 31 MA's), (Start: 44 @34703 has 16 MA's), (52, 34781), (55, 34823), (56,
34829), (59, 34841), (75, 34922),

Gene: Beezoo_46 Start: 36078, Stop: 36359, Start Num: 24

Candidate Starts for Beezoo_46:

(Start: 24 @36078 has 16 MA's), (Start: 31 @36102 has 28 MA's), (Start: 38 @36120 has 37 MA's),
(42, 36141), (Start: 44 @36162 has 16 MA's), (Start: 46 @36174 has 1 MA's), (48, 36207), (54,
36273), (56, 36288), (64, 36336),

Gene: Bella96_45 Start: 36011, Stop: 36250, Start Num: 38

Candidate Starts for Bella96_45:

(5, 35810), (6, 35816), (7, 35831), (8, 35915), (14, 35939), (Start: 38 @36011 has 37 MA's), (Start: 44 @36053 has 16 MA's), (Start: 46 @36065 has 1 MA's), (48, 36098), (54, 36164),

Gene: Belladonna_44 Start: 35259, Stop: 35516, Start Num: 31

Candidate Starts for Belladonna_44:

(Start: 24 @35235 has 16 MA's), (Start: 30 @35256 has 7 MA's), (Start: 31 @35259 has 28 MA's), (Start: 38 @35277 has 37 MA's), (42, 35298), (Start: 44 @35319 has 16 MA's), (Start: 46 @35331 has 1 MA's), (48, 35364), (54, 35430), (56, 35445), (64, 35493),

Gene: Bellis_39 Start: 34657, Stop: 34956, Start Num: 32

Candidate Starts for Bellis_39:

(Start: 32 @34657 has 31 MA's), (Start: 47 @34744 has 1 MA's), (49, 34768), (56, 34840), (59, 34852),

Gene: BigCheese_41 Start: 34467, Stop: 34697, Start Num: 44

Candidate Starts for BigCheese_41:

(Start: 26 @34392 has 9 MA's), (Start: 27 @34398 has 4 MA's), (Start: 32 @34410 has 31 MA's), (Start: 44 @34467 has 16 MA's), (55, 34587), (56, 34593), (59, 34605), (75, 34686),

Gene: Biglebops_39 Start: 34739, Stop: 34984, Start Num: 38

Candidate Starts for Biglebops_39:

(Start: 38 @34739 has 37 MA's), (Start: 45 @34790 has 3 MA's), (48, 34826), (56, 34907), (60, 34937), (61, 34943),

Gene: Blizzard_44 Start: 35432, Stop: 35713, Start Num: 24

Candidate Starts for Blizzard_44:

(Start: 24 @35432 has 16 MA's), (Start: 30 @35453 has 7 MA's), (Start: 31 @35456 has 28 MA's), (Start: 38 @35474 has 37 MA's), (42, 35495), (Start: 44 @35516 has 16 MA's), (Start: 46 @35528 has 1 MA's), (48, 35561), (54, 35627), (56, 35642), (64, 35690),

Gene: BobsGarage_41 Start: 34467, Stop: 34697, Start Num: 44

Candidate Starts for BobsGarage_41:

(Start: 26 @34392 has 9 MA's), (Start: 27 @34398 has 4 MA's), (Start: 32 @34410 has 31 MA's), (Start: 44 @34467 has 16 MA's), (55, 34587), (56, 34593), (59, 34605), (75, 34686),

Gene: Boiiii_44 Start: 35458, Stop: 35715, Start Num: 31

Candidate Starts for Boiiii_44:

(Start: 24 @35434 has 16 MA's), (Start: 30 @35455 has 7 MA's), (Start: 31 @35458 has 28 MA's), (Start: 38 @35476 has 37 MA's), (42, 35497), (Start: 44 @35518 has 16 MA's), (Start: 46 @35530 has 1 MA's), (48, 35563), (54, 35629), (56, 35644), (64, 35692),

Gene: Boilgate_43 Start: 36328, Stop: 36564, Start Num: 36

Candidate Starts for Boilgate_43:

(Start: 36 @36328 has 18 MA's), (66, 36550),

Gene: BoostSeason_47 Start: 36788, Stop: 37108, Start Num: 33

Candidate Starts for BoostSeason_47:

(Start: 33 @36788 has 5 MA's), (Start: 34 @36791 has 5 MA's), (Start: 38 @36800 has 37 MA's), (51, 36905), (56, 36968), (60, 36998), (70, 37049), (75, 37076), (78, 37091), (79, 37097),

Gene: BourbonZero_38 Start: 34636, Stop: 34935, Start Num: 32

Candidate Starts for BourbonZero_38:

(Start: 19 @34597 has 4 MA's), (Start: 32 @34636 has 31 MA's), (Start: 47 @34723 has 1 MA's), (49, 34747), (56, 34819), (59, 34831), (60, 34849),

Gene: BrainDrainer_39 Start: 33307, Stop: 33618, Start Num: 27

Candidate Starts for BrainDrainer_39:

(13, 33259), (Start: 19 @33280 has 4 MA's), (25, 33298), (Start: 26 @33301 has 9 MA's), (Start: 27 @33307 has 4 MA's), (Start: 32 @33319 has 31 MA's), (Start: 44 @33376 has 16 MA's), (51, 33439), (55, 33496), (59, 33514), (64, 33550),

Gene: Breezona_41 Start: 34392, Stop: 34697, Start Num: 26

Candidate Starts for Breezona_41:

(Start: 26 @34392 has 9 MA's), (Start: 27 @34398 has 4 MA's), (Start: 32 @34410 has 31 MA's), (Start: 44 @34467 has 16 MA's), (55, 34587), (56, 34593), (59, 34605), (75, 34686),

Gene: Bromden_40 Start: 33855, Stop: 34172, Start Num: 26

Candidate Starts for Bromden_40:

(Start: 26 @33855 has 9 MA's), (Start: 27 @33861 has 4 MA's), (Start: 32 @33873 has 31 MA's), (55, 34050), (59, 34068), (72, 34140), (77, 34167),

Gene: CREW_44 Start: 35259, Stop: 35516, Start Num: 31

Candidate Starts for CREW_44:

(Start: 24 @35235 has 16 MA's), (Start: 30 @35256 has 7 MA's), (Start: 31 @35259 has 28 MA's), (Start: 38 @35277 has 37 MA's), (42, 35298), (Start: 44 @35319 has 16 MA's), (Start: 46 @35331 has 1 MA's), (48, 35364), (54, 35430), (56, 35445), (64, 35493),

Gene: Calm_39 Start: 33058, Stop: 33360, Start Num: 32

Candidate Starts for Calm_39:

(Start: 20 @33022 has 3 MA's), (Start: 32 @33058 has 31 MA's), (52, 33193), (56, 33241), (58, 33250), (59, 33253), (60, 33271), (61, 33277), (70, 33322),

Gene: Capricorn_44 Start: 35259, Stop: 35516, Start Num: 31

Candidate Starts for Capricorn_44:

(Start: 24 @35235 has 16 MA's), (Start: 30 @35256 has 7 MA's), (Start: 31 @35259 has 28 MA's), (Start: 38 @35277 has 37 MA's), (42, 35298), (Start: 44 @35319 has 16 MA's), (Start: 46 @35331 has 1 MA's), (48, 35364), (54, 35430), (56, 35445), (64, 35493),

Gene: CaseJules_45 Start: 35432, Stop: 35713, Start Num: 24

Candidate Starts for CaseJules_45:

(Start: 24 @35432 has 16 MA's), (Start: 30 @35453 has 7 MA's), (Start: 31 @35456 has 28 MA's), (Start: 38 @35474 has 37 MA's), (42, 35495), (Start: 44 @35516 has 16 MA's), (Start: 46 @35528 has 1 MA's), (48, 35561), (54, 35627), (56, 35642), (64, 35690),

Gene: Chancellor_48 Start: 36169, Stop: 36417, Start Num: 36

Candidate Starts for Chancellor_48:

(9, 36073), (Start: 36 @36169 has 18 MA's), (56, 36340), (57, 36343),

Gene: Chaser_38 Start: 33136, Stop: 33435, Start Num: 32

Candidate Starts for Chaser_38:

(13, 33076), (Start: 19 @33097 has 4 MA's), (25, 33115), (Start: 26 @33118 has 9 MA's), (Start: 27 @33124 has 4 MA's), (Start: 32 @33136 has 31 MA's), (Start: 44 @33193 has 16 MA's), (51, 33256), (55, 33313), (59, 33331), (64, 33367),

Gene: Cheetobro_48 Start: 36166, Stop: 36414, Start Num: 36

Candidate Starts for Cheetobro_48:

(9, 36070), (Start: 36 @36166 has 18 MA's), (56, 36337), (57, 36340),

Gene: CicholasNage_39 Start: 33079, Stop: 33381, Start Num: 32

Candidate Starts for CicholasNage_39:

(Start: 20 @33043 has 3 MA's), (Start: 32 @33079 has 31 MA's), (52, 33214), (56, 33262), (58, 33271), (59, 33274), (60, 33292), (61, 33298), (70, 33343),

Gene: Clautastrophe_39 Start: 34655, Stop: 34954, Start Num: 32

Candidate Starts for Clautastrophe_39:

(Start: 32 @34655 has 31 MA's), (Start: 47 @34742 has 1 MA's), (56, 34838), (59, 34850),

Gene: Collard_42 Start: 34585, Stop: 34971, Start Num: 10

Candidate Starts for Collard_42:

(Start: 10 @34585 has 12 MA's), (Start: 21 @34624 has 12 MA's), (40, 34690), (51, 34783), (55, 34840), (56, 34846), (59, 34858), (63, 34891), (75, 34951),

Gene: CrimD_44 Start: 35400, Stop: 35639, Start Num: 38

Candidate Starts for CrimD_44:

(5, 35199), (6, 35205), (7, 35220), (8, 35304), (14, 35328), (Start: 22 @35352 has 1 MA's), (Start: 38 @35400 has 37 MA's), (Start: 44 @35442 has 16 MA's), (Start: 46 @35454 has 1 MA's), (48, 35487), (54, 35553), (56, 35568), (64, 35616),

Gene: Crossroads_41 Start: 34469, Stop: 34699, Start Num: 44

Candidate Starts for Crossroads_41:

(Start: 26 @34394 has 9 MA's), (Start: 27 @34400 has 4 MA's), (Start: 32 @34412 has 31 MA's), (Start: 44 @34469 has 16 MA's), (55, 34589), (56, 34595), (59, 34607), (75, 34688),

Gene: Curiosium_47 Start: 34347, Stop: 34634, Start Num: 38

Candidate Starts for Curiosium_47:

(Start: 38 @34347 has 37 MA's), (Start: 46 @34401 has 1 MA's), (49, 34443), (51, 34452), (75, 34623), (76, 34626),

Gene: DHan_42 Start: 34427, Stop: 34657, Start Num: 44

Candidate Starts for DHan_42:

(Start: 32 @34370 has 31 MA's), (Start: 44 @34427 has 16 MA's), (51, 34490), (52, 34505), (55, 34547), (56, 34553), (59, 34565), (75, 34646),

Gene: Dadosky_43 Start: 34519, Stop: 34866, Start Num: 21

Candidate Starts for Dadosky_43:

(Start: 21 @34519 has 12 MA's), (40, 34585), (51, 34678), (55, 34735), (56, 34741), (59, 34753), (74, 34834), (75, 34846),

Gene: Dalmuri_44 Start: 35259, Stop: 35516, Start Num: 31

Candidate Starts for Dalmuri_44:

(Start: 24 @35235 has 16 MA's), (Start: 30 @35256 has 7 MA's), (Start: 31 @35259 has 28 MA's), (Start: 38 @35277 has 37 MA's), (42, 35298), (Start: 44 @35319 has 16 MA's), (Start: 46 @35331 has 1 MA's), (48, 35364), (54, 35430), (56, 35445), (64, 35493),

Gene: Dartin_46 Start: 35860, Stop: 36105, Start Num: 38

Candidate Starts for Dartin_46:

(Start: 38 @35860 has 37 MA's), (Start: 45 @35911 has 3 MA's), (Start: 46 @35914 has 1 MA's), (56, 36028), (60, 36058),

Gene: Deby_44 Start: 35405, Stop: 35644, Start Num: 38

Candidate Starts for Deby_44:

(Start: 24 @35363 has 16 MA's), (Start: 30 @35384 has 7 MA's), (Start: 31 @35387 has 28 MA's), (Start: 38 @35405 has 37 MA's), (Start: 44 @35447 has 16 MA's), (Start: 46 @35459 has 1 MA's), (48, 35492), (54, 35558), (56, 35573), (64, 35621),

Gene: Devera_48 Start: 35896, Stop: 36177, Start Num: 24

Candidate Starts for Devera_48:

(Start: 24 @35896 has 16 MA's), (Start: 31 @35920 has 28 MA's), (Start: 38 @35938 has 37 MA's), (42, 35959), (Start: 44 @35980 has 16 MA's), (Start: 46 @35992 has 1 MA's), (48, 36025), (54, 36091), (56, 36106),

Gene: DirkDirk_38 Start: 33045, Stop: 33332, Start Num: 32

Candidate Starts for DirkDirk_38:

(Start: 20 @33009 has 3 MA's), (Start: 32 @33045 has 31 MA's), (51, 33165), (52, 33180), (55, 33222), (56, 33228), (59, 33240), (60, 33258), (61, 33264), (77, 33327),

Gene: DismalFunk_47 Start: 37222, Stop: 37542, Start Num: 33

Candidate Starts for DismalFunk_47:

(Start: 33 @37222 has 5 MA's), (Start: 34 @37225 has 5 MA's), (Start: 38 @37234 has 37 MA's), (51, 37339), (56, 37402), (60, 37432), (75, 37510), (78, 37525), (79, 37531),

Gene: DismalStressor_47 Start: 37225, Stop: 37542, Start Num: 34

Candidate Starts for DismalStressor_47:

(Start: 33 @37222 has 5 MA's), (Start: 34 @37225 has 5 MA's), (Start: 38 @37234 has 37 MA's), (51, 37339), (56, 37402), (60, 37432), (75, 37510), (78, 37525), (79, 37531),

Gene: Dole_47 Start: 35940, Stop: 36179, Start Num: 38

Candidate Starts for Dole_47:

(Start: 24 @35898 has 16 MA's), (Start: 31 @35922 has 28 MA's), (Start: 38 @35940 has 37 MA's), (42, 35961), (Start: 44 @35982 has 16 MA's), (Start: 46 @35994 has 1 MA's), (48, 36027), (54, 36093), (56, 36108),

Gene: Douge_38 Start: 33062, Stop: 33373, Start Num: 27

Candidate Starts for Douge_38:

(13, 33014), (Start: 19 @33035 has 4 MA's), (25, 33053), (Start: 26 @33056 has 9 MA's), (Start: 27 @33062 has 4 MA's), (Start: 32 @33074 has 31 MA's), (Start: 44 @33131 has 16 MA's), (55, 33251), (59, 33269), (64, 33305),

Gene: Douzhi_38 Start: 33168, Stop: 33479, Start Num: 27

Candidate Starts for Douzhi_38:

(13, 33120), (Start: 19 @33141 has 4 MA's), (25, 33159), (Start: 26 @33162 has 9 MA's), (Start: 27 @33168 has 4 MA's), (Start: 32 @33180 has 31 MA's), (Start: 44 @33237 has 16 MA's), (51, 33300), (55, 33357), (59, 33375), (64, 33411),

Gene: DrHayes_45 Start: 36056, Stop: 36295, Start Num: 38

Candidate Starts for DrHayes_45:

(5, 35855), (6, 35861), (7, 35876), (8, 35960), (14, 35984), (Start: 38 @36056 has 37 MA's), (Start: 44 @36098 has 16 MA's), (Start: 46 @36110 has 1 MA's), (48, 36143), (54, 36209),

Gene: DrSeegs_41 Start: 34410, Stop: 34697, Start Num: 32

Candidate Starts for DrSeegs_41:

(Start: 26 @34392 has 9 MA's), (Start: 27 @34398 has 4 MA's), (Start: 32 @34410 has 31 MA's),
(Start: 44 @34467 has 16 MA's), (55, 34587), (56, 34593), (59, 34605), (75, 34686),

Gene: DuncansLeg_39 Start: 34634, Stop: 34972, Start Num: 19

Candidate Starts for DuncansLeg_39:

(Start: 19 @34634 has 4 MA's), (Start: 32 @34673 has 31 MA's), (Start: 47 @34760 has 1 MA's), (49,
34784), (56, 34856), (59, 34868), (60, 34886),

Gene: Durfee_44 Start: 35432, Stop: 35713, Start Num: 24

Candidate Starts for Durfee_44:

(Start: 24 @35432 has 16 MA's), (Start: 30 @35453 has 7 MA's), (Start: 31 @35456 has 28 MA's),
(Start: 38 @35474 has 37 MA's), (42, 35495), (Start: 44 @35516 has 16 MA's), (Start: 46 @35528 has
1 MA's), (48, 35561), (54, 35627), (56, 35642), (64, 35690),

Gene: DyoEdafos_40 Start: 33408, Stop: 33707, Start Num: 32

Candidate Starts for DyoEdafos_40:

(13, 33348), (Start: 19 @33369 has 4 MA's), (25, 33387), (Start: 26 @33390 has 9 MA's), (Start: 27
@33396 has 4 MA's), (Start: 32 @33408 has 31 MA's), (55, 33585), (59, 33603),

Gene: Edugator_42 Start: 34944, Stop: 35291, Start Num: 21

Candidate Starts for Edugator_42:

(Start: 21 @34944 has 12 MA's), (40, 35010), (51, 35103), (55, 35160), (56, 35166), (59, 35178), (74,
35259), (75, 35271),

Gene: Ellson_39 Start: 34649, Stop: 34948, Start Num: 32

Candidate Starts for Ellson_39:

(Start: 19 @34610 has 4 MA's), (Start: 32 @34649 has 31 MA's), (Start: 47 @34736 has 1 MA's), (49,
34760), (56, 34832), (59, 34844), (60, 34862),

Gene: Emerson_45 Start: 35135, Stop: 35392, Start Num: 31

Candidate Starts for Emerson_45:

(Start: 24 @35111 has 16 MA's), (Start: 30 @35132 has 7 MA's), (Start: 31 @35135 has 28 MA's),
(Start: 38 @35153 has 37 MA's), (42, 35174), (Start: 44 @35195 has 16 MA's), (Start: 46 @35207 has
1 MA's), (48, 35240), (54, 35306), (56, 35321), (64, 35369),

Gene: Enceladus_38 Start: 33028, Stop: 33315, Start Num: 32

Candidate Starts for Enceladus_38:

(Start: 20 @32992 has 3 MA's), (Start: 32 @33028 has 31 MA's), (51, 33148), (52, 33163), (55,
33205), (56, 33211), (59, 33223), (60, 33241), (61, 33247), (77, 33310),

Gene: Enkosi_42 Start: 37403, Stop: 37597, Start Num: 45

Candidate Starts for Enkosi_42:

(Start: 38 @37352 has 37 MA's), (Start: 45 @37403 has 3 MA's), (48, 37439), (56, 37520), (60,
37550), (61, 37556),

Gene: Eponine_50 Start: 36922, Stop: 37167, Start Num: 36

Candidate Starts for Eponine_50:

(9, 36826), (Start: 36 @36922 has 18 MA's), (57, 37096),

Gene: Faith1_41 Start: 34392, Stop: 34697, Start Num: 26

Candidate Starts for Faith1_41:

(Start: 26 @34392 has 9 MA's), (Start: 27 @34398 has 4 MA's), (Start: 32 @34410 has 31 MA's),
(Start: 44 @34467 has 16 MA's), (55, 34587), (56, 34593), (59, 34605), (75, 34686),

Gene: FarmResident_39 Start: 33175, Stop: 33417, Start Num: 44

Candidate Starts for FarmResident_39:

(13, 33058), (Start: 19 @33079 has 4 MA's), (25, 33097), (Start: 26 @33100 has 9 MA's), (Start: 27 @33106 has 4 MA's), (Start: 32 @33118 has 31 MA's), (Start: 44 @33175 has 16 MA's), (55, 33295), (59, 33313), (64, 33349),

Gene: Feyre_43 Start: 35869, Stop: 36216, Start Num: 21

Candidate Starts for Feyre_43:

(Start: 21 @35869 has 12 MA's), (59, 36103), (60, 36121), (63, 36136), (75, 36196),

Gene: Findley_47 Start: 37218, Stop: 37535, Start Num: 34

Candidate Starts for Findley_47:

(Start: 33 @37215 has 5 MA's), (Start: 34 @37218 has 5 MA's), (Start: 38 @37227 has 37 MA's), (51, 37332), (56, 37395), (60, 37425), (75, 37503), (78, 37518), (79, 37524),

Gene: Finemlucis_41 Start: 34743, Stop: 34973, Start Num: 44

Candidate Starts for Finemlucis_41:

(Start: 26 @34668 has 9 MA's), (Start: 27 @34674 has 4 MA's), (Start: 32 @34686 has 31 MA's), (Start: 44 @34743 has 16 MA's), (55, 34863), (56, 34869), (59, 34881), (75, 34962),

Gene: Finnry_39 Start: 34658, Stop: 34957, Start Num: 32

Candidate Starts for Finnry_39:

(Start: 32 @34658 has 31 MA's), (Start: 47 @34745 has 1 MA's), (49, 34769), (56, 34841), (59, 34853),

Gene: Fionnbharth_48 Start: 36320, Stop: 36565, Start Num: 36

Candidate Starts for Fionnbharth_48:

(Start: 36 @36320 has 18 MA's), (57, 36494), (68, 36554),

Gene: Gabriela_41 Start: 34729, Stop: 34959, Start Num: 44

Candidate Starts for Gabriela_41:

(Start: 26 @34654 has 9 MA's), (Start: 27 @34660 has 4 MA's), (Start: 32 @34672 has 31 MA's), (Start: 44 @34729 has 16 MA's), (55, 34849), (56, 34855), (59, 34867), (75, 34948),

Gene: Gaia_69 Start: 45400, Stop: 45705, Start Num: 37

Candidate Starts for Gaia_69:

(Start: 37 @45400 has 2 MA's), (Start: 46 @45454 has 1 MA's), (48, 45487), (56, 45568), (64, 45616),

Gene: Ganymede_45 Start: 35592, Stop: 35831, Start Num: 38

Candidate Starts for Ganymede_45:

(5, 35391), (6, 35397), (7, 35412), (8, 35496), (14, 35520), (Start: 22 @35544 has 1 MA's), (Start: 38 @35592 has 37 MA's), (Start: 44 @35634 has 16 MA's), (Start: 46 @35646 has 1 MA's), (48, 35679), (54, 35745), (56, 35760), (64, 35808),

Gene: Gardann_41 Start: 34468, Stop: 34698, Start Num: 44

Candidate Starts for Gardann_41:

(Start: 26 @34393 has 9 MA's), (Start: 27 @34399 has 4 MA's), (Start: 32 @34411 has 31 MA's), (Start: 44 @34468 has 16 MA's), (55, 34588), (56, 34594), (59, 34606), (75, 34687),

Gene: Gengar_42 Start: 34445, Stop: 34831, Start Num: 10

Candidate Starts for Gengar_42:

(Start: 10 @34445 has 12 MA's), (Start: 21 @34484 has 12 MA's), (59, 34718), (60, 34736), (63, 34751), (75, 34811),

Gene: Geraldini_46 Start: 36191, Stop: 36448, Start Num: 31

Candidate Starts for Geraldini_46:

(Start: 24 @36167 has 16 MA's), (Start: 31 @36191 has 28 MA's), (Start: 38 @36209 has 37 MA's), (Start: 44 @36251 has 16 MA's), (Start: 46 @36263 has 1 MA's), (48, 36296), (54, 36362), (56, 36377), (64, 36425),

Gene: Guillsminger_43 Start: 34416, Stop: 34802, Start Num: 10

Candidate Starts for Guillsminger_43:

(Start: 10 @34416 has 12 MA's), (Start: 21 @34455 has 12 MA's), (59, 34689), (60, 34707), (63, 34722), (75, 34782),

Gene: GuuelaD_41 Start: 34506, Stop: 34736, Start Num: 44

Candidate Starts for GuuelaD_41:

(Start: 26 @34431 has 9 MA's), (Start: 27 @34437 has 4 MA's), (Start: 32 @34449 has 31 MA's), (Start: 44 @34506 has 16 MA's), (55, 34626), (56, 34632), (59, 34644), (75, 34725),

Gene: Hafay_41 Start: 34501, Stop: 34731, Start Num: 44

Candidate Starts for Hafay_41:

(Start: 26 @34426 has 9 MA's), (Start: 27 @34432 has 4 MA's), (Start: 32 @34444 has 31 MA's), (Start: 44 @34501 has 16 MA's), (55, 34621), (56, 34627), (59, 34639), (70, 34693), (75, 34720),

Gene: Halena_38 Start: 33054, Stop: 33356, Start Num: 32

Candidate Starts for Halena_38:

(Start: 20 @33018 has 3 MA's), (Start: 32 @33054 has 31 MA's), (52, 33189), (56, 33237), (58, 33246), (59, 33249), (60, 33267), (61, 33273), (70, 33318),

Gene: HedwigODU_44 Start: 35144, Stop: 35401, Start Num: 31

Candidate Starts for HedwigODU_44:

(Start: 24 @35120 has 16 MA's), (Start: 30 @35141 has 7 MA's), (Start: 31 @35144 has 28 MA's), (Start: 38 @35162 has 37 MA's), (42, 35183), (Start: 44 @35204 has 16 MA's), (Start: 46 @35216 has 1 MA's), (48, 35249), (54, 35315), (56, 35330), (64, 35378),

Gene: Heftyboy_42 Start: 34566, Stop: 34952, Start Num: 10

Candidate Starts for Heftyboy_42:

(Start: 10 @34566 has 12 MA's), (Start: 21 @34605 has 12 MA's), (59, 34839), (60, 34857), (63, 34872), (75, 34932),

Gene: Homura_44 Start: 35259, Stop: 35516, Start Num: 31

Candidate Starts for Homura_44:

(Start: 24 @35235 has 16 MA's), (Start: 30 @35256 has 7 MA's), (Start: 31 @35259 has 28 MA's), (Start: 38 @35277 has 37 MA's), (42, 35298), (Start: 44 @35319 has 16 MA's), (Start: 46 @35331 has 1 MA's), (48, 35364), (54, 35430), (56, 35445), (64, 35493),

Gene: Hyperbowlee_44 Start: 35432, Stop: 35713, Start Num: 24

Candidate Starts for Hyperbowlee_44:

(Start: 24 @35432 has 16 MA's), (Start: 30 @35453 has 7 MA's), (Start: 31 @35456 has 28 MA's), (Start: 38 @35474 has 37 MA's), (42, 35495), (Start: 44 @35516 has 16 MA's), (Start: 46 @35528 has 1 MA's), (48, 35561), (54, 35627), (56, 35642), (64, 35690),

Gene: Illumine_47 Start: 35940, Stop: 36179, Start Num: 38

Candidate Starts for Illumine_47:

(Start: 24 @35898 has 16 MA's), (Start: 31 @35922 has 28 MA's), (Start: 38 @35940 has 37 MA's), (42, 35961), (Start: 44 @35982 has 16 MA's), (Start: 46 @35994 has 1 MA's), (48, 36027), (54, 36093), (56, 36108),

Gene: Inky_44 Start: 35259, Stop: 35516, Start Num: 31

Candidate Starts for Inky_44:

(Start: 24 @35235 has 16 MA's), (Start: 30 @35256 has 7 MA's), (Start: 31 @35259 has 28 MA's), (Start: 38 @35277 has 37 MA's), (42, 35298), (Start: 44 @35319 has 16 MA's), (Start: 46 @35331 has 1 MA's), (48, 35364), (54, 35430), (56, 35445), (64, 35493),

Gene: InvictusManeo_42 Start: 34628, Stop: 35014, Start Num: 10

Candidate Starts for InvictusManeo_42:

(Start: 10 @34628 has 12 MA's), (Start: 21 @34667 has 12 MA's), (40, 34733), (51, 34826), (55, 34883), (56, 34889), (59, 34901), (63, 34934), (75, 34994),

Gene: Itos_40 Start: 33373, Stop: 33603, Start Num: 44

Candidate Starts for Itos_40:

(Start: 26 @33298 has 9 MA's), (Start: 27 @33304 has 4 MA's), (Start: 32 @33316 has 31 MA's), (Start: 44 @33373 has 16 MA's), (55, 33493), (56, 33499), (59, 33511), (75, 33592),

Gene: JAWS_44 Start: 35130, Stop: 35390, Start Num: 30

Candidate Starts for JAWS_44:

(Start: 24 @35109 has 16 MA's), (Start: 30 @35130 has 7 MA's), (Start: 31 @35133 has 28 MA's), (Start: 38 @35151 has 37 MA's), (42, 35172), (Start: 44 @35193 has 16 MA's), (Start: 46 @35205 has 1 MA's), (48, 35238), (54, 35304), (56, 35319), (64, 35367),

Gene: JF1_48 Start: 36237, Stop: 36485, Start Num: 36

Candidate Starts for JF1_48:

(Start: 36 @36237 has 18 MA's), (56, 36408), (57, 36411),

Gene: Jarvi_44 Start: 35259, Stop: 35516, Start Num: 31

Candidate Starts for Jarvi_44:

(Start: 24 @35235 has 16 MA's), (Start: 30 @35256 has 7 MA's), (Start: 31 @35259 has 28 MA's), (Start: 38 @35277 has 37 MA's), (42, 35298), (Start: 44 @35319 has 16 MA's), (Start: 46 @35331 has 1 MA's), (48, 35364), (54, 35430), (56, 35445), (64, 35493),

Gene: Jayhawk_45 Start: 35160, Stop: 35399, Start Num: 38

Candidate Starts for Jayhawk_45:

(Start: 24 @35118 has 16 MA's), (Start: 30 @35139 has 7 MA's), (Start: 31 @35142 has 28 MA's), (Start: 38 @35160 has 37 MA's), (42, 35181), (Start: 44 @35202 has 16 MA's), (Start: 46 @35214 has 1 MA's), (48, 35247), (54, 35313), (56, 35328), (64, 35376),

Gene: Jeckyll_44 Start: 35259, Stop: 35516, Start Num: 31

Candidate Starts for Jeckyll_44:

(Start: 24 @35235 has 16 MA's), (Start: 30 @35256 has 7 MA's), (Start: 31 @35259 has 28 MA's), (Start: 38 @35277 has 37 MA's), (42, 35298), (Start: 44 @35319 has 16 MA's), (Start: 46 @35331 has 1 MA's), (48, 35364), (54, 35430), (56, 35445), (64, 35493),

Gene: Jobypre_39 Start: 34742, Stop: 34954, Start Num: 47

Candidate Starts for Jobypre_39:

(Start: 32 @34655 has 31 MA's), (Start: 47 @34742 has 1 MA's), (56, 34838), (59, 34850),

Gene: JoeDirt_38 Start: 32990, Stop: 33313, Start Num: 20

Candidate Starts for JoeDirt_38:

(Start: 20 @32990 has 3 MA's), (Start: 32 @33026 has 31 MA's), (51, 33146), (52, 33161), (55, 33203), (56, 33209), (59, 33221), (60, 33239), (61, 33245), (77, 33308),

Gene: Joy99_44 Start: 35164, Stop: 35445, Start Num: 24

Candidate Starts for Joy99_44:

(Start: 24 @35164 has 16 MA's), (Start: 30 @35185 has 7 MA's), (Start: 31 @35188 has 28 MA's), (Start: 38 @35206 has 37 MA's), (42, 35227), (Start: 44 @35248 has 16 MA's), (Start: 46 @35260 has 1 MA's), (48, 35293), (54, 35359), (56, 35374), (64, 35422),

Gene: Jubie_39 Start: 34656, Stop: 34955, Start Num: 32

Candidate Starts for Jubie_39:

(Start: 32 @34656 has 31 MA's), (Start: 47 @34743 has 1 MA's), (56, 34839), (59, 34851),

Gene: Juliette_50 Start: 36393, Stop: 36641, Start Num: 36

Candidate Starts for Juliette_50:

(9, 36297), (Start: 20 @36339 has 3 MA's), (Start: 36 @36393 has 18 MA's), (56, 36564), (57, 36567),

Gene: Kahlid_41 Start: 34398, Stop: 34703, Start Num: 26

Candidate Starts for Kahlid_41:

(Start: 26 @34398 has 9 MA's), (Start: 27 @34404 has 4 MA's), (Start: 32 @34416 has 31 MA's), (Start: 44 @34473 has 16 MA's), (55, 34593), (56, 34599), (59, 34611), (70, 34665), (75, 34692),

Gene: Kingsolomon_39 Start: 34655, Stop: 34954, Start Num: 32

Candidate Starts for Kingsolomon_39:

(Start: 32 @34655 has 31 MA's), (Start: 47 @34742 has 1 MA's), (56, 34838), (59, 34850),

Gene: KirDoubleO7_37 Start: 34677, Stop: 34976, Start Num: 32

Candidate Starts for KirDoubleO7_37:

(Start: 19 @34638 has 4 MA's), (Start: 32 @34677 has 31 MA's), (Start: 47 @34764 has 1 MA's), (49, 34788), (56, 34860), (59, 34872), (60, 34890),

Gene: Kratio_41 Start: 34179, Stop: 34565, Start Num: 10

Candidate Starts for Kratio_41:

(Start: 10 @34179 has 12 MA's), (Start: 21 @34218 has 12 MA's), (40, 34284), (51, 34377), (55, 34434), (56, 34440), (59, 34452), (63, 34485), (75, 34545),

Gene: Krypton555_39 Start: 34572, Stop: 34871, Start Num: 32

Candidate Starts for Krypton555_39:

(Start: 19 @34533 has 4 MA's), (Start: 32 @34572 has 31 MA's), (Start: 47 @34659 has 1 MA's), (49, 34683), (56, 34755), (59, 34767), (71, 34836),

Gene: Larva_43 Start: 34386, Stop: 34733, Start Num: 21

Candidate Starts for Larva_43:

(Start: 21 @34386 has 12 MA's), (40, 34452), (51, 34545), (55, 34602), (56, 34608), (59, 34620), (74, 34701), (75, 34713),

Gene: LastHope_47 Start: 34715, Stop: 34948, Start Num: 46

Candidate Starts for LastHope_47:

(Start: 38 @34661 has 37 MA's), (Start: 46 @34715 has 1 MA's), (51, 34766),

Gene: LaterM_45 Start: 36054, Stop: 36293, Start Num: 38

Candidate Starts for LaterM_45:

(Start: 24 @36012 has 16 MA's), (Start: 31 @36036 has 28 MA's), (Start: 38 @36054 has 37 MA's), (42, 36075), (Start: 44 @36096 has 16 MA's), (Start: 46 @36108 has 1 MA's), (48, 36141), (54, 36207), (56, 36222),

Gene: LeBron_39 Start: 33034, Stop: 33357, Start Num: 20

Candidate Starts for LeBron_39:

(Start: 20 @33034 has 3 MA's), (Start: 32 @33070 has 31 MA's), (51, 33190), (52, 33205), (55, 33247), (56, 33253), (59, 33265), (60, 33283), (61, 33289), (77, 33352),

Gene: Leston_42 Start: 34584, Stop: 34931, Start Num: 21

Candidate Starts for Leston_42:

(Start: 10 @34545 has 12 MA's), (Start: 21 @34584 has 12 MA's), (59, 34818), (60, 34836), (63, 34851), (75, 34911),

Gene: Lewan_41 Start: 34391, Stop: 34690, Start Num: 27

Candidate Starts for Lewan_41:

(Start: 27 @34391 has 4 MA's), (Start: 32 @34403 has 31 MA's), (Start: 44 @34460 has 16 MA's), (55, 34580), (56, 34586), (59, 34598), (75, 34679),

Gene: LilDestine_41 Start: 34396, Stop: 34695, Start Num: 27

Candidate Starts for LilDestine_41:

(Start: 26 @34390 has 9 MA's), (Start: 27 @34396 has 4 MA's), (Start: 32 @34408 has 31 MA's), (Start: 44 @34465 has 16 MA's), (55, 34585), (56, 34591), (59, 34603), (75, 34684),

Gene: LilPharaoh_39 Start: 34467, Stop: 34712, Start Num: 38

Candidate Starts for LilPharaoh_39:

(Start: 38 @34467 has 37 MA's), (Start: 45 @34518 has 3 MA's), (48, 34554), (56, 34635), (60, 34665), (61, 34671),

Gene: LindNT_44 Start: 35343, Stop: 35582, Start Num: 38

Candidate Starts for LindNT_44:

(5, 35142), (6, 35148), (7, 35163), (8, 35247), (14, 35271), (Start: 38 @35343 has 37 MA's), (42, 35364), (Start: 44 @35385 has 16 MA's), (Start: 46 @35397 has 1 MA's), (48, 35430), (54, 35496), (56, 35511),

Gene: LiyuLake_39 Start: 34726, Stop: 34938, Start Num: 47

Candidate Starts for LiyuLake_39:

(Start: 19 @34600 has 4 MA's), (Start: 32 @34639 has 31 MA's), (Start: 47 @34726 has 1 MA's), (49, 34750), (56, 34822), (59, 34834), (60, 34852),

Gene: Llorens_44 Start: 35259, Stop: 35516, Start Num: 31

Candidate Starts for Llorens_44:

(Start: 24 @35235 has 16 MA's), (Start: 30 @35256 has 7 MA's), (Start: 31 @35259 has 28 MA's), (Start: 38 @35277 has 37 MA's), (42, 35298), (Start: 44 @35319 has 16 MA's), (Start: 46 @35331 has 1 MA's), (48, 35364), (54, 35430), (56, 35445), (64, 35493),

Gene: Loadrie_41 Start: 34424, Stop: 34729, Start Num: 26

Candidate Starts for Loadrie_41:

(Start: 26 @34424 has 9 MA's), (Start: 27 @34430 has 4 MA's), (Start: 32 @34442 has 31 MA's), (Start: 44 @34499 has 16 MA's), (55, 34619), (56, 34625), (59, 34637), (70, 34691), (75, 34718),

Gene: Lolly9_39 Start: 34550, Stop: 34762, Start Num: 47

Candidate Starts for Lolly9_39:

(Start: 19 @34424 has 4 MA's), (Start: 32 @34463 has 31 MA's), (Start: 47 @34550 has 1 MA's), (49, 34574), (56, 34646), (59, 34658), (60, 34676),

Gene: Lumos_39 Start: 34652, Stop: 34951, Start Num: 32

Candidate Starts for Lumos_39:

(Start: 32 @34652 has 31 MA's), (Start: 47 @34739 has 1 MA's), (56, 34835), (59, 34847),

Gene: Lunahalos_44 Start: 35259, Stop: 35516, Start Num: 31

Candidate Starts for Lunahalos_44:

(Start: 24 @35235 has 16 MA's), (Start: 30 @35256 has 7 MA's), (Start: 31 @35259 has 28 MA's), (Start: 38 @35277 has 37 MA's), (42, 35298), (Start: 44 @35319 has 16 MA's), (Start: 46 @35331 has 1 MA's), (48, 35364), (54, 35430), (56, 35445), (64, 35493),

Gene: MAckerman_39 Start: 33048, Stop: 33350, Start Num: 32

Candidate Starts for MAckerman_39:

(Start: 20 @33012 has 3 MA's), (Start: 32 @33048 has 31 MA's), (52, 33183), (56, 33231), (58, 33240), (59, 33243), (60, 33261), (61, 33267), (70, 33312),

Gene: MalagasyRose_45 Start: 33899, Stop: 34168, Start Num: 34

Candidate Starts for MalagasyRose_45:

(Start: 34 @33899 has 5 MA's), (Start: 37 @33908 has 2 MA's), (43, 33947), (Start: 46 @33962 has 1 MA's), (49, 34004), (53, 34040), (62, 34106),

Gene: Malthus_49 Start: 36081, Stop: 36329, Start Num: 36

Candidate Starts for Malthus_49:

(9, 35985), (Start: 20 @36027 has 3 MA's), (Start: 36 @36081 has 18 MA's), (56, 36252), (57, 36255),

Gene: Marcoliusprime_47 Start: 37222, Stop: 37542, Start Num: 33

Candidate Starts for Marcoliusprime_47:

(Start: 33 @37222 has 5 MA's), (Start: 34 @37225 has 5 MA's), (Start: 38 @37234 has 37 MA's), (51, 37339), (56, 37402), (60, 37432), (75, 37510), (78, 37525), (79, 37531),

Gene: Marshawn_47 Start: 36184, Stop: 36432, Start Num: 38

Candidate Starts for Marshawn_47:

(Start: 38 @36184 has 37 MA's), (42, 36205), (Start: 46 @36238 has 1 MA's), (56, 36352), (60, 36382), (65, 36406),

Gene: McMater_46 Start: 35860, Stop: 36105, Start Num: 38

Candidate Starts for McMater_46:

(Start: 38 @35860 has 37 MA's), (Start: 45 @35911 has 3 MA's), (Start: 46 @35914 has 1 MA's), (56, 36028), (60, 36058),

Gene: Mdavu_40 Start: 34728, Stop: 34973, Start Num: 38

Candidate Starts for Mdavu_40:

(Start: 38 @34728 has 37 MA's), (Start: 45 @34779 has 3 MA's), (48, 34815), (56, 34896), (60, 34926), (61, 34932),

Gene: MeaningOfLife_45 Start: 36086, Stop: 36325, Start Num: 38

Candidate Starts for MeaningOfLife_45:

(5, 35885), (6, 35891), (7, 35906), (8, 35990), (14, 36014), (Start: 22 @36038 has 1 MA's), (Start: 38 @36086 has 37 MA's), (Start: 44 @36128 has 16 MA's), (Start: 46 @36140 has 1 MA's), (48, 36173), (54, 36239), (56, 36254), (64, 36302),

Gene: Megsy_45 Start: 35402, Stop: 35641, Start Num: 38

Candidate Starts for Megsy_45:

(5, 35201), (6, 35207), (7, 35222), (8, 35306), (14, 35330), (Start: 22 @35354 has 1 MA's), (Start: 38 @35402 has 37 MA's), (Start: 44 @35444 has 16 MA's), (Start: 46 @35456 has 1 MA's), (48, 35489), (54, 35555), (56, 35570), (64, 35618),

Gene: Miley16_41 Start: 34467, Stop: 34697, Start Num: 44

Candidate Starts for Miley16_41:

(Start: 26 @34392 has 9 MA's), (Start: 27 @34398 has 4 MA's), (Start: 32 @34410 has 31 MA's), (Start: 44 @34467 has 16 MA's), (55, 34587), (56, 34593), (59, 34605), (75, 34686),

Gene: Milly_47 Start: 37198, Stop: 37515, Start Num: 34

Candidate Starts for Milly_47:

(Start: 33 @37195 has 5 MA's), (Start: 34 @37198 has 5 MA's), (Start: 38 @37207 has 37 MA's), (51, 37312), (56, 37375), (60, 37405), (75, 37483), (78, 37498), (79, 37504),

Gene: MiniLon_39 Start: 34425, Stop: 34763, Start Num: 19

Candidate Starts for MiniLon_39:

(Start: 19 @34425 has 4 MA's), (Start: 32 @34464 has 31 MA's), (Start: 47 @34551 has 1 MA's), (49, 34575), (56, 34647), (59, 34659), (60, 34677),

Gene: MiniMac_39 Start: 34422, Stop: 34760, Start Num: 19

Candidate Starts for MiniMac_39:

(11, 34392), (Start: 19 @34422 has 4 MA's), (Start: 32 @34461 has 31 MA's), (Start: 47 @34548 has 1 MA's), (49, 34572), (56, 34644), (59, 34656), (60, 34674),

Gene: Miryou_44 Start: 36748, Stop: 37134, Start Num: 10

Candidate Starts for Miryou_44:

(Start: 10 @36748 has 12 MA's), (Start: 21 @36787 has 12 MA's), (59, 37021), (60, 37039), (63, 37054), (75, 37114),

Gene: MissDaisy_46 Start: 35556, Stop: 35804, Start Num: 36

Candidate Starts for MissDaisy_46:

(16, 35493), (28, 35529), (29, 35535), (Start: 36 @35556 has 18 MA's), (56, 35727), (57, 35730),

Gene: Mitti_48 Start: 36257, Stop: 36505, Start Num: 36

Candidate Starts for Mitti_48:

(9, 36161), (Start: 36 @36257 has 18 MA's), (56, 36428), (57, 36431),

Gene: MkaliMitinis3_41 Start: 34400, Stop: 34699, Start Num: 27

Candidate Starts for MkaliMitinis3_41:

(Start: 26 @34394 has 9 MA's), (Start: 27 @34400 has 4 MA's), (Start: 32 @34412 has 31 MA's), (Start: 44 @34469 has 16 MA's), (55, 34589), (56, 34595), (59, 34607), (75, 34688),

Gene: Moostard_39 Start: 34657, Stop: 34956, Start Num: 32

Candidate Starts for Moostard_39:

(Start: 32 @34657 has 31 MA's), (Start: 47 @34744 has 1 MA's), (49, 34768), (56, 34840), (59, 34852),

Gene: MsGreen_39 Start: 34655, Stop: 34954, Start Num: 32

Candidate Starts for MsGreen_39:

(Start: 32 @34655 has 31 MA's), (Start: 47 @34742 has 1 MA's), (56, 34838), (59, 34850),

Gene: Mufasa_47 Start: 36779, Stop: 37099, Start Num: 33

Candidate Starts for Mufasa_47:

(Start: 33 @36779 has 5 MA's), (Start: 34 @36782 has 5 MA's), (Start: 38 @36791 has 37 MA's), (51, 36896), (56, 36959), (60, 36989), (70, 37040), (75, 37067), (78, 37082), (79, 37088),

Gene: Murucutumbu_45 Start: 36105, Stop: 36386, Start Num: 24

Candidate Starts for Murucutumbu_45:

(Start: 24 @36105 has 16 MA's), (Start: 31 @36129 has 28 MA's), (Start: 38 @36147 has 37 MA's), (42, 36168), (Start: 44 @36189 has 16 MA's), (Start: 46 @36201 has 1 MA's), (48, 36234), (54, 36300), (56, 36315),

Gene: Mynx_45 Start: 35478, Stop: 35717, Start Num: 38

Candidate Starts for Mynx_45:

(Start: 24 @35436 has 16 MA's), (Start: 30 @35457 has 7 MA's), (Start: 31 @35460 has 28 MA's), (Start: 38 @35478 has 37 MA's), (42, 35499), (Start: 44 @35520 has 16 MA's), (Start: 46 @35532 has 1 MA's), (48, 35565), (54, 35631), (56, 35646), (64, 35694),

Gene: Nebkiss_69 Start: 44011, Stop: 44316, Start Num: 37

Candidate Starts for Nebkiss_69:

(Start: 37 @44011 has 2 MA's), (Start: 46 @44065 has 1 MA's), (48, 44098), (56, 44179), (64, 44227),

Gene: Nergal_41 Start: 33794, Stop: 34084, Start Num: 31

Candidate Starts for Nergal_41:

(Start: 31 @33794 has 28 MA's), (35, 33809), (Start: 46 @33866 has 1 MA's), (48, 33899), (50, 33911), (51, 33917), (52, 33932), (57, 33983), (60, 34010), (64, 34028),

Gene: Netyap_41 Start: 34467, Stop: 34697, Start Num: 44

Candidate Starts for Netyap_41:

(Start: 26 @34392 has 9 MA's), (Start: 27 @34398 has 4 MA's), (Start: 32 @34410 has 31 MA's), (Start: 44 @34467 has 16 MA's), (55, 34587), (56, 34593), (59, 34605), (75, 34686),

Gene: Nicholas_39 Start: 34655, Stop: 34954, Start Num: 32

Candidate Starts for Nicholas_39:

(Start: 32 @34655 has 31 MA's), (Start: 47 @34742 has 1 MA's), (56, 34838), (59, 34850),

Gene: Nicholasp3_41 Start: 34393, Stop: 34698, Start Num: 26

Candidate Starts for Nicholasp3_41:

(Start: 26 @34393 has 9 MA's), (Start: 27 @34399 has 4 MA's), (Start: 32 @34411 has 31 MA's), (Start: 44 @34468 has 16 MA's), (55, 34588), (56, 34594), (59, 34606), (75, 34687),

Gene: Nikao_42 Start: 37403, Stop: 37597, Start Num: 45

Candidate Starts for Nikao_42:

(Start: 38 @37352 has 37 MA's), (Start: 45 @37403 has 3 MA's), (48, 37439), (56, 37520), (60, 37550), (61, 37556),

Gene: Niklas_46 Start: 35918, Stop: 36166, Start Num: 38

Candidate Starts for Niklas_46:

(Start: 38 @35918 has 37 MA's), (Start: 46 @35972 has 1 MA's), (56, 36086), (60, 36116), (64, 36134),

Gene: Nutello_39 Start: 34739, Stop: 34984, Start Num: 38

Candidate Starts for Nutello_39:

(Start: 38 @34739 has 37 MA's), (Start: 45 @34790 has 3 MA's), (48, 34826), (56, 34907), (60, 34937), (61, 34943),

Gene: OhShagHennessy_38 Start: 33016, Stop: 33303, Start Num: 32

Candidate Starts for OhShagHennessy_38:

(Start: 20 @32980 has 3 MA's), (Start: 32 @33016 has 31 MA's), (51, 33136), (52, 33151), (55, 33193), (56, 33199), (59, 33211), (60, 33229), (61, 33235), (77, 33298),

Gene: OkiRoe_42 Start: 34418, Stop: 34804, Start Num: 10

Candidate Starts for OkiRoe_42:

(Start: 10 @34418 has 12 MA's), (Start: 21 @34457 has 12 MA's), (59, 34691), (60, 34709), (63, 34724), (75, 34784),

Gene: OmniCritical_47 Start: 36066, Stop: 36314, Start Num: 36

Candidate Starts for OmniCritical_47:

(9, 35970), (Start: 20 @36012 has 3 MA's), (Start: 36 @36066 has 18 MA's), (56, 36237), (57, 36240),

Gene: Omnicron_45 Start: 34067, Stop: 34414, Start Num: 21

Candidate Starts for Omnicron_45:

(15, 34046), (Start: 21 @34067 has 12 MA's), (39, 34124), (56, 34289), (59, 34301), (64, 34337), (75, 34394),

Gene: PYPDinur_38 Start: 33159, Stop: 33479, Start Num: 25

Candidate Starts for PYPDinur_38:

(13, 33120), (Start: 19 @33141 has 4 MA's), (25, 33159), (Start: 26 @33162 has 9 MA's), (Start: 27 @33168 has 4 MA's), (Start: 32 @33180 has 31 MA's), (Start: 44 @33237 has 16 MA's), (51, 33300), (55, 33357), (59, 33375), (64, 33411),

Gene: Padfoot_44 Start: 35474, Stop: 35713, Start Num: 38

Candidate Starts for Padfoot_44:

(Start: 24 @35432 has 16 MA's), (Start: 30 @35453 has 7 MA's), (Start: 31 @35456 has 28 MA's), (Start: 38 @35474 has 37 MA's), (42, 35495), (Start: 44 @35516 has 16 MA's), (Start: 46 @35528 has 1 MA's), (48, 35561), (54, 35627), (56, 35642), (64, 35690),

Gene: Padpat_45 Start: 35153, Stop: 35392, Start Num: 38

Candidate Starts for Padpat_45:

(Start: 24 @35111 has 16 MA's), (Start: 30 @35132 has 7 MA's), (Start: 31 @35135 has 28 MA's), (Start: 38 @35153 has 37 MA's), (42, 35174), (Start: 44 @35195 has 16 MA's), (Start: 46 @35207 has 1 MA's), (48, 35240), (54, 35306), (56, 35321), (64, 35369),

Gene: Paola_42 Start: 34416, Stop: 34802, Start Num: 10

Candidate Starts for Paola_42:

(Start: 10 @34416 has 12 MA's), (Start: 21 @34455 has 12 MA's), (59, 34689), (60, 34707), (63, 34722), (75, 34782),

Gene: Patt_45 Start: 35280, Stop: 35528, Start Num: 36

Candidate Starts for Patt_45:

(16, 35217), (28, 35253), (29, 35259), (Start: 36 @35280 has 18 MA's), (56, 35451), (57, 35454),

Gene: Peel_44 Start: 35261, Stop: 35518, Start Num: 31

Candidate Starts for Peel_44:

(Start: 24 @35237 has 16 MA's), (Start: 30 @35258 has 7 MA's), (Start: 31 @35261 has 28 MA's), (Start: 38 @35279 has 37 MA's), (42, 35300), (Start: 44 @35321 has 16 MA's), (Start: 46 @35333 has

1 MA's), (48, 35366), (54, 35432), (56, 35447), (64, 35495),

Gene: Phrappuccino_41 Start: 23047, Stop: 23388, Start Num: 21

Candidate Starts for Phrappuccino_41:

(Start: 21 @23047 has 12 MA's), (Start: 37 @23095 has 2 MA's), (41, 23110), (Start: 46 @23149 has 1 MA's), (56, 23266), (64, 23314), (69, 23344),

Gene: Piatt_44 Start: 35432, Stop: 35713, Start Num: 24

Candidate Starts for Piatt_44:

(Start: 24 @35432 has 16 MA's), (Start: 30 @35453 has 7 MA's), (Start: 31 @35456 has 28 MA's), (Start: 38 @35474 has 37 MA's), (42, 35495), (Start: 44 @35516 has 16 MA's), (Start: 46 @35528 has 1 MA's), (48, 35561), (54, 35627), (56, 35642), (64, 35690),

Gene: Pokerus_43 Start: 35182, Stop: 35439, Start Num: 31

Candidate Starts for Pokerus_43:

(Start: 24 @35158 has 16 MA's), (Start: 31 @35182 has 28 MA's), (Start: 38 @35200 has 37 MA's), (Start: 44 @35242 has 16 MA's), (Start: 46 @35254 has 1 MA's), (48, 35287), (54, 35353), (56, 35368), (64, 35416),

Gene: Prithvi_45 Start: 35343, Stop: 35582, Start Num: 38

Candidate Starts for Prithvi_45:

(5, 35142), (6, 35148), (7, 35163), (8, 35247), (14, 35271), (Start: 38 @35343 has 37 MA's), (42, 35364), (Start: 44 @35385 has 16 MA's), (Start: 46 @35397 has 1 MA's), (48, 35430), (54, 35496), (56, 35511),

Gene: Psycho_43 Start: 34516, Stop: 34863, Start Num: 21

Candidate Starts for Psycho_43:

(Start: 21 @34516 has 12 MA's), (40, 34582), (51, 34675), (55, 34732), (56, 34738), (59, 34750), (74, 34831), (75, 34843),

Gene: Quby_39 Start: 33131, Stop: 33373, Start Num: 44

Candidate Starts for Quby_39:

(13, 33014), (Start: 19 @33035 has 4 MA's), (25, 33053), (Start: 26 @33056 has 9 MA's), (Start: 27 @33062 has 4 MA's), (Start: 32 @33074 has 31 MA's), (Start: 44 @33131 has 16 MA's), (51, 33194), (55, 33251), (59, 33269), (64, 33305),

Gene: QuincyRose_43 Start: 35592, Stop: 35831, Start Num: 38

Candidate Starts for QuincyRose_43:

(5, 35391), (6, 35397), (7, 35412), (8, 35496), (14, 35520), (Start: 22 @35544 has 1 MA's), (Start: 38 @35592 has 37 MA's), (Start: 44 @35634 has 16 MA's), (Start: 46 @35646 has 1 MA's), (48, 35679), (54, 35745), (56, 35760), (64, 35808),

Gene: Ramen_44 Start: 35122, Stop: 35403, Start Num: 24

Candidate Starts for Ramen_44:

(Start: 24 @35122 has 16 MA's), (Start: 30 @35143 has 7 MA's), (Start: 31 @35146 has 28 MA's), (Start: 38 @35164 has 37 MA's), (42, 35185), (Start: 44 @35206 has 16 MA's), (Start: 46 @35218 has 1 MA's), (48, 35251), (54, 35317), (56, 35332), (64, 35380),

Gene: Rando14_44 Start: 33637, Stop: 33984, Start Num: 21

Candidate Starts for Rando14_44:

(1, 33382), (2, 33388), (3, 33391), (4, 33415), (15, 33616), (Start: 21 @33637 has 12 MA's), (39, 33694), (56, 33859), (59, 33871), (75, 33964),

Gene: Rapunzel97_44 Start: 35142, Stop: 35399, Start Num: 31

Candidate Starts for Rapunzel97_44:

(Start: 24 @35118 has 16 MA's), (Start: 30 @35139 has 7 MA's), (Start: 31 @35142 has 28 MA's),
(Start: 38 @35160 has 37 MA's), (42, 35181), (Start: 44 @35202 has 16 MA's), (Start: 46 @35214 has
1 MA's), (48, 35247), (54, 35313), (56, 35328), (64, 35376),

Gene: Reptar3000_46 Start: 35271, Stop: 35519, Start Num: 36

Candidate Starts for Reptar3000_46:

(9, 35175), (Start: 20 @35217 has 3 MA's), (Start: 36 @35271 has 18 MA's), (56, 35442), (57, 35445),

Gene: Richo_46 Start: 35860, Stop: 36105, Start Num: 38

Candidate Starts for Richo_46:

(Start: 38 @35860 has 37 MA's), (Start: 45 @35911 has 3 MA's), (Start: 46 @35914 has 1 MA's), (56,
36028), (60, 36058),

Gene: Rose5_38 Start: 33043, Stop: 33345, Start Num: 32

Candidate Starts for Rose5_38:

(Start: 20 @33007 has 3 MA's), (Start: 32 @33043 has 31 MA's), (52, 33178), (56, 33226), (58,
33235), (59, 33238), (60, 33256), (61, 33262), (70, 33307),

Gene: Rosmarinus_44 Start: 35247, Stop: 35504, Start Num: 31

Candidate Starts for Rosmarinus_44:

(Start: 24 @35223 has 16 MA's), (Start: 30 @35244 has 7 MA's), (Start: 31 @35247 has 28 MA's),
(Start: 38 @35265 has 37 MA's), (42, 35286), (Start: 44 @35307 has 16 MA's), (Start: 46 @35319 has
1 MA's), (48, 35352), (54, 35418), (56, 35433), (64, 35481),

Gene: Rumpelstiltskin_41 Start: 34659, Stop: 34964, Start Num: 26

Candidate Starts for Rumpelstiltskin_41:

(Start: 26 @34659 has 9 MA's), (Start: 27 @34665 has 4 MA's), (Start: 32 @34677 has 31 MA's),
(Start: 44 @34734 has 16 MA's), (55, 34854), (56, 34860), (59, 34872), (75, 34953),

Gene: SamuelLPlaqson_45 Start: 36056, Stop: 36295, Start Num: 38

Candidate Starts for SamuelLPlaqson_45:

(5, 35855), (6, 35861), (7, 35876), (8, 35960), (14, 35984), (Start: 38 @36056 has 37 MA's), (Start: 44
@36098 has 16 MA's), (Start: 46 @36110 has 1 MA's), (48, 36143), (54, 36209),

Gene: Sarshaun_41 Start: 34432, Stop: 34731, Start Num: 27

Candidate Starts for Sarshaun_41:

(Start: 26 @34426 has 9 MA's), (Start: 27 @34432 has 4 MA's), (Start: 32 @34444 has 31 MA's),
(Start: 44 @34501 has 16 MA's), (55, 34621), (56, 34627), (59, 34639), (70, 34693), (75, 34720),

Gene: Settecandela_41 Start: 23047, Stop: 23388, Start Num: 21

Candidate Starts for Settecandela_41:

(Start: 21 @23047 has 12 MA's), (Start: 37 @23095 has 2 MA's), (41, 23110), (Start: 46 @23149 has
1 MA's), (56, 23266), (64, 23314), (69, 23344),

Gene: SgtBeansprout_39 Start: 34790, Stop: 34984, Start Num: 45

Candidate Starts for SgtBeansprout_39:

(Start: 38 @34739 has 37 MA's), (Start: 45 @34790 has 3 MA's), (48, 34826), (56, 34907), (60,
34937), (61, 34943),

Gene: Shaobing_46 Start: 35893, Stop: 36141, Start Num: 38

Candidate Starts for Shaobing_46:

(Start: 38 @35893 has 37 MA's), (Start: 46 @35947 has 1 MA's), (56, 36061), (60, 36091), (64, 36109),

Gene: Sheng711_39 Start: 33120, Stop: 33479, Start Num: 13

Candidate Starts for Sheng711_39:

(13, 33120), (Start: 19 @33141 has 4 MA's), (25, 33159), (Start: 26 @33162 has 9 MA's), (Start: 27 @33168 has 4 MA's), (Start: 32 @33180 has 31 MA's), (Start: 44 @33237 has 16 MA's), (51, 33300), (55, 33357), (59, 33375), (64, 33411),

Gene: ShiaSurprise_45 Start: 35474, Stop: 35713, Start Num: 38

Candidate Starts for ShiaSurprise_45:

(Start: 24 @35432 has 16 MA's), (Start: 30 @35453 has 7 MA's), (Start: 31 @35456 has 28 MA's), (Start: 38 @35474 has 37 MA's), (42, 35495), (Start: 44 @35516 has 16 MA's), (Start: 46 @35528 has 1 MA's), (48, 35561), (54, 35627), (56, 35642), (64, 35690),

Gene: Silverleaf_38 Start: 33043, Stop: 33345, Start Num: 32

Candidate Starts for Silverleaf_38:

(Start: 20 @33007 has 3 MA's), (Start: 32 @33043 has 31 MA's), (52, 33178), (56, 33226), (58, 33235), (59, 33238), (60, 33256), (61, 33262), (70, 33307),

Gene: Slarp_48 Start: 36169, Stop: 36417, Start Num: 36

Candidate Starts for Slarp_48:

(9, 36073), (Start: 36 @36169 has 18 MA's), (56, 36340), (57, 36343),

Gene: Slimphazie_44 Start: 35142, Stop: 35399, Start Num: 31

Candidate Starts for Slimphazie_44:

(Start: 24 @35118 has 16 MA's), (Start: 30 @35139 has 7 MA's), (Start: 31 @35142 has 28 MA's), (Start: 38 @35160 has 37 MA's), (42, 35181), (Start: 44 @35202 has 16 MA's), (Start: 46 @35214 has 1 MA's), (48, 35247), (54, 35313), (56, 35328), (64, 35376),

Gene: Snenia_39 Start: 34656, Stop: 34955, Start Num: 32

Candidate Starts for Snenia_39:

(Start: 32 @34656 has 31 MA's), (Start: 47 @34743 has 1 MA's), (56, 34839), (59, 34851),

Gene: SoSeph_42 Start: 34566, Stop: 34952, Start Num: 10

Candidate Starts for SoSeph_42:

(Start: 10 @34566 has 12 MA's), (Start: 21 @34605 has 12 MA's), (59, 34839), (60, 34857), (63, 34872), (75, 34932),

Gene: Soap141_41 Start: 34501, Stop: 34731, Start Num: 44

Candidate Starts for Soap141_41:

(Start: 26 @34426 has 9 MA's), (Start: 27 @34432 has 4 MA's), (Start: 32 @34444 has 31 MA's), (Start: 44 @34501 has 16 MA's), (55, 34621), (56, 34627), (59, 34639), (70, 34693), (75, 34720),

Gene: Spock_44 Start: 35260, Stop: 35517, Start Num: 31

Candidate Starts for Spock_44:

(Start: 24 @35236 has 16 MA's), (Start: 30 @35257 has 7 MA's), (Start: 31 @35260 has 28 MA's), (Start: 38 @35278 has 37 MA's), (42, 35299), (Start: 44 @35320 has 16 MA's), (Start: 46 @35332 has 1 MA's), (48, 35365), (54, 35431), (56, 35446), (64, 35494),

Gene: Stinson_45 Start: 35667, Stop: 35906, Start Num: 38

Candidate Starts for Stinson_45:

(Start: 24 @35625 has 16 MA's), (Start: 31 @35649 has 28 MA's), (Start: 38 @35667 has 37 MA's), (42, 35688), (Start: 44 @35709 has 16 MA's), (Start: 46 @35721 has 1 MA's), (48, 35754), (54, 35820), (56, 35835),

Gene: Strobilo_47 Start: 37197, Stop: 37517, Start Num: 33

Candidate Starts for Strobilo_47:

(Start: 33 @37197 has 5 MA's), (Start: 34 @37200 has 5 MA's), (Start: 38 @37209 has 37 MA's), (51, 37314), (56, 37377), (60, 37407), (75, 37485), (78, 37500), (79, 37506),

Gene: Sulley_44 Start: 35383, Stop: 35643, Start Num: 30

Candidate Starts for Sulley_44:

(Start: 24 @35362 has 16 MA's), (Start: 30 @35383 has 7 MA's), (Start: 31 @35386 has 28 MA's), (Start: 38 @35404 has 37 MA's), (Start: 44 @35446 has 16 MA's), (Start: 46 @35458 has 1 MA's), (48, 35491), (54, 35557), (56, 35572), (64, 35620),

Gene: TM4_42 Start: 31544, Stop: 31900, Start Num: 24

Candidate Starts for TM4_42:

(Start: 24 @31544 has 16 MA's), (25, 31547), (Start: 33 @31571 has 5 MA's), (Start: 34 @31574 has 5 MA's), (Start: 38 @31583 has 37 MA's), (51, 31688), (56, 31751), (60, 31781), (70, 31832), (75, 31859), (79, 31889),

Gene: Tachez_44 Start: 35101, Stop: 35361, Start Num: 30

Candidate Starts for Tachez_44:

(Start: 24 @35080 has 16 MA's), (Start: 30 @35101 has 7 MA's), (Start: 31 @35104 has 28 MA's), (Start: 38 @35122 has 37 MA's), (42, 35143), (Start: 44 @35164 has 16 MA's), (Start: 46 @35176 has 1 MA's), (48, 35209), (54, 35275), (56, 35290), (64, 35338),

Gene: Taquito_48 Start: 36416, Stop: 36664, Start Num: 36

Candidate Starts for Taquito_48:

(9, 36320), (Start: 36 @36416 has 18 MA's), (56, 36587), (57, 36590),

Gene: Thyatira_44 Start: 36765, Stop: 37151, Start Num: 10

Candidate Starts for Thyatira_44:

(Start: 10 @36765 has 12 MA's), (Start: 21 @36804 has 12 MA's), (59, 37038), (60, 37056), (63, 37071), (75, 37131),

Gene: TiniBug_45 Start: 36052, Stop: 36291, Start Num: 38

Candidate Starts for TiniBug_45:

(5, 35851), (6, 35857), (7, 35872), (8, 35956), (14, 35980), (Start: 38 @36052 has 37 MA's), (Start: 44 @36094 has 16 MA's), (Start: 46 @36106 has 1 MA's), (54, 36205), (56, 36220),

Gene: Tiri_45 Start: 35452, Stop: 35691, Start Num: 38

Candidate Starts for Tiri_45:

(5, 35251), (6, 35257), (7, 35272), (8, 35356), (14, 35380), (Start: 22 @35404 has 1 MA's), (Start: 38 @35452 has 37 MA's), (Start: 44 @35494 has 16 MA's), (Start: 46 @35506 has 1 MA's), (48, 35539), (54, 35605), (56, 35620), (64, 35668),

Gene: Topper_44 Start: 35259, Stop: 35516, Start Num: 31

Candidate Starts for Topper_44:

(Start: 24 @35235 has 16 MA's), (Start: 30 @35256 has 7 MA's), (Start: 31 @35259 has 28 MA's), (Start: 38 @35277 has 37 MA's), (42, 35298), (Start: 44 @35319 has 16 MA's), (Start: 46 @35331 has 1 MA's), (48, 35364), (54, 35430), (56, 35445), (64, 35493),

Gene: Torres_42 Start: 37404, Stop: 37598, Start Num: 45

Candidate Starts for Torres_42:

(Start: 38 @37353 has 37 MA's), (Start: 45 @37404 has 3 MA's), (48, 37440), (56, 37521), (60, 37551), (61, 37557),

Gene: Tourach_41 Start: 34425, Stop: 34712, Start Num: 32

Candidate Starts for Tourach_41:

(13, 34365), (Start: 32 @34425 has 31 MA's), (Start: 44 @34482 has 16 MA's), (52, 34560), (55, 34602), (56, 34608), (59, 34620),

Gene: TreyKay_45 Start: 35343, Stop: 35582, Start Num: 38

Candidate Starts for TreyKay_45:

(5, 35142), (6, 35148), (7, 35163), (8, 35247), (14, 35271), (Start: 38 @35343 has 37 MA's), (42, 35364), (Start: 44 @35385 has 16 MA's), (Start: 46 @35397 has 1 MA's), (48, 35430), (54, 35496), (56, 35511),

Gene: TruffulaTree_44 Start: 35138, Stop: 35395, Start Num: 31

Candidate Starts for TruffulaTree_44:

(Start: 24 @35114 has 16 MA's), (Start: 30 @35135 has 7 MA's), (Start: 31 @35138 has 28 MA's), (Start: 38 @35156 has 37 MA's), (42, 35177), (Start: 44 @35198 has 16 MA's), (Start: 46 @35210 has 1 MA's), (48, 35243), (54, 35309), (56, 35324), (64, 35372),

Gene: Twitch_44 Start: 35261, Stop: 35518, Start Num: 31

Candidate Starts for Twitch_44:

(Start: 24 @35237 has 16 MA's), (Start: 30 @35258 has 7 MA's), (Start: 31 @35261 has 28 MA's), (Start: 38 @35279 has 37 MA's), (42, 35300), (Start: 44 @35321 has 16 MA's), (Start: 46 @35333 has 1 MA's), (48, 35366), (54, 35432), (56, 35447), (64, 35495),

Gene: Tyson_38 Start: 33044, Stop: 33346, Start Num: 32

Candidate Starts for Tyson_38:

(Start: 20 @33008 has 3 MA's), (Start: 32 @33044 has 31 MA's), (52, 33179), (56, 33227), (58, 33236), (59, 33239), (60, 33257), (61, 33263), (70, 33308),

Gene: UPIE_39 Start: 33006, Stop: 33329, Start Num: 20

Candidate Starts for UPIE_39:

(Start: 20 @33006 has 3 MA's), (Start: 32 @33042 has 31 MA's), (51, 33162), (52, 33177), (55, 33219), (56, 33225), (59, 33237), (60, 33255), (61, 33261), (77, 33324),

Gene: Urkel_45 Start: 36056, Stop: 36295, Start Num: 38

Candidate Starts for Urkel_45:

(5, 35855), (6, 35861), (7, 35876), (8, 35960), (14, 35984), (Start: 38 @36056 has 37 MA's), (Start: 44 @36098 has 16 MA's), (Start: 46 @36110 has 1 MA's), (48, 36143), (54, 36209),

Gene: Validus_48 Start: 35897, Stop: 36190, Start Num: 22

Candidate Starts for Validus_48:

(Start: 22 @35897 has 1 MA's), (Start: 38 @35945 has 37 MA's), (Start: 45 @35996 has 3 MA's), (Start: 46 @35999 has 1 MA's), (56, 36113), (60, 36143), (65, 36167),

Gene: Veliki_44 Start: 35178, Stop: 35435, Start Num: 31

Candidate Starts for Veliki_44:

(Start: 24 @35154 has 16 MA's), (Start: 30 @35175 has 7 MA's), (Start: 31 @35178 has 28 MA's), (Start: 38 @35196 has 37 MA's), (42, 35217), (Start: 44 @35238 has 16 MA's), (Start: 46 @35250 has 1 MA's), (48, 35283), (54, 35349), (56, 35364), (64, 35412),

Gene: Vetrix_41 Start: 34417, Stop: 34704, Start Num: 32

Candidate Starts for Vetrix_41:

(Start: 26 @34399 has 9 MA's), (Start: 27 @34405 has 4 MA's), (Start: 32 @34417 has 31 MA's), (Start: 44 @34474 has 16 MA's), (55, 34594), (56, 34600), (59, 34612), (75, 34693),

Gene: Wamburgrxpress_39 Start: 33057, Stop: 33344, Start Num: 32

Candidate Starts for Wamburgrxpress_39:

(Start: 20 @33021 has 3 MA's), (Start: 32 @33057 has 31 MA's), (51, 33177), (52, 33192), (55, 33234), (56, 33240), (59, 33252), (60, 33270), (61, 33276), (77, 33339),

Gene: Waterfoul_43 Start: 34659, Stop: 35045, Start Num: 10

Candidate Starts for Waterfoul_43:

(Start: 10 @34659 has 12 MA's), (Start: 21 @34698 has 12 MA's), (59, 34932), (60, 34950), (63, 34965), (75, 35025),

Gene: Whirlwind_40 Start: 34375, Stop: 34713, Start Num: 19

Candidate Starts for Whirlwind_40:

(Start: 19 @34375 has 4 MA's), (Start: 32 @34414 has 31 MA's), (Start: 47 @34501 has 1 MA's), (49, 34525), (56, 34597), (59, 34609), (71, 34678),

Gene: Wigglewobble_41 Start: 34425, Stop: 34730, Start Num: 26

Candidate Starts for Wigglewobble_41:

(Start: 26 @34425 has 9 MA's), (Start: 27 @34431 has 4 MA's), (Start: 32 @34443 has 31 MA's), (Start: 44 @34500 has 16 MA's), (55, 34620), (56, 34626), (59, 34638), (70, 34692), (75, 34719),

Gene: Wilder_41 Start: 34473, Stop: 34703, Start Num: 44

Candidate Starts for Wilder_41:

(Start: 26 @34398 has 9 MA's), (Start: 27 @34404 has 4 MA's), (Start: 32 @34416 has 31 MA's), (Start: 44 @34473 has 16 MA's), (55, 34593), (56, 34599), (59, 34611), (70, 34665), (75, 34692),

Gene: Winky_41 Start: 34392, Stop: 34697, Start Num: 26

Candidate Starts for Winky_41:

(Start: 26 @34392 has 9 MA's), (Start: 27 @34398 has 4 MA's), (Start: 32 @34410 has 31 MA's), (Start: 44 @34467 has 16 MA's), (55, 34587), (56, 34593), (59, 34605), (75, 34686),

Gene: Wintermute_48 Start: 36318, Stop: 36566, Start Num: 36

Candidate Starts for Wintermute_48:

(9, 36222), (18, 36258), (Start: 36 @36318 has 18 MA's), (56, 36489), (57, 36492),

Gene: Wyatt2_39 Start: 33043, Stop: 33345, Start Num: 32

Candidate Starts for Wyatt2_39:

(Start: 20 @33007 has 3 MA's), (Start: 32 @33043 has 31 MA's), (52, 33178), (56, 33226), (58, 33235), (59, 33238), (60, 33256), (61, 33262), (70, 33307),

Gene: Y10_47 Start: 36237, Stop: 36485, Start Num: 36

Candidate Starts for Y10_47:

(Start: 36 @36237 has 18 MA's), (56, 36408), (57, 36411),

Gene: Y2_47 Start: 36237, Stop: 36485, Start Num: 36

Candidate Starts for Y2_47:

(Start: 36 @36237 has 18 MA's), (56, 36408), (57, 36411),

Gene: YoureAdopted_43 Start: 35343, Stop: 35600, Start Num: 31

Candidate Starts for YoureAdopted_43:

(Start: 24 @35319 has 16 MA's), (Start: 30 @35340 has 7 MA's), (Start: 31 @35343 has 28 MA's),
(Start: 38 @35361 has 37 MA's), (42, 35382), (Start: 44 @35403 has 16 MA's), (Start: 46 @35415 has
1 MA's), (48, 35448), (54, 35514), (56, 35529), (64, 35577),

Gene: Zabiza_39 Start: 31425, Stop: 31706, Start Num: 24

Candidate Starts for Zabiza_39:

(Start: 24 @31425 has 16 MA's), (Start: 30 @31446 has 7 MA's), (Start: 31 @31449 has 28 MA's),
(Start: 38 @31467 has 37 MA's), (42, 31488), (Start: 44 @31509 has 16 MA's), (Start: 46 @31521 has
1 MA's), (48, 31554), (54, 31620), (56, 31635), (64, 31683),

Gene: Zakai_41 Start: 34725, Stop: 34955, Start Num: 44

Candidate Starts for Zakai_41:

(Start: 26 @34650 has 9 MA's), (Start: 27 @34656 has 4 MA's), (Start: 32 @34668 has 31 MA's),
(Start: 44 @34725 has 16 MA's), (55, 34845), (56, 34851), (59, 34863), (75, 34944),

Gene: Zaria_39 Start: 33058, Stop: 33360, Start Num: 32

Candidate Starts for Zaria_39:

(Start: 20 @33022 has 3 MA's), (Start: 32 @33058 has 31 MA's), (52, 33193), (56, 33241), (58,
33250), (59, 33253), (60, 33271), (61, 33277), (70, 33322),

Gene: Zavala_45 Start: 35438, Stop: 35677, Start Num: 38

Candidate Starts for Zavala_45:

(Start: 30 @35417 has 7 MA's), (Start: 31 @35420 has 28 MA's), (Start: 38 @35438 has 37 MA's),
(42, 35459), (Start: 44 @35480 has 16 MA's), (Start: 46 @35492 has 1 MA's), (48, 35525), (54,
35591), (56, 35606), (64, 35654),

Gene: ZoeJ_46 Start: 36666, Stop: 36992, Start Num: 34

Candidate Starts for ZoeJ_46:

(17, 36615), (Start: 33 @36663 has 5 MA's), (Start: 34 @36666 has 5 MA's), (Start: 38 @36675 has
37 MA's), (51, 36780), (56, 36843), (60, 36873), (75, 36951), (79, 36981),