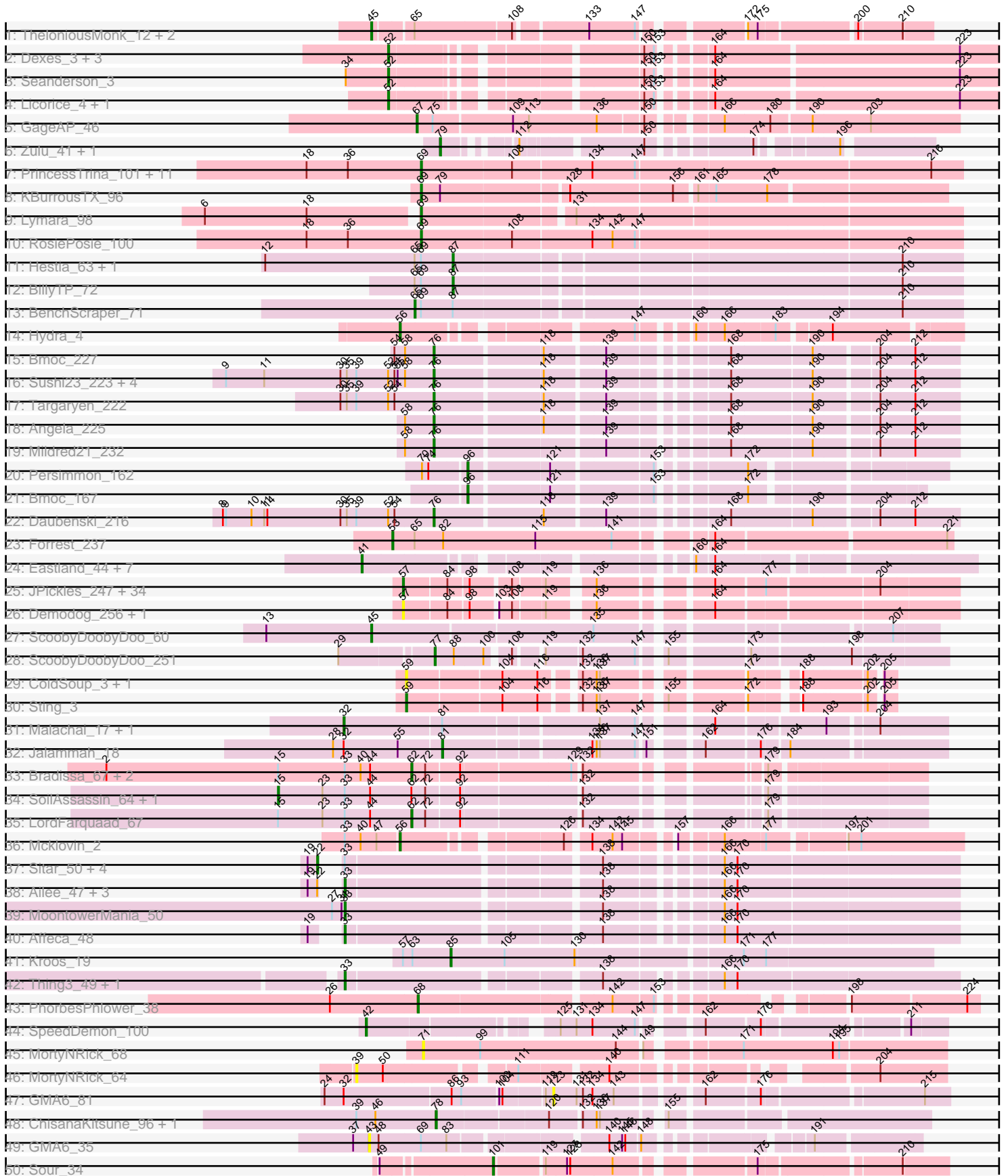
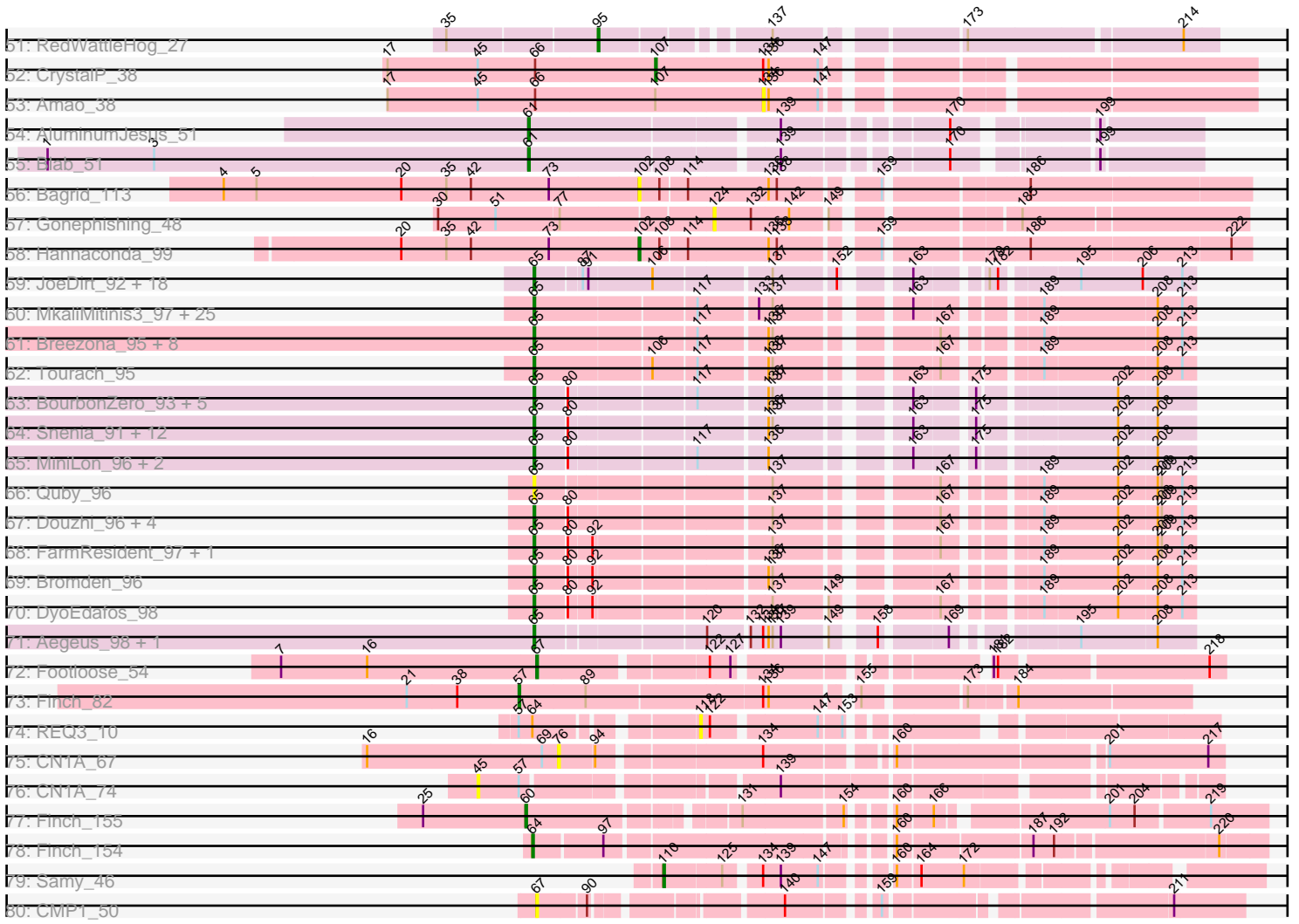


Pham 193711



Pham 193711



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 193711 Report

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

Pham number 193711 has 235 members, 39 are drafts.

Phages represented in each track:

- Track 1 : TheloniousMonk_12, Target_12, Gwendoluna_12
- Track 2 : Dexes_3, Smeagol_2, Gyzlar_3, Smairt_2
- Track 3 : Seanderson_3
- Track 4 : Licorice_4, BigPaolini_3
- Track 5 : GageAP_46
- Track 6 : Zulu_41, Tucker_41
- Track 7 : PrincessTrina_101, Chipper1996_1010, Mordred_100, JaNo_99, Linus_100, Scavito_101, HumptyDumpty_100, Chocolat_100, Chubster_100, Tophat_101, EdgarPoe_100, Kabreeze_100
- Track 8 : KBurrousTX_96
- Track 9 : Lymara_98
- Track 10 : RosiePosie_100
- Track 11 : Hestia_63, Faja_72
- Track 12 : BillyTP_72
- Track 13 : BenchScraper_71
- Track 14 : Hydra_4
- Track 15 : Bmoc_227
- Track 16 : Sushi23_223, Lululemon_219, Cursive_225, PacManQ_219, Larnav_222
- Track 17 : Targaryen_222
- Track 18 : Angela_225
- Track 19 : Mildred21_232
- Track 20 : Persimmon_162
- Track 21 : Bmoc_167
- Track 22 : Daubenski_216
- Track 23 : Forrest_237
- Track 24 : Eastland_44, Piccadilly_44, Ignacio_44, HFrancette_45, AxeJC_43, Vondra_43, Eklok_44, Cumberbatch_45
- Track 25 : JPickles_247, StubbySaigey_256, Darko_249, Blackbrain_248, Maby2021_250, Issimir_243, TinyTim_248, Erdmann_251, Ading_252, Shrimp_252, Gizmo_255, Specks_254, Chargie21_247, Trinitium_246, ZygoTaiga_246, Basquiat_247, Bread_246, Morizzled23_247, Yucca_250, Astraea_245, Lee7_249, Janiyra_253, Bonray_252, McGee_251, ErnieJ_243, BananaFence_247, Salacia_251, FoxtrotP1_248, PurduePete_250, FudgeTart_245, Asterius_245, Cactojaque_244, SrishMeg2525_247, EmToTheThree_250, Teardrop_248
- Track 26 : Demodog_256, Concombre_255
- Track 27 : ScoobyDoobyDoo_60
- Track 28 : ScoobyDoobyDoo_251

- Track 29 : ColdSoup_3, Jollymon_3
- Track 30 : Sting_3
- Track 31 : Malachai_17, Begonia_17
- Track 32 : Jalammah_18
- Track 33 : Bradissa_67, Lilas_67, EnalisNailo_66
- Track 34 : SoilAssassin_64, Attis_64
- Track 35 : LordFarquaad_67
- Track 36 : Mcklovin_2
- Track 37 : Sitar_50, Vivi2_54, Keitabear_50, Lennon_50, Angelicage_48
- Track 38 : Ailee_47, Love_55, Kewpiedoll_51, Shivanishola_50
- Track 39 : MoontowerMania_50
- Track 40 : Affeca_48
- Track 41 : Kroos_19
- Track 42 : Thing3_49, Kamashten_49
- Track 43 : PhorbesPhlower_38
- Track 44 : SpeedDemon_100
- Track 45 : MortyNRick_68
- Track 46 : MortyNRick_64
- Track 47 : GMA6_81
- Track 48 : ChisanaKitsune_96, MintFritos_94
- Track 49 : GMA6_35
- Track 50 : Sour_34
- Track 51 : RedWattleHog_27
- Track 52 : CrystalP_38
- Track 53 : Amao_38
- Track 54 : AluminumJesus_51
- Track 55 : Blab_51
- Track 56 : Bagrid_113
- Track 57 : Gonephishing_48
- Track 58 : Hannaconda_99
- Track 59 : JoeDirt_92, Zaria_91, AvadaKedavra_91, Calm_92, Wyatt2_92, Appletree2_90, LeBron_90, Rose5_92, Tyson_92, DirkDirk_88, Enceladus_88, Acquire49_91, CicholasNage_88, Halena_88, MAckerman_89, UPIE_90, Silverleaf_90, OhShagHennessy_87, Wamburggrxpress_90
- Track 60 : MkaliMitinis3_97, Vetrix_93, DHan_98, LilDestine_93, DanBing_94, Loadrie_94, Bazzle_92, BigCheese_95, Archie_92, Claus_94, GuuelaD_92, Finemlucis_96, Kahlid_94, Lewan_96, Zakai_96, Hafay_96, Baoshan_92, Nicholasp3_95, Crossroads_95, Sarshaun_96, Soap141_95, Wilder_96, ZhongYanYuan_92, Gardann_95, Rumpelstiltskin_91, BobsGarage_94
- Track 61 : Breezona_95, Faith1_95, DrSeegs_94, Wigglewiggle_95, Itos_95, Winky_95, Netyap_94, Gabriela_95, Miley16_95
- Track 62 : Tourach_95
- Track 63 : BourbonZero_93, Ellson_91, Krypton555_94, DuncansLeg_92, LiyuLake_91, KirDoubleO7_90
- Track 64 : Snenia_91, Moostard_89, Jubie_91, Bellis_90, Finnry_92, Jobypre_93, Nicholas_90, MsGreen_92, Kingsolomon_90, Samty_91, Clautastrophe_90, Lumos_92, Whirlwind_93
- Track 65 : MiniLon_96, MiniMac_96, Lolly9_91
- Track 66 : Quby_96
- Track 67 : Douzhi_96, Sheng711_97, Douge_96, BrainDrainer_97, PYPDinur_96
- Track 68 : FarmResident_97, Chaser_95
- Track 69 : Bromden_96
- Track 70 : DyoEdafos_98

- Track 71 : Aegeus_98, Baudelaire_98
- Track 72 : Footloose_54
- Track 73 : Finch_82
- Track 74 : REQ3_10
- Track 75 : CN1A_67
- Track 76 : CN1A_74
- Track 77 : Finch_155
- Track 78 : Finch_154
- Track 79 : Samy_46
- Track 80 : CMP1_50

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

The start number called the most often in the published annotations is 65, it was called in 70 of the 196 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acquire49_91, Aegeus_98, Appletree2_90, Archie_92, AvadaKedavra_91, Baoshan_92, Baudelaire_98, Bazzle_92, Bellis_90, BenchScraper_71, BigCheese_95, BobsGarage_94, BourbonZero_93, BrainDrainer_97, Breezona_95, Bromden_96, Calm_92, Chaser_95, CicholasNage_88, Claus_94, Clautastrophe_90, Crossroads_95, DHan_98, DanBing_94, DirkDirk_88, Douge_96, Douzhi_96, DrSeegs_94, DuncansLeg_92, DyoEdafos_98, Ellson_91, Enceladus_88, Faith1_95, FarmResident_97, Finemlucis_96, Finnry_92, Gabriela_95, Gardann_95, GuuelaD_92, Hafay_96, Halena_88, Itos_95, Jobypre_93, JoeDirt_92, Jubie_91, Kahlid_94, Kingsolomon_90, KirDoubleO7_90, Krypton555_94, LeBron_90, Lewan_96, LilDestine_93, LiyuLake_91, Loadrie_94, Lolly9_91, Lumos_92, MAckerman_89, Miley16_95, MiniLon_96, MiniMac_96, MkaliMitinis3_97, Moostard_89, MsGreen_92, Netyap_94, Nicholas_90, Nicholasp3_95, OhShagHennessy_87, PYPDinur_96, Quby_96, Rose5_92, Rumpelstiltskin_91, Samty_91, Sarshaun_96, Sheng711_97, Silverleaf_90, Snenia_91, Soap141_95, Tourach_95, Tyson_92, UPIE_90, Vetrix_93, Wamburggrxpress_90, Whirlwind_93, Wigglewiggles_95, Wilder_96, Winky_95, Wyatt2_92, Zakai_96, Zaria_91, ZhongYanYuan_92,

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

- BillyTP_72, Faja_72, Forrest_237, Gwendoluna_12, Hestia_63, Target_12, TheloniousMonk_12,

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

- Ading_252, Affeca_48, Ailee_47, AluminumJesus_51, Amao_38, Angela_225, Angelicage_48, Asterius_245, Astraea_245, Attis_64, AxeJC_43, Bagrid_113, BananaFence_247, Basquiat_247, Begonia_17, BigPaolini_3, Blab_51, Blackbrain_248, Bmoc_167, Bmoc_227, Bonray_252, Bradissa_67, Bread_246, CMP1_50, CN1A_67, CN1A_74, Cactojaque_244, Chargie21_247, Chipper1996_1010, ChisanaKitsune_96, Chocolat_100, Chubster_100, ColdSoup_3, Concombre_255, CrystalP_38, Cumberbatch_45, Cursive_225, Darko_249, Daubenski_216, Demodog_256, Dexes_3, Eastland_44, EdgarPoe_100, Eklok_44, EmToTheThree_250, EnalisNailo_66, Erdmann_251, ErnieJ_243, Finch_154, Finch_155, Finch_82, Footloose_54, FoxtrotP1_248, FudgeTart_245, GMA6_35,

GMA6_81, GageAP_46, Gizmo_255, Gonephishing_48, Gyzlar_3, HFrancette_45, Hannaconda_99, HumptyDumpty_100, Hydra_4, Ignacio_44, Issimir_243, JPickles_247, JaNo_99, Jalammah_18, Janiyra_253, Jollymon_3, KBurrousTX_96, Kabreeze_100, Kamashten_49, Keitabear_50, Kewpiedoll_51, Kroos_19, Larnav_222, Lee7_249, Lennon_50, Licorice_4, Lilas_67, Linus_100, LordFarquaad_67, Love_55, Lululemon_219, Lymara_98, Maby2021_250, Malachai_17, McGee_251, Mcklovin_2, Mildred21_232, MintFritos_94, MoontowerMania_50, Mordred_100, Morizzled23_247, MortyNRick_64, MortyNRick_68, PacManQ_219, Persimmon_162, PhorbessPhlower_38, Piccadilly_44, PrincessTrina_101, PurduePete_250, REQ3_10, RedWattleHog_27, RosiePosie_100, Salacia_251, Samy_46, Scavito_101, ScoobyDoobyDoo_251, ScoobyDoobyDoo_60, Seanderson_3, Shivanishola_50, Shrimp_252, Sitar_50, Smairt_2, Smeagol_2, SoilAssassin_64, Sour_34, Specks_254, SpeedDemon_100, SrishMeg2525_247, Sting_3, StubbySaigey_256, Sushi23_223, Targaryen_222, Teardrop_248, Thing3_49, TinyTim_248, Tophat_101, Trinitium_246, Tucker_41, Vivi2_54, Vondra_43, Yucca_250, Zulu_41, ZygoTaiga_246,

Summary by start number:

Start 15:

- Found in 6 of 235 (2.6%) of genes in pham
- Manual Annotations of this start: 2 of 196
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Attis_64 (CZ2), SoilAssassin_64 (CZ2),

Start 22:

- Found in 9 of 235 (3.8%) of genes in pham
- Manual Annotations of this start: 5 of 196
- Called 55.6% of time when present
- Phage (with cluster) where this start called: Angelicage_48 (DE1), Keitabear_50 (DE1), Lennon_50 (DE1), Sitar_50 (DE1), Vivi2_54 (DE1),

Start 32:

- Found in 4 of 235 (1.7%) of genes in pham
- Manual Annotations of this start: 2 of 196
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Begonia_17 (CV), Malachai_17 (CV),

Start 33:

- Found in 20 of 235 (8.5%) of genes in pham
- Manual Annotations of this start: 7 of 196
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Affeca_48 (DE1), Ailee_47 (DE1), Kamashten_49 (DE1), Kewpiedoll_51 (DE1), Love_55 (DE1), MoontowerMania_50 (DE1), Shivanishola_50 (DE1), Thing3_49 (DE1),

Start 39:

- Found in 10 of 235 (4.3%) of genes in pham
- No Manual Annotations of this start.
- Called 10.0% of time when present
- Phage (with cluster) where this start called: MortyNRick_64 (DN),

Start 41:

- Found in 8 of 235 (3.4%) of genes in pham
- Manual Annotations of this start: 8 of 196
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AxeJC_43 (BP), Cumberbatch_45 (BP), Eastland_44 (BP), Eklok_44 (BP), HFrancette_45 (BP), Ignacio_44 (BP), Piccadilly_44 (BP), Vondra_43 (BP),

Start 42:

- Found in 3 of 235 (1.3%) of genes in pham
- Manual Annotations of this start: 1 of 196
- Called 33.3% of time when present
- Phage (with cluster) where this start called: SpeedDemon_100 (DL),

Start 43:

- Found in 1 of 235 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA6_35 (DQ),

Start 45:

- Found in 7 of 235 (3.0%) of genes in pham
- Manual Annotations of this start: 4 of 196
- Called 71.4% of time when present
- Phage (with cluster) where this start called: CN1A_74 (singleton), Gwendoluna_12 (A1), ScoobyDoobyDoo_60 (C2), Target_12 (A1), TheloniousMonk_12 (A1),

Start 52:

- Found in 14 of 235 (6.0%) of genes in pham
- Manual Annotations of this start: 7 of 196
- Called 50.0% of time when present
- Phage (with cluster) where this start called: BigPaolini_3 (A1), Dexes_3 (A1), Gyzlar_3 (A1), Licorice_4 (A1), Seanderson_3 (A1), Smairt_2 (A1), Smeagol_2 (A1),

Start 53:

- Found in 1 of 235 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 196
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Forrest_237 (BK1),

Start 56:

- Found in 2 of 235 (0.9%) of genes in pham
- Manual Annotations of this start: 2 of 196
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hydra_4 (BD1), Mcklovin_2 (CZ4),

Start 57:

- Found in 41 of 235 (17.4%) of genes in pham
- Manual Annotations of this start: 34 of 196
- Called 92.7% of time when present
- Phage (with cluster) where this start called: Ading_252 (C1), Asterius_245 (C1), Astraea_245 (C1), BananaFence_247 (C1), Basquiat_247 (C1), Blackbrain_248 (C1), Bonray_252 (C1), Bread_246 (C1), Cactojaque_244 (C1), Chargie21_247 (C1), Concombre_255 (C1), Darko_249 (C1), Demodog_256 (C1), EmToTheThree_250

(C1), Erdmann_251 (C1), ErnieJ_243 (C1), Finch_82 (singleton), FoxtrotP1_248 (C1), FudgeTart_245 (C1), Gizmo_255 (C1), Issimir_243 (C1), JPickles_247 (C1), Janiyra_253 (C1), Lee7_249 (C1), Maby2021_250 (C1), McGee_251 (C1), Morizzled23_247 (C1), PurduePete_250 (C1), Salacia_251 (C1), Shrimp_252 (C1), Specks_254 (C1), SrishMeg2525_247 (C1), StubbySaigey_256 (C1), Teardrop_248 (C1), TinyTim_248 (C1), Trinitium_246 (C1), Yucca_250 (C1), ZygoTaiga_246 (C1),

Start 59:

- Found in 3 of 235 (1.3%) of genes in pham
- Manual Annotations of this start: 1 of 196
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ColdSoup_3 (CP), Jollymon_3 (CP), Sting_3 (CP),

Start 60:

- Found in 1 of 235 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 196
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Finch_155 (singleton),

Start 61:

- Found in 2 of 235 (0.9%) of genes in pham
- Manual Annotations of this start: 2 of 196
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AluminumJesus_51 (EG), Blab_51 (EG),

Start 62:

- Found in 6 of 235 (2.6%) of genes in pham
- Manual Annotations of this start: 4 of 196
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Bradissa_67 (CY1), EnalisNailo_66 (CY1), Lilas_67 (CY1), LordFarquaad_67 (CZ2),

Start 64:

- Found in 2 of 235 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 196
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Finch_154 (singleton),

Start 65:

- Found in 97 of 235 (41.3%) of genes in pham
- Manual Annotations of this start: 70 of 196
- Called 92.8% of time when present
- Phage (with cluster) where this start called: Acquire49_91 (L1), Aegeus_98 (L5), Appletree2_90 (L1), Archie_92 (L2), AvadaKedavra_91 (L1), Baoshan_92 (L2), Baudelaire_98 (L5), Bazzle_92 (L2), Bellis_90 (L3), BenchScraper_71 (AY), BigCheese_95 (L2), BobsGarage_94 (L2), BourbonZero_93 (L3), BrainDrainer_97 (L4), Breezona_95 (L2), Bromden_96 (L4), Calm_92 (L1), Chaser_95 (L4), CicholasNage_88 (L1), Claus_94 (L2), Clautastrophe_90 (L3), Crossroads_95 (L2), DHan_98 (L2), DanBing_94 (L2), DirkDirk_88 (L1), Douge_96 (L4), Douzhi_96 (L4), DrSeegs_94 (L2), DuncansLeg_92 (L3), DyoEdafos_98 (L4), Ellson_91 (L3), Enceladus_88 (L1), Faith1_95 (L2), FarmResident_97 (L4), Finemlucis_96 (L2), Finny_92 (L3), Gabriela_95 (L2), Gardann_95 (L2), GuuelaD_92 (L2), Hafay_96

(L2), Halena_88 (L1), Itos_95 (L2), Jobypre_93 (L3), JoeDirt_92 (L1), Jubie_91 (L3), Kahlid_94 (L2), Kingsolomon_90 (L3), KirDoubleO7_90 (L3), Krypton555_94 (L3), LeBron_90 (L1), Lewan_96 (L2), LilDestine_93 (L2), LiyuLake_91 (L3), Loadrie_94 (L2), Lolly9_91 (L3), Lumos_92 (L3), MAckerman_89 (L1), Miley16_95 (L2), MiniLon_96 (L3), MiniMac_96 (L3), MkaliMitinis3_97 (L2), Moostard_89 (L3), MsGreen_92 (L3), Netyap_94 (L2), Nicholas_90 (L3), Nicholasp3_95 (L2), OhShagHennessy_87 (L1), PYPDinur_96 (L4), Quby_96 (L4), Rose5_92 (L1), Rumpelstiltskin_91 (L2), Samty_91 (L3), Sarshaun_96 (L2), Sheng711_97 (L4), Silverleaf_90 (L1), Snenia_91 (L3), Soap141_95 (L2), Tourach_95 (L2), Tyson_92 (L1), UPIE_90 (L1), Vetrrix_93 (L2), Wamburggrxpress_90 (L1), Whirlwind_93 (L3), Wigglewiggles_95 (L2), Wilder_96 (L2), Winky_95 (L2), Wyatt2_92 (L1), Zakai_96 (L2), Zaria_91 (L1), ZhongYanYuan_92 (L2),

Start 67:

- Found in 3 of 235 (1.3%) of genes in pham
- Manual Annotations of this start: 2 of 196
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CMP1_50 (singleton), Footloose_54 (singleton), GageAP_46 (A1),

Start 68:

- Found in 1 of 235 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 196
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PhorbesPhlower_38 (DH),

Start 69:

- Found in 21 of 235 (8.9%) of genes in pham
- Manual Annotations of this start: 15 of 196
- Called 71.4% of time when present
- Phage (with cluster) where this start called: Chipper1996_1010 (AR), Chocolat_100 (AR), Chubster_100 (AR), EdgarPoe_100 (AR), HumptyDumpty_100 (AR), JaNo_99 (AR), KBurrousTX_96 (AR), Kabreeze_100 (AR), Linus_100 (AR), Lymara_98 (AR), Mordred_100 (AR), PrincessTrina_101 (AR), RosiePosie_100 (AR), Scavito_101 (AR), Tophat_101 (AR),

Start 71:

- Found in 1 of 235 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MortyNRick_68 (DN),

Start 76:

- Found in 11 of 235 (4.7%) of genes in pham
- Manual Annotations of this start: 10 of 196
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Angela_225 (BE1), Bmoc_227 (BE1), CN1A_67 (singleton), Cursive_225 (BE1), Daubenski_216 (BE1), Larnav_222 (BE1), Lululemon_219 (BE1), Mildred21_232 (BE1), PacManQ_219 (BE1), Sushi23_223 (BE1), Targaryen_222 (BE1),

Start 77:

- Found in 2 of 235 (0.9%) of genes in pham

- Manual Annotations of this start: 1 of 196
- Called 50.0% of time when present
- Phage (with cluster) where this start called: ScoobyDoobyDoo_251 (C2),

Start 78:

- Found in 2 of 235 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 196
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ChisanaKitsune_96 (DQ), MintFritos_94 (DQ),

Start 79:

- Found in 3 of 235 (1.3%) of genes in pham
- Manual Annotations of this start: 2 of 196
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Tucker_41 (A6), Zulu_41 (A6),

Start 81:

- Found in 3 of 235 (1.3%) of genes in pham
- Manual Annotations of this start: 1 of 196
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Jalammah_18 (CV),

Start 85:

- Found in 1 of 235 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 196
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kroos_19 (DE1),

Start 87:

- Found in 23 of 235 (9.8%) of genes in pham
- Manual Annotations of this start: 3 of 196
- Called 13.0% of time when present
- Phage (with cluster) where this start called: BillyTP_72 (AY), Faja_72 (AY), Hestia_63 (AY),

Start 95:

- Found in 1 of 235 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 196
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RedWattleHog_27 (DX),

Start 96:

- Found in 2 of 235 (0.9%) of genes in pham
- Manual Annotations of this start: 2 of 196
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bmoc_167 (BE1), Persimmon_162 (BE1),

Start 101:

- Found in 1 of 235 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 196
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Sour_34 (DR),

Start 102:

- Found in 2 of 235 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 196
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bagrid_113 (J), Hannaconda_99 (J),

Start 107:

- Found in 2 of 235 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 196
- Called 50.0% of time when present
- Phage (with cluster) where this start called: CrystalP_38 (E),

Start 110:

- Found in 1 of 235 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 196
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Samy_46 (singleton),

Start 118:

- Found in 10 of 235 (4.3%) of genes in pham
- No Manual Annotations of this start.
- Called 10.0% of time when present
- Phage (with cluster) where this start called: REQ3_10 (singleton),

Start 123:

- Found in 1 of 235 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA6_81 (DQ),

Start 124:

- Found in 1 of 235 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gonephishing_48 (J),

Start 134:

- Found in 24 of 235 (10.2%) of genes in pham
- No Manual Annotations of this start.
- Called 4.2% of time when present
- Phage (with cluster) where this start called: Amao_38 (E),

Summary by clusters:

There are 31 clusters represented in this pham: DN, singleton, DH, CZ2, DL, CZ4, BP, DX, DR, DQ, A1, BD1, A6, C2, C1, CY1, E, EG, J, L4, AR, L2, L3, L1, AY, CP, CV, DE1, L5, BE1, BK1,

Info for manual annotations of cluster A1:

- Start number 45 was manually annotated 3 times for cluster A1.
- Start number 52 was manually annotated 7 times for cluster A1.

- Start number 67 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster A6:

- Start number 79 was manually annotated 2 times for cluster A6.

Info for manual annotations of cluster AR:

- Start number 69 was manually annotated 15 times for cluster AR.

Info for manual annotations of cluster AY:

- Start number 65 was manually annotated 1 time for cluster AY.
- Start number 87 was manually annotated 3 times for cluster AY.

Info for manual annotations of cluster BD1:

- Start number 56 was manually annotated 1 time for cluster BD1.

Info for manual annotations of cluster BE1:

- Start number 76 was manually annotated 10 times for cluster BE1.
- Start number 96 was manually annotated 2 times for cluster BE1.

Info for manual annotations of cluster BK1:

- Start number 53 was manually annotated 1 time for cluster BK1.

Info for manual annotations of cluster BP:

- Start number 41 was manually annotated 8 times for cluster BP.

Info for manual annotations of cluster C1:

- Start number 57 was manually annotated 33 times for cluster C1.

Info for manual annotations of cluster C2:

- Start number 45 was manually annotated 1 time for cluster C2.
- Start number 77 was manually annotated 1 time for cluster C2.

Info for manual annotations of cluster CP:

- Start number 59 was manually annotated 1 time for cluster CP.

Info for manual annotations of cluster CV:

- Start number 32 was manually annotated 2 times for cluster CV.
- Start number 81 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster CY1:

- Start number 62 was manually annotated 3 times for cluster CY1.

Info for manual annotations of cluster CZ2:

- Start number 15 was manually annotated 2 times for cluster CZ2.
- Start number 62 was manually annotated 1 time for cluster CZ2.

Info for manual annotations of cluster CZ4:

- Start number 56 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster DE1:

- Start number 22 was manually annotated 5 times for cluster DE1.
- Start number 33 was manually annotated 7 times for cluster DE1.
- Start number 85 was manually annotated 1 time for cluster DE1.

Info for manual annotations of cluster DH:

- Start number 68 was manually annotated 1 time for cluster DH.

Info for manual annotations of cluster DL:

- Start number 42 was manually annotated 1 time for cluster DL.

Info for manual annotations of cluster DQ:

- Start number 78 was manually annotated 1 time for cluster DQ.

Info for manual annotations of cluster DR:

- Start number 101 was manually annotated 1 time for cluster DR.

Info for manual annotations of cluster DX:

- Start number 95 was manually annotated 1 time for cluster DX.

Info for manual annotations of cluster E:

- Start number 107 was manually annotated 1 time for cluster E.

Info for manual annotations of cluster EG:

- Start number 61 was manually annotated 2 times for cluster EG.

Info for manual annotations of cluster J:

- Start number 102 was manually annotated 1 time for cluster J.

Info for manual annotations of cluster L1:

- Start number 65 was manually annotated 19 times for cluster L1.

Info for manual annotations of cluster L2:

- Start number 65 was manually annotated 28 times for cluster L2.

Info for manual annotations of cluster L3:

- Start number 65 was manually annotated 16 times for cluster L3.

Info for manual annotations of cluster L4:

- Start number 65 was manually annotated 4 times for cluster L4.

Info for manual annotations of cluster L5:

- Start number 65 was manually annotated 2 times for cluster L5.

Gene Information:

Gene: Acquire49_91 Start: 57365, Stop: 57775, Start Num: 65

Candidate Starts for Acquire49_91:

(Start: 65 @57365 has 70 MA's), (Start: 87 @57395 has 3 MA's), (91, 57398), (106, 57443), (137, 57521), (152, 57563), (163, 57599), (179, 57641), (182, 57647), (195, 57695), (206, 57740), (213, 57767),

Gene: Ading_252 Start: 144356, Stop: 144805, Start Num: 57

Candidate Starts for Ading_252:

(Start: 57 @144356 has 34 MA's), (84, 144395), (98, 144413), (108, 144446), (119, 144473), (136, 144506), (164, 144593), (177, 144635), (204, 144734),

Gene: Aegeus_98 Start: 59877, Stop: 60281, Start Num: 65

Candidate Starts for Aegeus_98:

(Start: 65 @59877 has 70 MA's), (120, 59988), (132, 60015), (134, 60024), (136, 60027), (137, 60030), (139, 60036), (149, 60066), (158, 60090), (169, 60132), (195, 60201), (208, 60255),

Gene: Affeca_48 Start: 42397, Stop: 42915, Start Num: 33

Candidate Starts for Affeca_48:

(19, 42385), (Start: 33 @42397 has 7 MA's), (138, 42613), (166, 42703), (170, 42715),

Gene: Ailee_47 Start: 42002, Stop: 42520, Start Num: 33

Candidate Starts for Ailee_47:

(19, 41990), (Start: 22 @41999 has 5 MA's), (Start: 33 @42002 has 7 MA's), (138, 42218), (166, 42308), (170, 42320),

Gene: AluminumJesus_51 Start: 40979, Stop: 40554, Start Num: 61

Candidate Starts for AluminumJesus_51:

(Start: 61 @40979 has 2 MA's), (139, 40811), (170, 40709), (199, 40625),

Gene: Amao_38 Start: 33060, Stop: 32746, Start Num: 134

Candidate Starts for Amao_38:

(17, 33333), (Start: 45 @33267 has 4 MA's), (66, 33225), (Start: 107 @33138 has 1 MA's), (134, 33060), (136, 33057), (147, 33021),

Gene: Angela_225 Start: 112366, Stop: 112806, Start Num: 76

Candidate Starts for Angela_225:

(58, 112339), (Start: 76 @112366 has 10 MA's), (118, 112462), (139, 112513), (168, 112606), (190, 112678), (204, 112732), (212, 112765),

Gene: Angelicage_48 Start: 42812, Stop: 43333, Start Num: 22

Candidate Starts for Angelicage_48:

(19, 42803), (Start: 22 @42812 has 5 MA's), (Start: 33 @42815 has 7 MA's), (138, 43031), (166, 43121), (170, 43133),

Gene: Appletree2_90 Start: 57125, Stop: 57535, Start Num: 65

Candidate Starts for Appletree2_90:

(Start: 65 @57125 has 70 MA's), (Start: 87 @57155 has 3 MA's), (91, 57158), (106, 57203), (137, 57281), (152, 57323), (163, 57359), (179, 57401), (182, 57407), (195, 57455), (206, 57500), (213, 57527),

Gene: Archie_92 Start: 59049, Stop: 59462, Start Num: 65

Candidate Starts for Archie_92:

(Start: 65 @59049 has 70 MA's), (117, 59160), (133, 59199), (137, 59208), (163, 59286), (189, 59358), (208, 59436), (213, 59454),

Gene: Asterius_245 Start: 142368, Stop: 142817, Start Num: 57

Candidate Starts for Asterius_245:

(Start: 57 @142368 has 34 MA's), (84, 142407), (98, 142425), (108, 142458), (119, 142485), (136, 142518), (164, 142605), (177, 142647), (204, 142746),

Gene: Astraea_245 Start: 141563, Stop: 142012, Start Num: 57

Candidate Starts for Astraea_245:

(Start: 57 @141563 has 34 MA's), (84, 141602), (98, 141620), (108, 141653), (119, 141680), (136, 141713), (164, 141800), (177, 141842), (204, 141941),

Gene: Attis_64 Start: 43105, Stop: 43650, Start Num: 15

Candidate Starts for Attis_64:

(Start: 15 @43105 has 2 MA's), (23, 43147), (Start: 33 @43168 has 7 MA's), (44, 43192), (Start: 62 @43231 has 4 MA's), (72, 43243), (92, 43273), (132, 43378), (179, 43516),

Gene: AvadaKedavra_91 Start: 57477, Stop: 57887, Start Num: 65

Candidate Starts for AvadaKedavra_91:

(Start: 65 @57477 has 70 MA's), (Start: 87 @57507 has 3 MA's), (91, 57510), (106, 57555), (137, 57633), (152, 57675), (163, 57711), (179, 57753), (182, 57759), (195, 57807), (206, 57852), (213, 57879),

Gene: AxeJC_43 Start: 29903, Stop: 30394, Start Num: 41

Candidate Starts for AxeJC_43:

(Start: 41 @29903 has 8 MA's), (160, 30155), (164, 30170),

Gene: Bagrid_113 Start: 63671, Stop: 64075, Start Num: 102

Candidate Starts for Bagrid_113:

(4, 63371), (5, 63395), (20, 63500), (35, 63533), (Start: 42 @63551 has 1 MA's), (73, 63608), (Start: 102 @63671 has 1 MA's), (108, 63686), (114, 63704), (136, 63761), (138, 63767), (159, 63827), (186, 63920),

Gene: BananaFence_247 Start: 142192, Stop: 142641, Start Num: 57

Candidate Starts for BananaFence_247:

(Start: 57 @142192 has 34 MA's), (84, 142231), (98, 142249), (108, 142282), (119, 142309), (136, 142342), (164, 142429), (177, 142471), (204, 142570),

Gene: Baoshan_92 Start: 59704, Stop: 60117, Start Num: 65

Candidate Starts for Baoshan_92:

(Start: 65 @59704 has 70 MA's), (117, 59815), (133, 59854), (137, 59863), (163, 59941), (189, 60013), (208, 60091), (213, 60109),

Gene: Basquiat_247 Start: 140478, Stop: 140927, Start Num: 57

Candidate Starts for Basquiat_247:

(Start: 57 @140478 has 34 MA's), (84, 140517), (98, 140535), (108, 140568), (119, 140595), (136, 140628), (164, 140715), (177, 140757), (204, 140856),

Gene: Baudelaire_98 Start: 59877, Stop: 60281, Start Num: 65

Candidate Starts for Baudelaire_98:

(Start: 65 @59877 has 70 MA's), (120, 59988), (132, 60015), (134, 60024), (136, 60027), (137, 60030), (139, 60036), (149, 60066), (158, 60090), (169, 60132), (195, 60201), (208, 60255),

Gene: Bazzle_92 Start: 59605, Stop: 60018, Start Num: 65

Candidate Starts for Bazzle_92:

(Start: 65 @59605 has 70 MA's), (117, 59716), (133, 59755), (137, 59764), (163, 59842), (189, 59914), (208, 59992), (213, 60010),

Gene: Begonia_17 Start: 10279, Stop: 10785, Start Num: 32

Candidate Starts for Begonia_17:

(Start: 32 @10279 has 2 MA's), (Start: 81 @10369 has 1 MA's), (137, 10504), (147, 10537), (164, 10588), (193, 10681), (204, 10723),

Gene: Bellis_90 Start: 59240, Stop: 59647, Start Num: 65

Candidate Starts for Bellis_90:

(Start: 65 @59240 has 70 MA's), (80, 59261), (136, 59390), (137, 59393), (163, 59471), (175, 59507), (202, 59594), (208, 59621),

Gene: BenchScraper_71 Start: 37047, Stop: 37535, Start Num: 65

Candidate Starts for BenchScraper_71:

(Start: 65 @37047 has 70 MA's), (Start: 69 @37053 has 15 MA's), (Start: 87 @37083 has 3 MA's), (210, 37479),

Gene: BigCheese_95 Start: 59815, Stop: 60228, Start Num: 65

Candidate Starts for BigCheese_95:

(Start: 65 @59815 has 70 MA's), (117, 59926), (133, 59965), (137, 59974), (163, 60052), (189, 60124), (208, 60202), (213, 60220),

Gene: BigPaolini_3 Start: 1128, Stop: 1637, Start Num: 52

Candidate Starts for BigPaolini_3:

(Start: 52 @1128 has 7 MA's), (150, 1323), (153, 1332), (164, 1368), (223, 1590),

Gene: BillyTP_72 Start: 38938, Stop: 39390, Start Num: 87

Candidate Starts for BillyTP_72:

(Start: 65 @38902 has 70 MA's), (Start: 69 @38908 has 15 MA's), (Start: 87 @38938 has 3 MA's), (210, 39334),

Gene: Blab_51 Start: 40826, Stop: 40401, Start Num: 61

Candidate Starts for Blab_51:

(1, 41177), (3, 41099), (Start: 61 @40826 has 2 MA's), (139, 40658), (170, 40556), (199, 40472),

Gene: Blackbrain_248 Start: 142255, Stop: 142704, Start Num: 57

Candidate Starts for Blackbrain_248:

(Start: 57 @142255 has 34 MA's), (84, 142294), (98, 142312), (108, 142345), (119, 142372), (136, 142405), (164, 142492), (177, 142534), (204, 142633),

Gene: Bmoc_227 Start: 112807, Stop: 113247, Start Num: 76

Candidate Starts for Bmoc_227:

(54, 112771), (58, 112780), (Start: 76 @112807 has 10 MA's), (118, 112903), (139, 112954), (168, 113047), (190, 113119), (204, 113173), (212, 113206),

Gene: Bmoc_167 Start: 91666, Stop: 92031, Start Num: 96

Candidate Starts for Bmoc_167:

(Start: 96 @91666 has 2 MA's), (121, 91735), (153, 91822), (172, 91888),

Gene: BobsGarage_94 Start: 59815, Stop: 60228, Start Num: 65

Candidate Starts for BobsGarage_94:

(Start: 65 @59815 has 70 MA's), (117, 59926), (133, 59965), (137, 59974), (163, 60052), (189, 60124), (208, 60202), (213, 60220),

Gene: Bonray_252 Start: 144055, Stop: 144504, Start Num: 57

Candidate Starts for Bonray_252:

(Start: 57 @144055 has 34 MA's), (84, 144094), (98, 144112), (108, 144145), (119, 144172), (136, 144205), (164, 144292), (177, 144334), (204, 144433),

Gene: BourbonZero_93 Start: 59266, Stop: 59673, Start Num: 65

Candidate Starts for BourbonZero_93:

(Start: 65 @59266 has 70 MA's), (80, 59287), (117, 59371), (136, 59416), (137, 59419), (163, 59497), (175, 59533), (202, 59620), (208, 59647),

Gene: Bradissa_67 Start: 46915, Stop: 47334, Start Num: 62

Candidate Starts for Bradissa_67:

(2, 46627), (Start: 15 @46789 has 2 MA's), (Start: 33 @46852 has 7 MA's), (40, 46867), (44, 46876), (Start: 62 @46915 has 4 MA's), (72, 46927), (92, 46957), (129, 47056), (132, 47062), (179, 47200),

Gene: BrainDrainer_97 Start: 59520, Stop: 59927, Start Num: 65

Candidate Starts for BrainDrainer_97:

(Start: 65 @59520 has 70 MA's), (80, 59541), (137, 59673), (167, 59769), (189, 59823), (202, 59874), (208, 59901), (209, 59904), (213, 59919),

Gene: Bread_246 Start: 142022, Stop: 142471, Start Num: 57

Candidate Starts for Bread_246:

(Start: 57 @142022 has 34 MA's), (84, 142061), (98, 142079), (108, 142112), (119, 142139), (136, 142172), (164, 142259), (177, 142301), (204, 142400),

Gene: Breezona_95 Start: 59815, Stop: 60228, Start Num: 65

Candidate Starts for Breezona_95:

(Start: 65 @59815 has 70 MA's), (117, 59926), (136, 59971), (137, 59974), (167, 60070), (189, 60124), (208, 60202), (213, 60220),

Gene: Bromden_96 Start: 60413, Stop: 60820, Start Num: 65

Candidate Starts for Bromden_96:

(Start: 65 @60413 has 70 MA's), (80, 60434), (92, 60449), (136, 60563), (137, 60566), (189, 60716), (202, 60767), (208, 60794), (213, 60812),

Gene: CMP1_50 Start: 47245, Stop: 46814, Start Num: 67

Candidate Starts for CMP1_50:

(Start: 67 @47245 has 2 MA's), (90, 47212), (140, 47098), (159, 47044), (211, 46864),

Gene: CN1A_67 Start: 52198, Stop: 51770, Start Num: 76

Candidate Starts for CN1A_67:

(16, 52336), (Start: 69 @52210 has 15 MA's), (Start: 76 @52198 has 10 MA's), (94, 52174), (134, 52066), (160, 51991), (201, 51853), (217, 51781),

Gene: CN1A_74 Start: 54320, Stop: 53856, Start Num: 45

Candidate Starts for CN1A_74:

(Start: 45 @54320 has 4 MA's), (Start: 57 @54290 has 34 MA's), (139, 54131),

Gene: Cactojaque_244 Start: 141201, Stop: 141650, Start Num: 57

Candidate Starts for Cactojaque_244:

(Start: 57 @141201 has 34 MA's), (84, 141240), (98, 141258), (108, 141291), (119, 141318), (136, 141351), (164, 141438), (177, 141480), (204, 141579),

Gene: Calm_92 Start: 57376, Stop: 57786, Start Num: 65

Candidate Starts for Calm_92:

(Start: 65 @57376 has 70 MA's), (Start: 87 @57406 has 3 MA's), (91, 57409), (106, 57454), (137, 57532), (152, 57574), (163, 57610), (179, 57652), (182, 57658), (195, 57706), (206, 57751), (213, 57778),

Gene: Chargie21_247 Start: 140478, Stop: 140927, Start Num: 57

Candidate Starts for Chargie21_247:

(Start: 57 @140478 has 34 MA's), (84, 140517), (98, 140535), (108, 140568), (119, 140595), (136, 140628), (164, 140715), (177, 140757), (204, 140856),

Gene: Chaser_95 Start: 58821, Stop: 59228, Start Num: 65

Candidate Starts for Chaser_95:

(Start: 65 @58821 has 70 MA's), (80, 58842), (92, 58857), (137, 58974), (167, 59070), (189, 59124), (202, 59175), (208, 59202), (209, 59205), (213, 59220),

Gene: Chipper1996_1010 Start: 63867, Stop: 64361, Start Num: 69

Candidate Starts for Chipper1996_1010:

(18, 63759), (36, 63798), (Start: 69 @63867 has 15 MA's), (108, 63951), (134, 64023), (147, 64062), (216, 64332),

Gene: ChisanaKitsune_96 Start: 72440, Stop: 72853, Start Num: 78

Candidate Starts for ChisanaKitsune_96:

(39, 72365), (46, 72383), (Start: 78 @72440 has 1 MA's), (120, 72536), (132, 72563), (136, 72575), (137, 72578), (155, 72626),

Gene: Chocolat_100 Start: 63574, Stop: 64068, Start Num: 69

Candidate Starts for Chocolat_100:

(18, 63466), (36, 63505), (Start: 69 @63574 has 15 MA's), (108, 63658), (134, 63730), (147, 63769), (216, 64039),

Gene: Chubster_100 Start: 63814, Stop: 64308, Start Num: 69

Candidate Starts for Chubster_100:

(18, 63706), (36, 63745), (Start: 69 @63814 has 15 MA's), (108, 63898), (134, 63970), (147, 64009), (216, 64279),

Gene: CicholasNage_88 Start: 57029, Stop: 57439, Start Num: 65

Candidate Starts for CicholasNage_88:

(Start: 65 @57029 has 70 MA's), (Start: 87 @57059 has 3 MA's), (91, 57062), (106, 57107), (137, 57185), (152, 57227), (163, 57263), (179, 57305), (182, 57311), (195, 57359), (206, 57404), (213, 57431),

Gene: Claus_94 Start: 59528, Stop: 59941, Start Num: 65

Candidate Starts for Claus_94:

(Start: 65 @59528 has 70 MA's), (117, 59639), (133, 59678), (137, 59687), (163, 59765), (189, 59837), (208, 59915), (213, 59933),

Gene: Clautastrophe_90 Start: 59235, Stop: 59642, Start Num: 65

Candidate Starts for Clautastrophe_90:

(Start: 65 @59235 has 70 MA's), (80, 59256), (136, 59385), (137, 59388), (163, 59466), (175, 59502), (202, 59589), (208, 59616),

Gene: ColdSoup_3 Start: 2875, Stop: 3255, Start Num: 59

Candidate Starts for ColdSoup_3:

(Start: 59 @2875 has 1 MA's), (104, 2959), (116, 2992), (132, 3019), (136, 3031), (137, 3034), (172, 3145), (188, 3181), (202, 3235), (205, 3244),

Gene: Concombres_255 Start: 144217, Stop: 144666, Start Num: 57

Candidate Starts for Concombres_255:

(Start: 57 @144217 has 34 MA's), (84, 144256), (98, 144274), (103, 144295), (108, 144307), (119, 144334), (136, 144367), (164, 144454),

Gene: Crossroads_95 Start: 59527, Stop: 59940, Start Num: 65

Candidate Starts for Crossroads_95:

(Start: 65 @59527 has 70 MA's), (117, 59638), (133, 59677), (137, 59686), (163, 59764), (189, 59836), (208, 59914), (213, 59932),

Gene: CrystalP_38 Start: 33934, Stop: 33542, Start Num: 107

Candidate Starts for CrystalP_38:

(17, 34129), (Start: 45 @34063 has 4 MA's), (66, 34021), (Start: 107 @33934 has 1 MA's), (134, 33856), (136, 33853), (147, 33817),

Gene: Cumberbatch_45 Start: 30201, Stop: 30692, Start Num: 41

Candidate Starts for Cumberbatch_45:

(Start: 41 @30201 has 8 MA's), (160, 30453), (164, 30468),

Gene: Cursive_225 Start: 113007, Stop: 113447, Start Num: 76

Candidate Starts for Cursive_225:

(9, 112812), (11, 112848), (30, 112920), (35, 112926), (39, 112935), (Start: 52 @112965 has 7 MA's), (54, 112971), (55, 112974), (58, 112980), (Start: 76 @113007 has 10 MA's), (118, 113103), (139, 113154), (168, 113247), (190, 113319), (204, 113373), (212, 113406),

Gene: DHan_98 Start: 59751, Stop: 60164, Start Num: 65

Candidate Starts for DHan_98:

(Start: 65 @59751 has 70 MA's), (117, 59862), (133, 59901), (137, 59910), (163, 59988), (189, 60060), (208, 60138), (213, 60156),

Gene: DanBing_94 Start: 59444, Stop: 59857, Start Num: 65

Candidate Starts for DanBing_94:

(Start: 65 @59444 has 70 MA's), (117, 59555), (133, 59594), (137, 59603), (163, 59681), (189, 59753), (208, 59831), (213, 59849),

Gene: Darko_249 Start: 142196, Stop: 142645, Start Num: 57

Candidate Starts for Darko_249:

(Start: 57 @142196 has 34 MA's), (84, 142235), (98, 142253), (108, 142286), (119, 142313), (136, 142346), (164, 142433), (177, 142475), (204, 142574),

Gene: Daubenski_216 Start: 113389, Stop: 113829, Start Num: 76

Candidate Starts for Daubenski_216:

(8, 113191), (9, 113194), (10, 113218), (11, 113230), (14, 113233), (30, 113302), (35, 113308), (39, 113317), (Start: 52 @113347 has 7 MA's), (54, 113353), (Start: 76 @113389 has 10 MA's), (118, 113485), (139, 113536), (168, 113629), (190, 113701), (204, 113755), (212, 113788),

Gene: Demodog_256 Start: 144227, Stop: 144676, Start Num: 57

Candidate Starts for Demodog_256:

(Start: 57 @144227 has 34 MA's), (84, 144266), (98, 144284), (103, 144305), (108, 144317), (119, 144344), (136, 144377), (164, 144464),

Gene: Dexes_3 Start: 1113, Stop: 1622, Start Num: 52

Candidate Starts for Dexes_3:

(Start: 52 @1113 has 7 MA's), (150, 1308), (153, 1317), (164, 1353), (223, 1575),

Gene: DirkDirk_88 Start: 56705, Stop: 57115, Start Num: 65

Candidate Starts for DirkDirk_88:

(Start: 65 @56705 has 70 MA's), (Start: 87 @56735 has 3 MA's), (91, 56738), (106, 56783), (137, 56861), (152, 56903), (163, 56939), (179, 56981), (182, 56987), (195, 57035), (206, 57080), (213, 57107),

Gene: Douge_96 Start: 58940, Stop: 59347, Start Num: 65

Candidate Starts for Douge_96:

(Start: 65 @58940 has 70 MA's), (80, 58961), (137, 59093), (167, 59189), (189, 59243), (202, 59294), (208, 59321), (209, 59324), (213, 59339),

Gene: Douzhi_96 Start: 59209, Stop: 59616, Start Num: 65

Candidate Starts for Douzhi_96:

(Start: 65 @59209 has 70 MA's), (80, 59230), (137, 59362), (167, 59458), (189, 59512), (202, 59563), (208, 59590), (209, 59593), (213, 59608),

Gene: DrSeegs_94 Start: 59815, Stop: 60228, Start Num: 65

Candidate Starts for DrSeegs_94:

(Start: 65 @59815 has 70 MA's), (117, 59926), (136, 59971), (137, 59974), (167, 60070), (189, 60124), (208, 60202), (213, 60220),

Gene: DuncansLeg_92 Start: 59254, Stop: 59661, Start Num: 65

Candidate Starts for DuncansLeg_92:

(Start: 65 @59254 has 70 MA's), (80, 59275), (117, 59359), (136, 59404), (137, 59407), (163, 59485), (175, 59521), (202, 59608), (208, 59635),

Gene: DyoEdafos_98 Start: 59531, Stop: 59938, Start Num: 65

Candidate Starts for DyoEdafos_98:

(Start: 65 @59531 has 70 MA's), (80, 59552), (92, 59567), (137, 59684), (149, 59720), (167, 59780), (189, 59834), (202, 59885), (208, 59912), (213, 59930),

Gene: Eastland_44 Start: 30161, Stop: 30652, Start Num: 41

Candidate Starts for Eastland_44:

(Start: 41 @30161 has 8 MA's), (160, 30413), (164, 30428),

Gene: EdgarPoe_100 Start: 63731, Stop: 64225, Start Num: 69

Candidate Starts for EdgarPoe_100:

(18, 63623), (36, 63662), (Start: 69 @63731 has 15 MA's), (108, 63815), (134, 63887), (147, 63926), (216, 64196),

Gene: Eklok_44 Start: 29960, Stop: 30451, Start Num: 41

Candidate Starts for Eklok_44:

(Start: 41 @29960 has 8 MA's), (160, 30212), (164, 30227),

Gene: Ellson_91 Start: 59569, Stop: 59976, Start Num: 65

Candidate Starts for Ellson_91:

(Start: 65 @59569 has 70 MA's), (80, 59590), (117, 59674), (136, 59719), (137, 59722), (163, 59800), (175, 59836), (202, 59923), (208, 59950),

Gene: EmToTheThree_250 Start: 143104, Stop: 143553, Start Num: 57

Candidate Starts for EmToTheThree_250:

(Start: 57 @143104 has 34 MA's), (84, 143143), (98, 143161), (108, 143194), (119, 143221), (136, 143254), (164, 143341), (177, 143383), (204, 143482),

Gene: EnalisNailo_66 Start: 46449, Stop: 46868, Start Num: 62

Candidate Starts for EnalisNailo_66:

(2, 46161), (Start: 15 @46323 has 2 MA's), (Start: 33 @46386 has 7 MA's), (40, 46401), (44, 46410), (Start: 62 @46449 has 4 MA's), (72, 46461), (92, 46491), (129, 46590), (132, 46596), (179, 46734),

Gene: Enceladus_88 Start: 57406, Stop: 57816, Start Num: 65

Candidate Starts for Enceladus_88:

(Start: 65 @57406 has 70 MA's), (Start: 87 @57436 has 3 MA's), (91, 57439), (106, 57484), (137, 57562), (152, 57604), (163, 57640), (179, 57682), (182, 57688), (195, 57736), (206, 57781), (213, 57808),

Gene: Erdmann_251 Start: 143072, Stop: 143521, Start Num: 57

Candidate Starts for Erdmann_251:

(Start: 57 @143072 has 34 MA's), (84, 143111), (98, 143129), (108, 143162), (119, 143189), (136, 143222), (164, 143309), (177, 143351), (204, 143450),

Gene: ErnieJ_243 Start: 139900, Stop: 140349, Start Num: 57

Candidate Starts for ErnieJ_243:

(Start: 57 @139900 has 34 MA's), (84, 139939), (98, 139957), (108, 139990), (119, 140017), (136, 140050), (164, 140137), (177, 140179), (204, 140278),

Gene: Faith1_95 Start: 59452, Stop: 59865, Start Num: 65

Candidate Starts for Faith1_95:

(Start: 65 @59452 has 70 MA's), (117, 59563), (136, 59608), (137, 59611), (167, 59707), (189, 59761), (208, 59839), (213, 59857),

Gene: Faja_72 Start: 38688, Stop: 39140, Start Num: 87

Candidate Starts for Faja_72:

(12, 38511), (Start: 65 @38652 has 70 MA's), (Start: 69 @38658 has 15 MA's), (Start: 87 @38688 has 3 MA's), (210, 39084),

Gene: FarmResident_97 Start: 59091, Stop: 59498, Start Num: 65

Candidate Starts for FarmResident_97:

(Start: 65 @59091 has 70 MA's), (80, 59112), (92, 59127), (137, 59244), (167, 59340), (189, 59394), (202, 59445), (208, 59472), (209, 59475), (213, 59490),

Gene: Finch_82 Start: 71334, Stop: 71777, Start Num: 57

Candidate Starts for Finch_82:

(21, 71253), (38, 71289), (Start: 57 @71334 has 34 MA's), (89, 71382), (134, 71505), (136, 71508), (155, 71559), (173, 71625), (184, 71655),

Gene: Finch_155 Start: 99620, Stop: 100087, Start Num: 60

Candidate Starts for Finch_155:

(25, 99545), (Start: 60 @99620 has 1 MA's), (131, 99755), (154, 99824), (160, 99845), (166, 99869), (201, 99977), (204, 99995), (219, 100046),

Gene: Finch_154 Start: 99144, Stop: 99620, Start Num: 64

Candidate Starts for Finch_154:

(Start: 64 @99144 has 1 MA's), (97, 99192), (160, 99372), (187, 99462), (192, 99477), (220, 99588),

Gene: Finemlucis_96 Start: 60566, Stop: 60979, Start Num: 65

Candidate Starts for Finemlucis_96:

(Start: 65 @60566 has 70 MA's), (117, 60677), (133, 60716), (137, 60725), (163, 60803), (189, 60875), (208, 60953), (213, 60971),

Gene: Finnry_92 Start: 59588, Stop: 59995, Start Num: 65

Candidate Starts for Finnry_92:

(Start: 65 @59588 has 70 MA's), (80, 59609), (136, 59738), (137, 59741), (163, 59819), (175, 59855), (202, 59942), (208, 59969),

Gene: Footloose_54 Start: 31404, Stop: 31829, Start Num: 67

Candidate Starts for Footloose_54:

(7, 31218), (16, 31281), (Start: 67 @31404 has 2 MA's), (122, 31515), (127, 31530), (181, 31677), (182, 31680), (218, 31818),

Gene: Forrest_237 Start: 114096, Stop: 114590, Start Num: 53

Candidate Starts for Forrest_237:

(Start: 53 @114096 has 1 MA's), (Start: 65 @114117 has 70 MA's), (82, 114144), (115, 114231), (141, 114303), (164, 114378), (221, 114585),

Gene: FoxtrotP1_248 Start: 143658, Stop: 144107, Start Num: 57

Candidate Starts for FoxtrotP1_248:

(Start: 57 @143658 has 34 MA's), (84, 143697), (98, 143715), (108, 143748), (119, 143775), (136, 143808), (164, 143895), (177, 143937), (204, 144036),

Gene: FudgeTart_245 Start: 142162, Stop: 142611, Start Num: 57

Candidate Starts for FudgeTart_245:

(Start: 57 @142162 has 34 MA's), (84, 142201), (98, 142219), (108, 142252), (119, 142279), (136, 142312), (164, 142399), (177, 142441), (204, 142540),

Gene: GMA6_81 Start: 64168, Stop: 64497, Start Num: 123

Candidate Starts for GMA6_81:

(24, 63964), (Start: 32 @63982 has 2 MA's), (86, 64081), (93, 64090), (103, 64123), (104, 64126), (119, 64162), (123, 64168), (131, 64189), (132, 64195), (134, 64204), (143, 64222), (162, 64288), (176, 64336), (215, 64474),

Gene: GMA6_35 Start: 29073, Stop: 29516, Start Num: 43

Candidate Starts for GMA6_35:

(37, 29058), (43, 29073), (48, 29082), (Start: 69 @29121 has 15 MA's), (83, 29145), (140, 29274), (145, 29286), (146, 29289), (148, 29301), (191, 29424),

Gene: Gabriela_95 Start: 58798, Stop: 59211, Start Num: 65

Candidate Starts for Gabriela_95:

(Start: 65 @58798 has 70 MA's), (117, 58909), (136, 58954), (137, 58957), (167, 59053), (189, 59107), (208, 59185), (213, 59203),

Gene: GageAP_46 Start: 34874, Stop: 34401, Start Num: 67

Candidate Starts for GageAP_46:

(Start: 67 @34874 has 2 MA's), (75, 34859), (109, 34787), (113, 34772), (136, 34709), (150, 34670), (166, 34616), (180, 34574), (190, 34538), (203, 34484),

Gene: Gardann_95 Start: 59299, Stop: 59712, Start Num: 65

Candidate Starts for Gardann_95:

(Start: 65 @59299 has 70 MA's), (117, 59410), (133, 59449), (137, 59458), (163, 59536), (189, 59608), (208, 59686), (213, 59704),

Gene: Gizmo_255 Start: 144989, Stop: 145438, Start Num: 57

Candidate Starts for Gizmo_255:

(Start: 57 @144989 has 34 MA's), (84, 145028), (98, 145046), (108, 145079), (119, 145106), (136, 145139), (164, 145226), (177, 145268), (204, 145367),

Gene: Gonephishing_48 Start: 38804, Stop: 38457, Start Num: 124

Candidate Starts for Gonephishing_48:

(30, 38996), (51, 38954), (Start: 77 @38909 has 1 MA's), (124, 38804), (132, 38777), (142, 38750), (149, 38726), (185, 38615),

Gene: GuuelaD_92 Start: 59411, Stop: 59824, Start Num: 65

Candidate Starts for GuuelaD_92:

(Start: 65 @59411 has 70 MA's), (117, 59522), (133, 59561), (137, 59570), (163, 59648), (189, 59720), (208, 59798), (213, 59816),

Gene: Gwendoluna_12 Start: 7666, Stop: 8121, Start Num: 45

Candidate Starts for Gwendoluna_12:

(Start: 45 @7666 has 4 MA's), (Start: 65 @7699 has 70 MA's), (108, 7786), (133, 7846), (147, 7888), (172, 7966), (175, 7975), (200, 8056), (210, 8095),

Gene: Gyzlar_3 Start: 1073, Stop: 1582, Start Num: 52

Candidate Starts for Gyzlar_3:

(Start: 52 @1073 has 7 MA's), (150, 1268), (153, 1277), (164, 1313), (223, 1535),

Gene: HFrancette_45 Start: 30939, Stop: 31430, Start Num: 41

Candidate Starts for HFrancette_45:

(Start: 41 @30939 has 8 MA's), (160, 31191), (164, 31206),

Gene: Hafay_96 Start: 59523, Stop: 59936, Start Num: 65

Candidate Starts for Hafay_96:

(Start: 65 @59523 has 70 MA's), (117, 59634), (133, 59673), (137, 59682), (163, 59760), (189, 59832), (208, 59910), (213, 59928),

Gene: Halena_88 Start: 56292, Stop: 56702, Start Num: 65

Candidate Starts for Halena_88:

(Start: 65 @56292 has 70 MA's), (Start: 87 @56322 has 3 MA's), (91, 56325), (106, 56370), (137, 56448), (152, 56490), (163, 56526), (179, 56568), (182, 56574), (195, 56622), (206, 56667), (213, 56694),

Gene: Hannaconda_99 Start: 57411, Stop: 57815, Start Num: 102

Candidate Starts for Hannaconda_99:

(20, 57240), (35, 57273), (Start: 42 @57291 has 1 MA's), (73, 57348), (Start: 102 @57411 has 1 MA's), (108, 57426), (114, 57444), (136, 57501), (138, 57507), (159, 57567), (186, 57660), (222, 57801),

Gene: Hestia_63 Start: 34911, Stop: 35363, Start Num: 87

Candidate Starts for Hestia_63:

(12, 34734), (Start: 65 @34875 has 70 MA's), (Start: 69 @34881 has 15 MA's), (Start: 87 @34911 has 3 MA's), (210, 35307),

Gene: HumptyDumpty_100 Start: 63534, Stop: 64028, Start Num: 69

Candidate Starts for HumptyDumpty_100:

(18, 63426), (36, 63465), (Start: 69 @63534 has 15 MA's), (108, 63618), (134, 63690), (147, 63729), (216, 63999),

Gene: Hydra_4 Start: 1342, Stop: 1785, Start Num: 56

Candidate Starts for Hydra_4:

(Start: 56 @1342 has 2 MA's), (147, 1525), (160, 1561), (166, 1585), (183, 1630), (194, 1672),

Gene: Ignacio_44 Start: 30842, Stop: 31333, Start Num: 41

Candidate Starts for Ignacio_44:

(Start: 41 @30842 has 8 MA's), (160, 31094), (164, 31109),

Gene: Issimir_243 Start: 142261, Stop: 142710, Start Num: 57

Candidate Starts for Issimir_243:

(Start: 57 @142261 has 34 MA's), (84, 142300), (98, 142318), (108, 142351), (119, 142378), (136, 142411), (164, 142498), (177, 142540), (204, 142639),

Gene: Itos_95 Start: 58358, Stop: 58771, Start Num: 65

Candidate Starts for Itos_95:

(Start: 65 @58358 has 70 MA's), (117, 58469), (136, 58514), (137, 58517), (167, 58613), (189, 58667), (208, 58745), (213, 58763),

Gene: JPickles_247 Start: 141311, Stop: 141760, Start Num: 57

Candidate Starts for JPickles_247:

(Start: 57 @141311 has 34 MA's), (84, 141350), (98, 141368), (108, 141401), (119, 141428), (136, 141461), (164, 141548), (177, 141590), (204, 141689),

Gene: JaNo_99 Start: 63505, Stop: 63999, Start Num: 69

Candidate Starts for JaNo_99:

(18, 63397), (36, 63436), (Start: 69 @63505 has 15 MA's), (108, 63589), (134, 63661), (147, 63700), (216, 63970),

Gene: Jalammah_18 Start: 10634, Stop: 11050, Start Num: 81

Candidate Starts for Jalammah_18:

(28, 10535), (Start: 32 @10544 has 2 MA's), (55, 10595), (Start: 81 @10634 has 1 MA's), (134, 10763), (136, 10766), (137, 10769), (147, 10802), (151, 10808), (162, 10844), (176, 10892), (184, 10913),

Gene: Janiyra_253 Start: 142848, Stop: 143297, Start Num: 57

Candidate Starts for Janiyra_253:

(Start: 57 @142848 has 34 MA's), (84, 142887), (98, 142905), (108, 142938), (119, 142965), (136, 142998), (164, 143085), (177, 143127), (204, 143226),

Gene: Jobypre_93 Start: 59235, Stop: 59642, Start Num: 65

Candidate Starts for Jobypre_93:

(Start: 65 @59235 has 70 MA's), (80, 59256), (136, 59385), (137, 59388), (163, 59466), (175, 59502), (202, 59589), (208, 59616),

Gene: JoeDirt_92 Start: 57967, Stop: 58377, Start Num: 65

Candidate Starts for JoeDirt_92:

(Start: 65 @57967 has 70 MA's), (Start: 87 @57997 has 3 MA's), (91, 58000), (106, 58045), (137, 58123), (152, 58165), (163, 58201), (179, 58243), (182, 58249), (195, 58297), (206, 58342), (213, 58369),

Gene: Jollymon_3 Start: 2875, Stop: 3255, Start Num: 59

Candidate Starts for Jollymon_3:

(Start: 59 @2875 has 1 MA's), (104, 2959), (116, 2992), (132, 3019), (136, 3031), (137, 3034), (172, 3145), (188, 3181), (202, 3235), (205, 3244),

Gene: Jubie_91 Start: 59370, Stop: 59777, Start Num: 65

Candidate Starts for Jubie_91:

(Start: 65 @59370 has 70 MA's), (80, 59391), (136, 59520), (137, 59523), (163, 59601), (175, 59637), (202, 59724), (208, 59751),

Gene: KBurrousTX_96 Start: 64281, Stop: 64742, Start Num: 69

Candidate Starts for KBurrousTX_96:

(Start: 69 @64281 has 15 MA's), (Start: 79 @64299 has 2 MA's), (128, 64410), (156, 64503), (161, 64521), (165, 64536), (178, 64584),

Gene: Kabreeze_100 Start: 63591, Stop: 64085, Start Num: 69

Candidate Starts for Kabreeze_100:

(18, 63483), (36, 63522), (Start: 69 @63591 has 15 MA's), (108, 63675), (134, 63747), (147, 63786), (216, 64056),

Gene: Kahlid_94 Start: 59217, Stop: 59630, Start Num: 65

Candidate Starts for Kahlid_94:

(Start: 65 @59217 has 70 MA's), (117, 59328), (133, 59367), (137, 59376), (163, 59454), (189, 59526), (208, 59604), (213, 59622),

Gene: Kamashten_49 Start: 42108, Stop: 42626, Start Num: 33

Candidate Starts for Kamashten_49:

(Start: 33 @42108 has 7 MA's), (138, 42324), (166, 42414), (170, 42426),

Gene: Keitabear_50 Start: 43627, Stop: 44148, Start Num: 22

Candidate Starts for Keitabear_50:

(19, 43618), (Start: 22 @43627 has 5 MA's), (Start: 33 @43630 has 7 MA's), (138, 43846), (166, 43936), (170, 43948),

Gene: Kewpiedoll_51 Start: 43059, Stop: 43577, Start Num: 33

Candidate Starts for Kewpiedoll_51:

(19, 43047), (Start: 22 @43056 has 5 MA's), (Start: 33 @43059 has 7 MA's), (138, 43275), (166, 43365), (170, 43377),

Gene: Kingsolomon_90 Start: 59344, Stop: 59751, Start Num: 65

Candidate Starts for Kingsolomon_90:

(Start: 65 @59344 has 70 MA's), (80, 59365), (136, 59494), (137, 59497), (163, 59575), (175, 59611), (202, 59698), (208, 59725),

Gene: KirDoubleO7_90 Start: 59256, Stop: 59663, Start Num: 65

Candidate Starts for KirDoubleO7_90:

(Start: 65 @59256 has 70 MA's), (80, 59277), (117, 59361), (136, 59406), (137, 59409), (163, 59487), (175, 59523), (202, 59610), (208, 59637),

Gene: Kroos_19 Start: 14665, Stop: 15102, Start Num: 85

Candidate Starts for Kroos_19:

(Start: 57 @14620 has 34 MA's), (63, 14629), (Start: 85 @14665 has 1 MA's), (105, 14716), (130, 14782), (171, 14926), (177, 14947),

Gene: Krypton555_94 Start: 59747, Stop: 60154, Start Num: 65

Candidate Starts for Krypton555_94:

(Start: 65 @59747 has 70 MA's), (80, 59768), (117, 59852), (136, 59897), (137, 59900), (163, 59978), (175, 60014), (202, 60101), (208, 60128),

Gene: Larnav_222 Start: 113173, Stop: 113613, Start Num: 76

Candidate Starts for Larnav_222:

(9, 112978), (11, 113014), (30, 113086), (35, 113092), (39, 113101), (Start: 52 @113131 has 7 MA's), (54, 113137), (55, 113140), (58, 113146), (Start: 76 @113173 has 10 MA's), (118, 113269), (139, 113320), (168, 113413), (190, 113485), (204, 113539), (212, 113572),

Gene: LeBron_90 Start: 56599, Stop: 57009, Start Num: 65

Candidate Starts for LeBron_90:

(Start: 65 @56599 has 70 MA's), (Start: 87 @56629 has 3 MA's), (91, 56632), (106, 56677), (137, 56755), (152, 56797), (163, 56833), (179, 56875), (182, 56881), (195, 56929), (206, 56974), (213, 57001),

Gene: Lee7_249 Start: 144611, Stop: 145060, Start Num: 57

Candidate Starts for Lee7_249:

(Start: 57 @144611 has 34 MA's), (84, 144650), (98, 144668), (108, 144701), (119, 144728), (136, 144761), (164, 144848), (177, 144890), (204, 144989),

Gene: Lennon_50 Start: 43707, Stop: 44228, Start Num: 22

Candidate Starts for Lennon_50:

(19, 43698), (Start: 22 @43707 has 5 MA's), (Start: 33 @43710 has 7 MA's), (138, 43926), (166, 44016), (170, 44028),

Gene: Lewan_96 Start: 59451, Stop: 59864, Start Num: 65

Candidate Starts for Lewan_96:

(Start: 65 @59451 has 70 MA's), (117, 59562), (133, 59601), (137, 59610), (163, 59688), (189, 59760), (208, 59838), (213, 59856),

Gene: Licorice_4 Start: 1283, Stop: 1792, Start Num: 52

Candidate Starts for Licorice_4:

(Start: 52 @1283 has 7 MA's), (150, 1478), (153, 1487), (164, 1523), (223, 1745),

Gene: LilDestine_93 Start: 59128, Stop: 59541, Start Num: 65

Candidate Starts for LilDestine_93:

(Start: 65 @59128 has 70 MA's), (117, 59239), (133, 59278), (137, 59287), (163, 59365), (189, 59437), (208, 59515), (213, 59533),

Gene: Lilas_67 Start: 47987, Stop: 48406, Start Num: 62

Candidate Starts for Lilas_67:

(2, 47699), (Start: 15 @47861 has 2 MA's), (Start: 33 @47924 has 7 MA's), (40, 47939), (44, 47948), (Start: 62 @47987 has 4 MA's), (72, 47999), (92, 48029), (129, 48128), (132, 48134), (179, 48272),

Gene: Linus_100 Start: 64039, Stop: 64533, Start Num: 69

Candidate Starts for Linus_100:

(18, 63931), (36, 63970), (Start: 69 @64039 has 15 MA's), (108, 64123), (134, 64195), (147, 64234), (216, 64504),

Gene: LiyuLake_91 Start: 59329, Stop: 59736, Start Num: 65

Candidate Starts for LiyuLake_91:

(Start: 65 @59329 has 70 MA's), (80, 59350), (117, 59434), (136, 59479), (137, 59482), (163, 59560), (175, 59596), (202, 59683), (208, 59710),

Gene: Loadrie_94 Start: 59619, Stop: 60032, Start Num: 65

Candidate Starts for Loadrie_94:

(Start: 65 @59619 has 70 MA's), (117, 59730), (133, 59769), (137, 59778), (163, 59856), (189, 59928), (208, 60006), (213, 60024),

Gene: Lolly9_91 Start: 59420, Stop: 59827, Start Num: 65

Candidate Starts for Lolly9_91:

(Start: 65 @59420 has 70 MA's), (80, 59441), (117, 59525), (136, 59570), (163, 59651), (175, 59687), (202, 59774), (208, 59801),

Gene: LordFarquaad_67 Start: 43212, Stop: 43631, Start Num: 62

Candidate Starts for LordFarquaad_67:

(Start: 15 @43086 has 2 MA's), (23, 43128), (Start: 33 @43149 has 7 MA's), (44, 43173), (Start: 62 @43212 has 4 MA's), (72, 43224), (92, 43254), (132, 43359), (179, 43497),

Gene: Love_55 Start: 44334, Stop: 44852, Start Num: 33

Candidate Starts for Love_55:

(19, 44322), (Start: 22 @44331 has 5 MA's), (Start: 33 @44334 has 7 MA's), (138, 44550), (166, 44640), (170, 44652),

Gene: Lululemon_219 Start: 112060, Stop: 112500, Start Num: 76

Candidate Starts for Lululemon_219:

(9, 111865), (11, 111901), (30, 111973), (35, 111979), (39, 111988), (Start: 52 @112018 has 7 MA's), (54, 112024), (55, 112027), (58, 112033), (Start: 76 @112060 has 10 MA's), (118, 112156), (139, 112207), (168, 112300), (190, 112372), (204, 112426), (212, 112459),

Gene: Lumos_92 Start: 59232, Stop: 59639, Start Num: 65

Candidate Starts for Lumos_92:

(Start: 65 @59232 has 70 MA's), (80, 59253), (136, 59382), (137, 59385), (163, 59463), (175, 59499), (202, 59586), (208, 59613),

Gene: Lymara_98 Start: 62394, Stop: 62876, Start Num: 69

Candidate Starts for Lymara_98:

(6, 62202), (18, 62298), (Start: 69 @62394 has 15 MA's), (131, 62526),

Gene: MAckerman_89 Start: 56285, Stop: 56695, Start Num: 65

Candidate Starts for MAckerman_89:

(Start: 65 @56285 has 70 MA's), (Start: 87 @56315 has 3 MA's), (91, 56318), (106, 56363), (137, 56441), (152, 56483), (163, 56519), (179, 56561), (182, 56567), (195, 56615), (206, 56660), (213, 56687),

Gene: Maby2021_250 Start: 143650, Stop: 144099, Start Num: 57

Candidate Starts for Maby2021_250:

(Start: 57 @143650 has 34 MA's), (84, 143689), (98, 143707), (108, 143740), (119, 143767), (136, 143800), (164, 143887), (177, 143929), (204, 144028),

Gene: Malachai_17 Start: 10279, Stop: 10785, Start Num: 32

Candidate Starts for Malachai_17:

(Start: 32 @10279 has 2 MA's), (Start: 81 @10369 has 1 MA's), (137, 10504), (147, 10537), (164, 10588), (193, 10681), (204, 10723),

Gene: McGee_251 Start: 142298, Stop: 142747, Start Num: 57

Candidate Starts for McGee_251:

(Start: 57 @142298 has 34 MA's), (84, 142337), (98, 142355), (108, 142388), (119, 142415), (136, 142448), (164, 142535), (177, 142577), (204, 142676),

Gene: Mcklovin_2 Start: 532, Stop: 981, Start Num: 56

Candidate Starts for Mcklovin_2:

(Start: 33 @484 has 7 MA's), (40, 499), (47, 514), (Start: 56 @532 has 2 MA's), (126, 658), (134, 676), (142, 694), (145, 703), (157, 739), (166, 775), (177, 811), (197, 874), (201, 886),

Gene: Mildred21_232 Start: 111445, Stop: 111885, Start Num: 76

Candidate Starts for Mildred21_232:

(58, 111418), (Start: 76 @111445 has 10 MA's), (139, 111592), (168, 111685), (190, 111757), (204, 111811), (212, 111844),

Gene: Miley16_95 Start: 59815, Stop: 60228, Start Num: 65

Candidate Starts for Miley16_95:

(Start: 65 @59815 has 70 MA's), (117, 59926), (136, 59971), (137, 59974), (167, 60070), (189, 60124), (208, 60202), (213, 60220),

Gene: MiniLon_96 Start: 59421, Stop: 59828, Start Num: 65

Candidate Starts for MiniLon_96:

(Start: 65 @59421 has 70 MA's), (80, 59442), (117, 59526), (136, 59571), (163, 59652), (175, 59688), (202, 59775), (208, 59802),

Gene: MiniMac_96 Start: 59416, Stop: 59823, Start Num: 65

Candidate Starts for MiniMac_96:

(Start: 65 @59416 has 70 MA's), (80, 59437), (117, 59521), (136, 59566), (163, 59647), (175, 59683), (202, 59770), (208, 59797),

Gene: MintFritos_94 Start: 72730, Stop: 73143, Start Num: 78

Candidate Starts for MintFritos_94:

(39, 72655), (46, 72673), (Start: 78 @72730 has 1 MA's), (120, 72826), (132, 72853), (136, 72865), (137, 72868), (155, 72916),

Gene: MkaliMitinis3_97 Start: 59582, Stop: 59995, Start Num: 65

Candidate Starts for MkaliMitinis3_97:

(Start: 65 @59582 has 70 MA's), (117, 59693), (133, 59732), (137, 59741), (163, 59819), (189, 59891), (208, 59969), (213, 59987),

Gene: MoontowerMania_50 Start: 43336, Stop: 43860, Start Num: 33

Candidate Starts for MoontowerMania_50:

(27, 43324), (31, 43333), (Start: 33 @43336 has 7 MA's), (138, 43558), (166, 43648), (170, 43660),

Gene: Moostard_89 Start: 59339, Stop: 59746, Start Num: 65

Candidate Starts for Moostard_89:

(Start: 65 @59339 has 70 MA's), (80, 59360), (136, 59489), (137, 59492), (163, 59570), (175, 59606), (202, 59693), (208, 59720),

Gene: Mordred_100 Start: 63630, Stop: 64124, Start Num: 69

Candidate Starts for Mordred_100:

(18, 63522), (36, 63561), (Start: 69 @63630 has 15 MA's), (108, 63714), (134, 63786), (147, 63825), (216, 64095),

Gene: Morizzled23_247 Start: 141326, Stop: 141775, Start Num: 57

Candidate Starts for Morizzled23_247:

(Start: 57 @141326 has 34 MA's), (84, 141365), (98, 141383), (108, 141416), (119, 141443), (136, 141476), (164, 141563), (177, 141605), (204, 141704),

Gene: MortyNRick_68 Start: 43724, Stop: 44188, Start Num: 71

Candidate Starts for MortyNRick_68:

(71, 43724), (99, 43778), (144, 43904), (149, 43925), (171, 44000), (194, 44084), (195, 44090),

Gene: MortyNRick_64 Start: 42082, Stop: 42537, Start Num: 39

Candidate Starts for MortyNRick_64:

(39, 42082), (50, 42106), (111, 42211), (140, 42283), (204, 42475),

Gene: MsGreen_92 Start: 59234, Stop: 59641, Start Num: 65

Candidate Starts for MsGreen_92:

(Start: 65 @59234 has 70 MA's), (80, 59255), (136, 59384), (137, 59387), (163, 59465), (175, 59501), (202, 59588), (208, 59615),

Gene: Netyap_94 Start: 59453, Stop: 59866, Start Num: 65

Candidate Starts for Netyap_94:

(Start: 65 @59453 has 70 MA's), (117, 59564), (136, 59609), (137, 59612), (167, 59708), (189, 59762), (208, 59840), (213, 59858),

Gene: Nicholas_90 Start: 59344, Stop: 59751, Start Num: 65

Candidate Starts for Nicholas_90:

(Start: 65 @59344 has 70 MA's), (80, 59365), (136, 59494), (137, 59497), (163, 59575), (175, 59611), (202, 59698), (208, 59725),

Gene: Nicholasp3_95 Start: 59299, Stop: 59712, Start Num: 65

Candidate Starts for Nicholasp3_95:

(Start: 65 @59299 has 70 MA's), (117, 59410), (133, 59449), (137, 59458), (163, 59536), (189, 59608), (208, 59686), (213, 59704),

Gene: OhShagHennessy_87 Start: 56542, Stop: 56952, Start Num: 65

Candidate Starts for OhShagHennessy_87:

(Start: 65 @56542 has 70 MA's), (Start: 87 @56572 has 3 MA's), (91, 56575), (106, 56620), (137, 56698), (152, 56740), (163, 56776), (179, 56818), (182, 56824), (195, 56872), (206, 56917), (213, 56944),

Gene: PYPDinur_96 Start: 59772, Stop: 60179, Start Num: 65

Candidate Starts for PYPDinur_96:

(Start: 65 @59772 has 70 MA's), (80, 59793), (137, 59925), (167, 60021), (189, 60075), (202, 60126), (208, 60153), (209, 60156), (213, 60171),

Gene: PacManQ_219 Start: 112060, Stop: 112500, Start Num: 76
Candidate Starts for PacManQ_219:
(9, 111865), (11, 111901), (30, 111973), (35, 111979), (39, 111988), (Start: 52 @112018 has 7 MA's),
(54, 112024), (55, 112027), (58, 112033), (Start: 76 @112060 has 10 MA's), (118, 112156), (139,
112207), (168, 112300), (190, 112372), (204, 112426), (212, 112459),

Gene: Persimmon_162 Start: 90873, Stop: 91259, Start Num: 96
Candidate Starts for Persimmon_162:
(70, 90837), (74, 90843), (Start: 96 @90873 has 2 MA's), (121, 90942), (153, 91029), (172, 91095),

Gene: PhorbesPhlower_38 Start: 28562, Stop: 29011, Start Num: 68
Candidate Starts for PhorbesPhlower_38:
(26, 28481), (Start: 68 @28562 has 1 MA's), (142, 28730), (153, 28766), (198, 28895), (224, 29000),

Gene: Piccadilly_44 Start: 30160, Stop: 30651, Start Num: 41
Candidate Starts for Piccadilly_44:
(Start: 41 @30160 has 8 MA's), (160, 30412), (164, 30427),

Gene: PrincessTrina_101 Start: 63821, Stop: 64315, Start Num: 69
Candidate Starts for PrincessTrina_101:
(18, 63713), (36, 63752), (Start: 69 @63821 has 15 MA's), (108, 63905), (134, 63977), (147, 64016),
(216, 64286),

Gene: PurduePete_250 Start: 143690, Stop: 144139, Start Num: 57
Candidate Starts for PurduePete_250:
(Start: 57 @143690 has 34 MA's), (84, 143729), (98, 143747), (108, 143780), (119, 143807), (136,
143840), (164, 143927), (177, 143969), (204, 144068),

Gene: Quby_96 Start: 59183, Stop: 59590, Start Num: 65
Candidate Starts for Quby_96:
(Start: 65 @59183 has 70 MA's), (137, 59336), (167, 59432), (189, 59486), (202, 59537), (208,
59564), (209, 59567), (213, 59582),

Gene: REQ3_10 Start: 4829, Stop: 5143, Start Num: 118
Candidate Starts for REQ3_10:
(Start: 57 @4724 has 34 MA's), (Start: 64 @4733 has 1 MA's), (118, 4829), (122, 4835), (147, 4904),
(153, 4919),

Gene: RedWattleHog_27 Start: 28545, Stop: 28156, Start Num: 95
Candidate Starts for RedWattleHog_27:
(35, 28650), (Start: 95 @28545 has 1 MA's), (137, 28443), (173, 28326), (214, 28179),

Gene: Rose5_92 Start: 57809, Stop: 58219, Start Num: 65
Candidate Starts for Rose5_92:
(Start: 65 @57809 has 70 MA's), (Start: 87 @57839 has 3 MA's), (91, 57842), (106, 57887), (137,
57965), (152, 58007), (163, 58043), (179, 58085), (182, 58091), (195, 58139), (206, 58184), (213,
58211),

Gene: RosiePosie_100 Start: 63686, Stop: 64180, Start Num: 69
Candidate Starts for RosiePosie_100:
(18, 63578), (36, 63617), (Start: 69 @63686 has 15 MA's), (108, 63770), (134, 63842), (142, 63860),
(147, 63881),

Gene: Rumpelstiltskin_91 Start: 59092, Stop: 59505, Start Num: 65
Candidate Starts for Rumpelstiltskin_91:
(Start: 65 @59092 has 70 MA's), (117, 59203), (133, 59242), (137, 59251), (163, 59329), (189, 59401), (208, 59479), (213, 59497),

Gene: Salacia_251 Start: 144116, Stop: 144565, Start Num: 57
Candidate Starts for Salacia_251:
(Start: 57 @144116 has 34 MA's), (84, 144155), (98, 144173), (108, 144206), (119, 144233), (136, 144266), (164, 144353), (177, 144395), (204, 144494),

Gene: Samty_91 Start: 59332, Stop: 59739, Start Num: 65
Candidate Starts for Samty_91:
(Start: 65 @59332 has 70 MA's), (80, 59353), (136, 59482), (137, 59485), (163, 59563), (175, 59599), (202, 59686), (208, 59713),

Gene: Samy_46 Start: 31456, Stop: 31815, Start Num: 110
Candidate Starts for Samy_46:
(Start: 110 @31456 has 1 MA's), (125, 31495), (134, 31516), (139, 31528), (147, 31555), (160, 31591), (164, 31606), (172, 31636),

Gene: Sarshaun_96 Start: 60210, Stop: 60623, Start Num: 65
Candidate Starts for Sarshaun_96:
(Start: 65 @60210 has 70 MA's), (117, 60321), (133, 60360), (137, 60369), (163, 60447), (189, 60519), (208, 60597), (213, 60615),

Gene: Scavito_101 Start: 63679, Stop: 64173, Start Num: 69
Candidate Starts for Scavito_101:
(18, 63571), (36, 63610), (Start: 69 @63679 has 15 MA's), (108, 63763), (134, 63835), (147, 63874), (216, 64144),

Gene: ScoobyDoobyDoo_60 Start: 22027, Stop: 22503, Start Num: 45
Candidate Starts for ScoobyDoobyDoo_60:
(13, 21928), (Start: 45 @22027 has 4 MA's), (135, 22225), (207, 22462),

Gene: ScoobyDoobyDoo_251 Start: 151338, Stop: 151754, Start Num: 77
Candidate Starts for ScoobyDoobyDoo_251:
(29, 151257), (Start: 77 @151338 has 1 MA's), (88, 151356), (100, 151383), (108, 151401), (119, 151422), (132, 151452), (147, 151500), (155, 151515), (173, 151581), (198, 151668),

Gene: Seanderson_3 Start: 1096, Stop: 1605, Start Num: 52
Candidate Starts for Seanderson_3:
(34, 1057), (Start: 52 @1096 has 7 MA's), (150, 1291), (153, 1300), (164, 1336), (223, 1558),

Gene: Sheng711_97 Start: 59248, Stop: 59655, Start Num: 65
Candidate Starts for Sheng711_97:
(Start: 65 @59248 has 70 MA's), (80, 59269), (137, 59401), (167, 59497), (189, 59551), (202, 59602), (208, 59629), (209, 59632), (213, 59647),

Gene: Shivanishola_50 Start: 42031, Stop: 42549, Start Num: 33
Candidate Starts for Shivanishola_50:
(19, 42019), (Start: 22 @42028 has 5 MA's), (Start: 33 @42031 has 7 MA's), (138, 42247), (166, 42337), (170, 42349),

Gene: Shrimp_252 Start: 143727, Stop: 144176, Start Num: 57

Candidate Starts for Shrimp_252:

(Start: 57 @143727 has 34 MA's), (84, 143766), (98, 143784), (108, 143817), (119, 143844), (136, 143877), (164, 143964), (177, 144006), (204, 144105),

Gene: Silverleaf_90 Start: 57305, Stop: 57715, Start Num: 65

Candidate Starts for Silverleaf_90:

(Start: 65 @57305 has 70 MA's), (Start: 87 @57335 has 3 MA's), (91, 57338), (106, 57383), (137, 57461), (152, 57503), (163, 57539), (179, 57581), (182, 57587), (195, 57635), (206, 57680), (213, 57707),

Gene: Sitar_50 Start: 43707, Stop: 44228, Start Num: 22

Candidate Starts for Sitar_50:

(19, 43698), (Start: 22 @43707 has 5 MA's), (Start: 33 @43710 has 7 MA's), (138, 43926), (166, 44016), (170, 44028),

Gene: Smairt_2 Start: 926, Stop: 1435, Start Num: 52

Candidate Starts for Smairt_2:

(Start: 52 @926 has 7 MA's), (150, 1121), (153, 1130), (164, 1166), (223, 1388),

Gene: Smeagol_2 Start: 927, Stop: 1436, Start Num: 52

Candidate Starts for Smeagol_2:

(Start: 52 @927 has 7 MA's), (150, 1122), (153, 1131), (164, 1167), (223, 1389),

Gene: Snenia_91 Start: 59236, Stop: 59643, Start Num: 65

Candidate Starts for Snenia_91:

(Start: 65 @59236 has 70 MA's), (80, 59257), (136, 59386), (137, 59389), (163, 59467), (175, 59503), (202, 59590), (208, 59617),

Gene: Soap141_95 Start: 60210, Stop: 60623, Start Num: 65

Candidate Starts for Soap141_95:

(Start: 65 @60210 has 70 MA's), (117, 60321), (133, 60360), (137, 60369), (163, 60447), (189, 60519), (208, 60597), (213, 60615),

Gene: SoilAssassin_64 Start: 43104, Stop: 43649, Start Num: 15

Candidate Starts for SoilAssassin_64:

(Start: 15 @43104 has 2 MA's), (23, 43146), (Start: 33 @43167 has 7 MA's), (44, 43191), (Start: 62 @43230 has 4 MA's), (72, 43242), (92, 43272), (132, 43377), (179, 43515),

Gene: Sour_34 Start: 32659, Stop: 32288, Start Num: 101

Candidate Starts for Sour_34:

(49, 32755), (Start: 101 @32659 has 1 MA's), (119, 32617), (127, 32599), (128, 32596), (142, 32557), (175, 32449), (210, 32329),

Gene: Specks_254 Start: 143067, Stop: 143516, Start Num: 57

Candidate Starts for Specks_254:

(Start: 57 @143067 has 34 MA's), (84, 143106), (98, 143124), (108, 143157), (119, 143184), (136, 143217), (164, 143304), (177, 143346), (204, 143445),

Gene: SpeedDemon_100 Start: 4893, Stop: 5351, Start Num: 42

Candidate Starts for SpeedDemon_100:

(Start: 42 @4893 has 1 MA's), (125, 5040), (131, 5055), (134, 5070), (147, 5109), (162, 5151), (176, 5199), (211, 5319),

Gene: SrishMeg2525_247 Start: 143222, Stop: 143671, Start Num: 57

Candidate Starts for SrishMeg2525_247:

(Start: 57 @143222 has 34 MA's), (84, 143261), (98, 143279), (108, 143312), (119, 143339), (136, 143372), (164, 143459), (177, 143501), (204, 143600),

Gene: Sting_3 Start: 2872, Stop: 3252, Start Num: 59

Candidate Starts for Sting_3:

(Start: 59 @2872 has 1 MA's), (104, 2956), (116, 2989), (132, 3016), (136, 3028), (137, 3031), (155, 3079), (172, 3142), (188, 3178), (202, 3232), (205, 3241),

Gene: StubbySaigey_256 Start: 142752, Stop: 143201, Start Num: 57

Candidate Starts for StubbySaigey_256:

(Start: 57 @142752 has 34 MA's), (84, 142791), (98, 142809), (108, 142842), (119, 142869), (136, 142902), (164, 142989), (177, 143031), (204, 143130),

Gene: Sushi23_223 Start: 114010, Stop: 114450, Start Num: 76

Candidate Starts for Sushi23_223:

(9, 113815), (11, 113851), (30, 113923), (35, 113929), (39, 113938), (Start: 52 @113968 has 7 MA's), (54, 113974), (55, 113977), (58, 113983), (Start: 76 @114010 has 10 MA's), (118, 114106), (139, 114157), (168, 114250), (190, 114322), (204, 114376), (212, 114409),

Gene: Targaryen_222 Start: 114182, Stop: 114622, Start Num: 76

Candidate Starts for Targaryen_222:

(30, 114095), (35, 114101), (39, 114110), (Start: 52 @114140 has 7 MA's), (54, 114146), (Start: 76 @114182 has 10 MA's), (118, 114278), (139, 114329), (168, 114422), (190, 114494), (204, 114548), (212, 114581),

Gene: Target_12 Start: 7244, Stop: 7699, Start Num: 45

Candidate Starts for Target_12:

(Start: 45 @7244 has 4 MA's), (Start: 65 @7277 has 70 MA's), (108, 7364), (133, 7424), (147, 7466), (172, 7544), (175, 7553), (200, 7634), (210, 7673),

Gene: Teardrop_248 Start: 142079, Stop: 142528, Start Num: 57

Candidate Starts for Teardrop_248:

(Start: 57 @142079 has 34 MA's), (84, 142118), (98, 142136), (108, 142169), (119, 142196), (136, 142229), (164, 142316), (177, 142358), (204, 142457),

Gene: TheloniousMonk_12 Start: 7471, Stop: 7926, Start Num: 45

Candidate Starts for TheloniousMonk_12:

(Start: 45 @7471 has 4 MA's), (Start: 65 @7504 has 70 MA's), (108, 7591), (133, 7651), (147, 7693), (172, 7771), (175, 7780), (200, 7861), (210, 7900),

Gene: Thing3_49 Start: 42108, Stop: 42626, Start Num: 33

Candidate Starts for Thing3_49:

(Start: 33 @42108 has 7 MA's), (138, 42324), (166, 42414), (170, 42426),

Gene: TinyTim_248 Start: 142046, Stop: 142495, Start Num: 57

Candidate Starts for TinyTim_248:

(Start: 57 @142046 has 34 MA's), (84, 142085), (98, 142103), (108, 142136), (119, 142163), (136, 142196), (164, 142283), (177, 142325), (204, 142424),

Gene: Tophat_101 Start: 63868, Stop: 64362, Start Num: 69

Candidate Starts for Tophat_101:

(18, 63760), (36, 63799), (Start: 69 @63868 has 15 MA's), (108, 63952), (134, 64024), (147, 64063), (216, 64333),

Gene: Tourach_95 Start: 60189, Stop: 60602, Start Num: 65

Candidate Starts for Tourach_95:

(Start: 65 @60189 has 70 MA's), (106, 60270), (117, 60300), (136, 60345), (137, 60348), (167, 60444), (189, 60498), (208, 60576), (213, 60594),

Gene: Trinitium_246 Start: 140800, Stop: 141249, Start Num: 57

Candidate Starts for Trinitium_246:

(Start: 57 @140800 has 34 MA's), (84, 140839), (98, 140857), (108, 140890), (119, 140917), (136, 140950), (164, 141037), (177, 141079), (204, 141178),

Gene: Tucker_41 Start: 26756, Stop: 26394, Start Num: 79

Candidate Starts for Tucker_41:

(Start: 79 @26756 has 2 MA's), (112, 26708), (150, 26609), (174, 26531), (196, 26471),

Gene: Tyson_92 Start: 57702, Stop: 58112, Start Num: 65

Candidate Starts for Tyson_92:

(Start: 65 @57702 has 70 MA's), (Start: 87 @57732 has 3 MA's), (91, 57735), (106, 57780), (137, 57858), (152, 57900), (163, 57936), (179, 57978), (182, 57984), (195, 58032), (206, 58077), (213, 58104),

Gene: UPIE_90 Start: 57298, Stop: 57708, Start Num: 65

Candidate Starts for UPIE_90:

(Start: 65 @57298 has 70 MA's), (Start: 87 @57328 has 3 MA's), (91, 57331), (106, 57376), (137, 57454), (152, 57496), (163, 57532), (179, 57574), (182, 57580), (195, 57628), (206, 57673), (213, 57700),

Gene: Vetrix_93 Start: 59073, Stop: 59486, Start Num: 65

Candidate Starts for Vetrix_93:

(Start: 65 @59073 has 70 MA's), (117, 59184), (133, 59223), (137, 59232), (163, 59310), (189, 59382), (208, 59460), (213, 59478),

Gene: Vivi2_54 Start: 43935, Stop: 44456, Start Num: 22

Candidate Starts for Vivi2_54:

(19, 43926), (Start: 22 @43935 has 5 MA's), (Start: 33 @43938 has 7 MA's), (138, 44154), (166, 44244), (170, 44256),

Gene: Vondra_43 Start: 30012, Stop: 30503, Start Num: 41

Candidate Starts for Vondra_43:

(Start: 41 @30012 has 8 MA's), (160, 30264), (164, 30279),

Gene: Wamburgexpress_90 Start: 57426, Stop: 57836, Start Num: 65

Candidate Starts for Wamburgexpress_90:

(Start: 65 @57426 has 70 MA's), (Start: 87 @57456 has 3 MA's), (91, 57459), (106, 57504), (137, 57582), (152, 57624), (163, 57660), (179, 57702), (182, 57708), (195, 57756), (206, 57801), (213, 57828),

Gene: Whirlwind_93 Start: 59575, Stop: 59982, Start Num: 65

Candidate Starts for Whirlwind_93:

(Start: 65 @59575 has 70 MA's), (80, 59596), (136, 59725), (137, 59728), (163, 59806), (175, 59842), (202, 59929), (208, 59956),

Gene: Wigglewiggles_95 Start: 59375, Stop: 59788, Start Num: 65

Candidate Starts for Wigglewiggles_95:

(Start: 65 @59375 has 70 MA's), (117, 59486), (136, 59531), (137, 59534), (167, 59630), (189, 59684), (208, 59762), (213, 59780),

Gene: Wilder_96 Start: 59217, Stop: 59630, Start Num: 65

Candidate Starts for Wilder_96:

(Start: 65 @59217 has 70 MA's), (117, 59328), (133, 59367), (137, 59376), (163, 59454), (189, 59526), (208, 59604), (213, 59622),

Gene: Winky_95 Start: 59815, Stop: 60228, Start Num: 65

Candidate Starts for Winky_95:

(Start: 65 @59815 has 70 MA's), (117, 59926), (136, 59971), (137, 59974), (167, 60070), (189, 60124), (208, 60202), (213, 60220),

Gene: Wyatt2_92 Start: 57733, Stop: 58143, Start Num: 65

Candidate Starts for Wyatt2_92:

(Start: 65 @57733 has 70 MA's), (Start: 87 @57763 has 3 MA's), (91, 57766), (106, 57811), (137, 57889), (152, 57931), (163, 57967), (179, 58009), (182, 58015), (195, 58063), (206, 58108), (213, 58135),

Gene: Yucca_250 Start: 143605, Stop: 144054, Start Num: 57

Candidate Starts for Yucca_250:

(Start: 57 @143605 has 34 MA's), (84, 143644), (98, 143662), (108, 143695), (119, 143722), (136, 143755), (164, 143842), (177, 143884), (204, 143983),

Gene: Zakai_96 Start: 59860, Stop: 60273, Start Num: 65

Candidate Starts for Zakai_96:

(Start: 65 @59860 has 70 MA's), (117, 59971), (133, 60010), (137, 60019), (163, 60097), (189, 60169), (208, 60247), (213, 60265),

Gene: Zaria_91 Start: 56841, Stop: 57251, Start Num: 65

Candidate Starts for Zaria_91:

(Start: 65 @56841 has 70 MA's), (Start: 87 @56871 has 3 MA's), (91, 56874), (106, 56919), (137, 56997), (152, 57039), (163, 57075), (179, 57117), (182, 57123), (195, 57171), (206, 57216), (213, 57243),

Gene: ZhongYanYuan_92 Start: 59271, Stop: 59684, Start Num: 65

Candidate Starts for ZhongYanYuan_92:

(Start: 65 @59271 has 70 MA's), (117, 59382), (133, 59421), (137, 59430), (163, 59508), (189, 59580), (208, 59658), (213, 59676),

Gene: Zulu_41 Start: 26737, Stop: 26375, Start Num: 79

Candidate Starts for Zulu_41:

(Start: 79 @26737 has 2 MA's), (112, 26689), (150, 26590), (174, 26512), (196, 26452),

Gene: ZygoTaiga_246 Start: 143902, Stop: 144351, Start Num: 57

Candidate Starts for ZygoTaiga_246:

(Start: 57 @143902 has 34 MA's), (84, 143941), (98, 143959), (108, 143992), (119, 144019), (136, 144052), (164, 144139), (177, 144181), (204, 144280),

