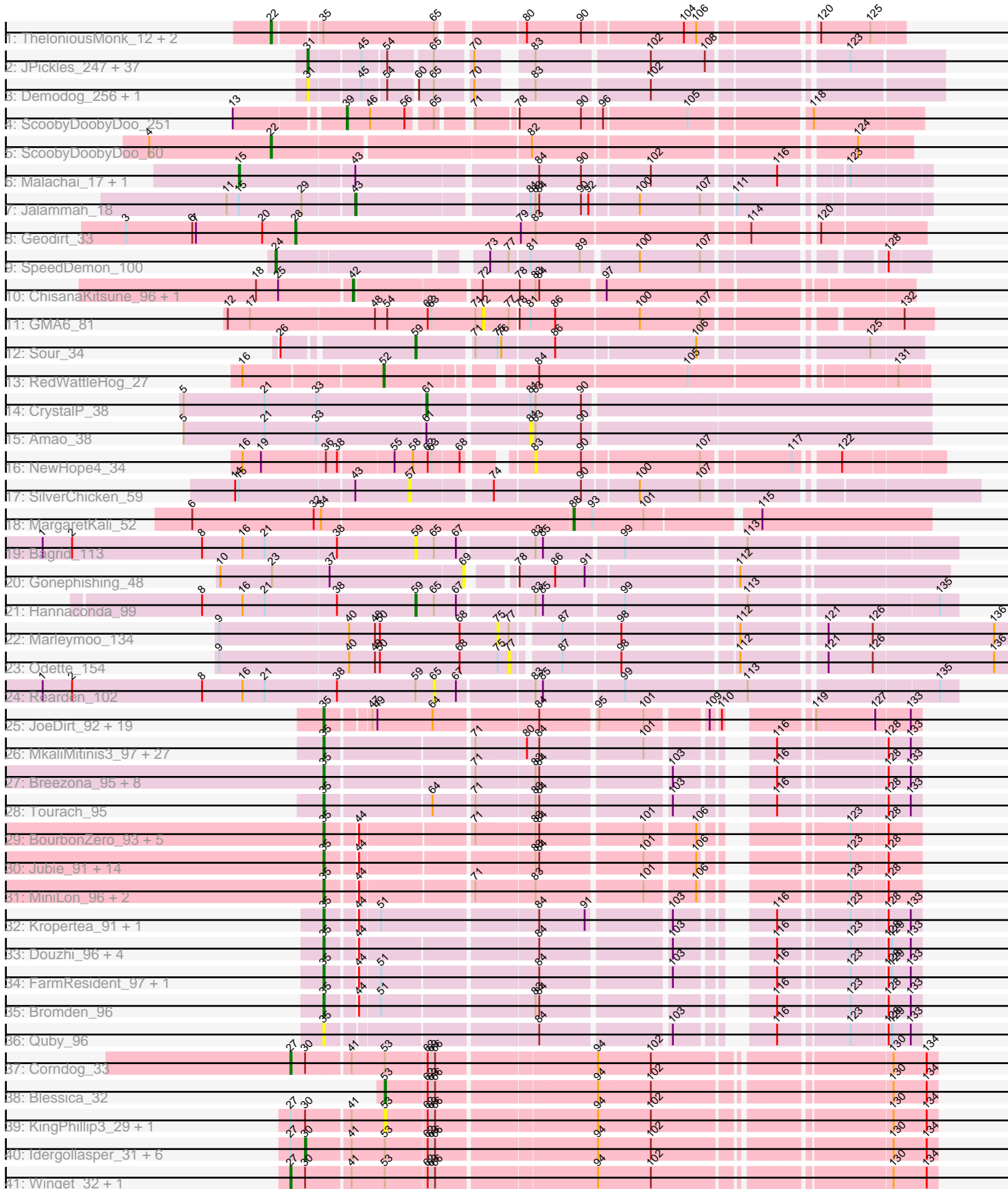


Pham 215890



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 215890 Report

This analysis was run 02/22/25 on database version 588.

Pham number 215890 has 172 members, 43 are drafts.

Phages represented in each track:

- Track 1 : TheloniousMonk_12, Target_12, Gwendoluna_12
- Track 2 : JPickles_247, StubbySaigey_256, Asterius_250, Darko_249, Blackbrain_248, Maby2021_250, Issimir_243, TinyTim_248, Erdmann_251, Ablatia_247, Ading_252, Shrimp_252, Gizmo_255, Belieber_242, Chargie21_247, Trinitium_246, ZygoTaiga_246, Basquiat_247, Bread_246, Morizzled23_247, Yucca_250, Specks_254, Astraea_245, Lee7_249, Janiyra_253, Bonray_252, McGee_251, ErnieJ_243, BananaFence_247, Salacia_251, FoxtrotP1_248, PurduePete_250, FudgeTart_245, Primadonna_244, Cactojaque_244, SrishMeg2525_247, EmToTheThree_250, Teardrop_248
- Track 3 : Demodog_256, Concombre_255
- Track 4 : ScoobyDoobyDoo_251
- Track 5 : ScoobyDoobyDoo_60
- Track 6 : Malachai_17, Begonia_17
- Track 7 : Jalammah_18
- Track 8 : Geodirt_33
- Track 9 : SpeedDemon_100
- Track 10 : ChisanaKitsune_96, MintFritos_94
- Track 11 : GMA6_81
- Track 12 : Sour_34
- Track 13 : RedWattleHog_27
- Track 14 : CrystalP_38
- Track 15 : Amao_38
- Track 16 : NewHope4_34
- Track 17 : SilverChicken_59
- Track 18 : MargaretKali_52
- Track 19 : Bagrid_113
- Track 20 : Gonephishing_48
- Track 21 : Hannaconda_99
- Track 22 : Marleymoo_134
- Track 23 : Odette_154
- Track 24 : Rearden_102
- Track 25 : JoeDirt_92, Zaria_91, AvadaKedavra_91, Wyatt2_92, Appletree2_90, LeBron_90, Rose5_92, Silverleaf_90, Tyson_92, DirkDirk_88, Enceladus_88, Acquire49_91, CicholasNage_88, OhShagHennessy_87, Halena_88, MAckerman_89, Poochiewood_89, Calm_92, UPIE_90, Wamburggrxpress_90
- Track 26 : MkaliMitinis3_97, DHan_98, LilDestine_93, DanBing_94, Loadrie_94, Bazzle_92, Finemlucis_96, Underpass_85, BigCheese_95, Archie_92, Claus_94,

GuuelaD_92, Baoshan_92, Kahlid_94, Lewan_96, Zakai_96, Hafay_96, Nicholasp3_95, Crossroads_95, Vetrix_93, Sarshaun_96, Soap141_95, Wilder_96, ZhongYanYuan_92, Gardann_95, Rumpelstiltskin_91, SoJulia_97, BobsGarage_94

- Track 27 : Breezona_95, Faith1_95, DrSeegs_94, Miley16_95, Wigglewiggle_95, Itos_95, Winky_95, Netyap_94, Gabriela_95
- Track 28 : Tourach_95
- Track 29 : BourbonZero_93, Ellson_91, Krypton555_94, KirDoubleO7_90, DuncansLeg_92, LiyuLake_91
- Track 30 : Jubie_91, Snenia_91, TriFive_92, Moostard_89, Jobypre_92, Red305_93, Finnry_92, Nicholas_90, MsGreen_92, Kingsolomon_90, Bellis_90, Samty_91, Clautastrophe_90, Lumos_92, Whirlwind_93
- Track 31 : MiniLon_96, MiniMac_96, Lolly9_91
- Track 32 : Kropertea_91, DyoEdafos_98
- Track 33 : Douzhi_96, Sheng711_97, Douge_96, BrainDrainer_97, PYPDinur_96
- Track 34 : FarmResident_97, Chaser_95
- Track 35 : Bromden_96
- Track 36 : Quby_96
- Track 37 : Corndog_33
- Track 38 : Blessica_32
- Track 39 : KingPhillip3_29, Zebo_30
- Track 40 : Idergollasper_31, Familton_32, SchoolBus_31, Catdawg_31, FoulBall_31, YungJamal_34, JangDynasty_31
- Track 41 : Winget_32, Ryadel_34

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

The start number called the most often in the published annotations is 35, it was called in 68 of the 129 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acquire49_91, Appletree2_90, Archie_92, AvadaKedavra_91, Baoshan_92, Bazzle_92, Bellis_90, 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_92, JoeDirt_92, Jubie_91, Kahlid_94, Kingsolomon_90, KirDoubleO7_90, Kropertea_91, 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, Poochiewood_89, Quby_96, Red305_93, Rose5_92, Rumpelstiltskin_91, Samty_91, Sarshaun_96, Sheng711_97, Silverleaf_90, Snenia_91, SoJulia_97, Soap141_95, Tourach_95, TriFive_92, Tyson_92, UPIE_90, Underpass_85, Vetrix_93, Wamburgxpress_90, Whirlwind_93, Wigglewiggle_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:

- Gwendoluna_12, Target_12, TheloniousMonk_12,

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

- Ablatia_247, Ading_252, Amao_38, Asterius_250, Astraea_245, Bagrid_113, BananaFence_247, Basquiat_247, Begonia_17, Belieber_242, Blackbrain_248, Blessica_32, Bonray_252, Bread_246, Cactojaque_244, Catdawg_31, Chargie21_247, ChisanaKitsune_96, Concombre_255, Corndog_33, CrystalP_38, Darko_249, Demodog_256, EmToTheThree_250, Erdmann_251, ErnieJ_243, Familton_32, FoulBall_31, FoxtrotP1_248, FudgeTart_245, GMA6_81, Geodirt_33, Gizmo_255, Gonephishing_48, Hannaconda_99, Idergollasper_31, Issimir_243, JPickles_247, Jalammah_18, JangDynasty_31, Janiyra_253, KingPhillip3_29, Lee7_249, Maby2021_250, Malachai_17, MargaretKali_52, Marleymoo_134, McGee_251, MintFritos_94, Morizzled23_247, NewHope4_34, Odette_154, Primadonna_244, PurduePete_250, Rearden_102, RedWattleHog_27, Ryadel_34, Salacia_251, SchoolBus_31, ScoobyDoobyDoo_251, ScoobyDoobyDoo_60, Shrimp_252, SilverChicken_59, Sour_34, Specks_254, SpeedDemon_100, SrishMeg2525_247, StubbySaigey_256, Teardrop_248, TinyTim_248, Trinitium_246, Winget_32, Yucca_250, YungJamal_34, Zebo_30, ZygoTaiga_246,

Summary by start number:

Start 15:

- Found in 4 of 172 (2.3%) of genes in pham
- Manual Annotations of this start: 2 of 129
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Begonia_17 (CV), Malachai_17 (CV),

Start 22:

- Found in 4 of 172 (2.3%) of genes in pham
- Manual Annotations of this start: 4 of 129
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gwendoluna_12 (A1), ScoobyDoobyDoo_60 (C2), Target_12 (A1), TheloniousMonk_12 (A1),

Start 24:

- Found in 1 of 172 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 129
- Called 100.0% of time when present
- Phage (with cluster) where this start called: SpeedDemon_100 (DL),

Start 27:

- Found in 12 of 172 (7.0%) of genes in pham
- Manual Annotations of this start: 3 of 129
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Corndog_33 (O), Ryadel_34 (O), Winget_32 (O),

Start 28:

- Found in 1 of 172 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 129
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Geodirt_33 (DE1),

Start 30:

- Found in 12 of 172 (7.0%) of genes in pham
- Manual Annotations of this start: 7 of 129
- Called 58.3% of time when present
- Phage (with cluster) where this start called: Catdawg_31 (O), Familton_32 (O), FoulBall_31 (O), Idergollasper_31 (O), JangDynasty_31 (O), SchoolBus_31 (O), YungJamal_34 (O),

Start 31:

- Found in 40 of 172 (23.3%) of genes in pham
- Manual Annotations of this start: 34 of 129
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ablatia_247 (C1), Ading_252 (C1), Asterius_250 (C1), Astraea_245 (C1), BananaFence_247 (C1), Basquiat_247 (C1), Belieber_242 (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), 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), Primadonna_244 (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 35:

- Found in 96 of 172 (55.8%) of genes in pham
- Manual Annotations of this start: 68 of 129
- Called 96.9% of time when present
- Phage (with cluster) where this start called: Acquire49_91 (L1), Appletree2_90 (L1), Archie_92 (L2), AvadaKedavra_91 (L1), Baoshan_92 (L2), Bazzle_92 (L2), Bellis_90 (L3), 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), Finnry_92 (L3), Gabriela_95 (L2), Gardann_95 (L2), GuuelaD_92 (L2), Hafay_96 (L2), Halena_88 (L1), Itos_95 (L2), Jobypre_92 (L3), JoeDirt_92 (L1), Jubie_91 (L3), Kahlid_94 (L2), Kingsolomon_90 (L3), KirDoubleO7_90 (L3), Kropertea_91 (L4), 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), Poochiewood_89 (L1), Quby_96 (L4), Red305_93 (L3), Rose5_92 (L1), Rumpelstiltskin_91 (L2), Samty_91 (L3), Sarshaun_96 (L2), Sheng711_97 (L4), Silverleaf_90 (L1), Snenia_91 (L3), SoJulia_97 (L2), Soap141_95 (L2), Tourach_95 (L2), TriFive_92 (L3), Tyson_92 (L1), UPIE_90 (L1), Underpass_85 (L2), Vetric_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 39:

- Found in 1 of 172 (0.6%) of genes in pham

- Manual Annotations of this start: 1 of 129
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ScoobyDoobyDoo_251 (C2),

Start 42:

- Found in 2 of 172 (1.2%) of genes in pham
- Manual Annotations of this start: 1 of 129
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ChisanaKitsune_96 (DQ), MintFritos_94 (DQ),

Start 43:

- Found in 4 of 172 (2.3%) of genes in pham
- Manual Annotations of this start: 1 of 129
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Jalammah_18 (CV),

Start 52:

- Found in 1 of 172 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 129
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RedWattleHog_27 (DX),

Start 53:

- Found in 13 of 172 (7.6%) of genes in pham
- Manual Annotations of this start: 1 of 129
- Called 23.1% of time when present
- Phage (with cluster) where this start called: Blessica_32 (O), KingPhillip3_29 (O), Zebo_30 (O),

Start 57:

- Found in 1 of 172 (0.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: SilverChicken_59 (F2),

Start 59:

- Found in 4 of 172 (2.3%) of genes in pham
- Manual Annotations of this start: 2 of 129
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Bagrid_113 (J), Hannaconda_99 (J), Sour_34 (DR),

Start 61:

- Found in 2 of 172 (1.2%) of genes in pham
- Manual Annotations of this start: 1 of 129
- Called 50.0% of time when present
- Phage (with cluster) where this start called: CrystalP_38 (E),

Start 65:

- Found in 47 of 172 (27.3%) of genes in pham
- No Manual Annotations of this start.
- Called 2.1% of time when present

- Phage (with cluster) where this start called: Rearden_102 (J),

Start 69:

- Found in 1 of 172 (0.6%) 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 72:

- Found in 3 of 172 (1.7%) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: GMA6_81 (DQ),

Start 75:

- Found in 3 of 172 (1.7%) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Marleymoo_134 (J),

Start 77:

- Found in 4 of 172 (2.3%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Odette_154 (J),

Start 81:

- Found in 5 of 172 (2.9%) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Amao_38 (E),

Start 83:

- Found in 85 of 172 (49.4%) of genes in pham
- No Manual Annotations of this start.
- Called 1.2% of time when present
- Phage (with cluster) where this start called: NewHope4_34 (F1),

Start 88:

- Found in 1 of 172 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 129
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MargaretKali_52 (FB),

Summary by clusters:

There are 19 clusters represented in this pham: F1, F2, E, DE1, FB, J, DL, O, A1, L4, L2, L3, DX, L1, C2, C1, DR, CV, DQ,

Info for manual annotations of cluster A1:

- Start number 22 was manually annotated 3 times for cluster A1.

Info for manual annotations of cluster C1:

- Start number 31 was manually annotated 34 times for cluster C1.

Info for manual annotations of cluster C2:

- Start number 22 was manually annotated 1 time for cluster C2.
- Start number 39 was manually annotated 1 time for cluster C2.

Info for manual annotations of cluster CV:

- Start number 15 was manually annotated 2 times for cluster CV.
- Start number 43 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster DE1:

- Start number 28 was manually annotated 1 time for cluster DE1.

Info for manual annotations of cluster DL:

- Start number 24 was manually annotated 1 time for cluster DL.

Info for manual annotations of cluster DQ:

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

Info for manual annotations of cluster DR:

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

Info for manual annotations of cluster DX:

- Start number 52 was manually annotated 1 time for cluster DX.

Info for manual annotations of cluster E:

- Start number 61 was manually annotated 1 time for cluster E.

Info for manual annotations of cluster FB:

- Start number 88 was manually annotated 1 time for cluster FB.

Info for manual annotations of cluster J:

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

Info for manual annotations of cluster L1:

- Start number 35 was manually annotated 19 times for cluster L1.

Info for manual annotations of cluster L2:

- Start number 35 was manually annotated 28 times for cluster L2.

Info for manual annotations of cluster L3:

- Start number 35 was manually annotated 17 times for cluster L3.

Info for manual annotations of cluster L4:

- Start number 35 was manually annotated 4 times for cluster L4.

Info for manual annotations of cluster O:

- Start number 27 was manually annotated 3 times for cluster O.
- Start number 30 was manually annotated 7 times for cluster O.
- Start number 53 was manually annotated 1 time for cluster O.

Gene Information:

Gene: Ablatia_247 Start: 141923, Stop: 142372, Start Num: 31

Candidate Starts for Ablatia_247:

(Start: 31 @141923 has 34 MA's), (45, 141962), (54, 141980), (65, 142013), (70, 142040), (83, 142073), (102, 142160), (108, 142202), (123, 142301),

Gene: Acquire49_91 Start: 57365, Stop: 57775, Start Num: 35

Candidate Starts for Acquire49_91:

(Start: 35 @57365 has 68 MA's), (47, 57395), (49, 57398), (64, 57443), (84, 57521), (95, 57563), (101, 57599), (109, 57641), (110, 57647), (119, 57695), (127, 57740), (133, 57767),

Gene: Ading_252 Start: 144356, Stop: 144805, Start Num: 31

Candidate Starts for Ading_252:

(Start: 31 @144356 has 34 MA's), (45, 144395), (54, 144413), (65, 144446), (70, 144473), (83, 144506), (102, 144593), (108, 144635), (123, 144734),

Gene: Amao_38 Start: 33060, Stop: 32746, Start Num: 81

Candidate Starts for Amao_38:

(5, 33333), (21, 33267), (33, 33225), (Start: 61 @33138 has 1 MA's), (81, 33060), (83, 33057), (90, 33021),

Gene: Appletree2_90 Start: 57125, Stop: 57535, Start Num: 35

Candidate Starts for Appletree2_90:

(Start: 35 @57125 has 68 MA's), (47, 57155), (49, 57158), (64, 57203), (84, 57281), (95, 57323), (101, 57359), (109, 57401), (110, 57407), (119, 57455), (127, 57500), (133, 57527),

Gene: Archie_92 Start: 59049, Stop: 59462, Start Num: 35

Candidate Starts for Archie_92:

(Start: 35 @59049 has 68 MA's), (71, 59160), (80, 59199), (84, 59208), (101, 59286), (116, 59358), (128, 59436), (133, 59454),

Gene: Asterius_250 Start: 142368, Stop: 142817, Start Num: 31

Candidate Starts for Asterius_250:

(Start: 31 @142368 has 34 MA's), (45, 142407), (54, 142425), (65, 142458), (70, 142485), (83, 142518), (102, 142605), (108, 142647), (123, 142746),

Gene: Astraea_245 Start: 141563, Stop: 142012, Start Num: 31

Candidate Starts for Astraea_245:

(Start: 31 @141563 has 34 MA's), (45, 141602), (54, 141620), (65, 141653), (70, 141680), (83, 141713), (102, 141800), (108, 141842), (123, 141941),

Gene: AvadaKedavra_91 Start: 57477, Stop: 57887, Start Num: 35

Candidate Starts for AvadaKedavra_91:

(Start: 35 @57477 has 68 MA's), (47, 57507), (49, 57510), (64, 57555), (84, 57633), (95, 57675), (101, 57711), (109, 57753), (110, 57759), (119, 57807), (127, 57852), (133, 57879),

Gene: Bagrid_113 Start: 63671, Stop: 64075, Start Num: 59

Candidate Starts for Bagrid_113:

(1, 63371), (2, 63395), (8, 63500), (16, 63533), (21, 63551), (38, 63608), (Start: 59 @63671 has 2 MA's), (65, 63686), (67, 63704), (83, 63761), (85, 63767), (99, 63827), (113, 63920),

Gene: BananaFence_247 Start: 142192, Stop: 142641, Start Num: 31

Candidate Starts for BananaFence_247:

(Start: 31 @142192 has 34 MA's), (45, 142231), (54, 142249), (65, 142282), (70, 142309), (83, 142342), (102, 142429), (108, 142471), (123, 142570),

Gene: Baoshan_92 Start: 59704, Stop: 60117, Start Num: 35

Candidate Starts for Baoshan_92:

(Start: 35 @59704 has 68 MA's), (71, 59815), (80, 59854), (84, 59863), (101, 59941), (116, 60013), (128, 60091), (133, 60109),

Gene: Basquiat_247 Start: 140478, Stop: 140927, Start Num: 31

Candidate Starts for Basquiat_247:

(Start: 31 @140478 has 34 MA's), (45, 140517), (54, 140535), (65, 140568), (70, 140595), (83, 140628), (102, 140715), (108, 140757), (123, 140856),

Gene: Bazzle_92 Start: 59605, Stop: 60018, Start Num: 35

Candidate Starts for Bazzle_92:

(Start: 35 @59605 has 68 MA's), (71, 59716), (80, 59755), (84, 59764), (101, 59842), (116, 59914), (128, 59992), (133, 60010),

Gene: Begonia_17 Start: 10279, Stop: 10785, Start Num: 15

Candidate Starts for Begonia_17:

(Start: 15 @10279 has 2 MA's), (Start: 43 @10369 has 1 MA's), (84, 10504), (90, 10537), (102, 10588), (116, 10681), (123, 10723),

Gene: Belieber_242 Start: 140605, Stop: 141054, Start Num: 31

Candidate Starts for Belieber_242:

(Start: 31 @140605 has 34 MA's), (45, 140644), (54, 140662), (65, 140695), (70, 140722), (83, 140755), (102, 140842), (108, 140884), (123, 140983),

Gene: Bellis_90 Start: 59240, Stop: 59647, Start Num: 35

Candidate Starts for Bellis_90:

(Start: 35 @59240 has 68 MA's), (44, 59261), (83, 59390), (84, 59393), (101, 59471), (106, 59507), (123, 59594), (128, 59621),

Gene: BigCheese_95 Start: 59815, Stop: 60228, Start Num: 35

Candidate Starts for BigCheese_95:

(Start: 35 @59815 has 68 MA's), (71, 59926), (80, 59965), (84, 59974), (101, 60052), (116, 60124), (128, 60202), (133, 60220),

Gene: Blackbrain_248 Start: 142255, Stop: 142704, Start Num: 31

Candidate Starts for Blackbrain_248:

(Start: 31 @142255 has 34 MA's), (45, 142294), (54, 142312), (65, 142345), (70, 142372), (83, 142405), (102, 142492), (108, 142534), (123, 142633),

Gene: Blessica_32 Start: 14991, Stop: 15401, Start Num: 53

Candidate Starts for Blessica_32:

(Start: 53 @14991 has 1 MA's), (62, 15024), (63, 15027), (66, 15030), (94, 15153), (102, 15195), (130, 15366), (134, 15393),

Gene: BobsGarage_94 Start: 59815, Stop: 60228, Start Num: 35

Candidate Starts for BobsGarage_94:

(Start: 35 @59815 has 68 MA's), (71, 59926), (80, 59965), (84, 59974), (101, 60052), (116, 60124), (128, 60202), (133, 60220),

Gene: Bonray_252 Start: 144055, Stop: 144504, Start Num: 31

Candidate Starts for Bonray_252:

(Start: 31 @144055 has 34 MA's), (45, 144094), (54, 144112), (65, 144145), (70, 144172), (83, 144205), (102, 144292), (108, 144334), (123, 144433),

Gene: BourbonZero_93 Start: 59266, Stop: 59673, Start Num: 35

Candidate Starts for BourbonZero_93:

(Start: 35 @59266 has 68 MA's), (44, 59287), (71, 59371), (83, 59416), (84, 59419), (101, 59497), (106, 59533), (123, 59620), (128, 59647),

Gene: BrainDrainer_97 Start: 59520, Stop: 59927, Start Num: 35

Candidate Starts for BrainDrainer_97:

(Start: 35 @59520 has 68 MA's), (44, 59541), (84, 59673), (103, 59769), (116, 59823), (123, 59874), (128, 59901), (129, 59904), (133, 59919),

Gene: Bread_246 Start: 142022, Stop: 142471, Start Num: 31

Candidate Starts for Bread_246:

(Start: 31 @142022 has 34 MA's), (45, 142061), (54, 142079), (65, 142112), (70, 142139), (83, 142172), (102, 142259), (108, 142301), (123, 142400),

Gene: Breezona_95 Start: 59815, Stop: 60228, Start Num: 35

Candidate Starts for Breezona_95:

(Start: 35 @59815 has 68 MA's), (71, 59926), (83, 59971), (84, 59974), (103, 60070), (116, 60124), (128, 60202), (133, 60220),

Gene: Bromden_96 Start: 60413, Stop: 60820, Start Num: 35

Candidate Starts for Bromden_96:

(Start: 35 @60413 has 68 MA's), (44, 60434), (51, 60449), (83, 60563), (84, 60566), (116, 60716), (123, 60767), (128, 60794), (133, 60812),

Gene: Cactojaque_244 Start: 141201, Stop: 141650, Start Num: 31

Candidate Starts for Cactojaque_244:

(Start: 31 @141201 has 34 MA's), (45, 141240), (54, 141258), (65, 141291), (70, 141318), (83, 141351), (102, 141438), (108, 141480), (123, 141579),

Gene: Calm_92 Start: 57376, Stop: 57786, Start Num: 35

Candidate Starts for Calm_92:

(Start: 35 @57376 has 68 MA's), (47, 57406), (49, 57409), (64, 57454), (84, 57532), (95, 57574), (101, 57610), (109, 57652), (110, 57658), (119, 57706), (127, 57751), (133, 57778),

Gene: Catdawg_31 Start: 14620, Stop: 15090, Start Num: 30

Candidate Starts for Catdawg_31:

(Start: 27 @14608 has 3 MA's), (Start: 30 @14620 has 7 MA's), (41, 14653), (Start: 53 @14680 has 1 MA's), (62, 14713), (63, 14716), (66, 14719), (94, 14842), (102, 14884), (130, 15055), (134, 15082),

Gene: Chargie21_247 Start: 140478, Stop: 140927, Start Num: 31

Candidate Starts for Chargie21_247:

(Start: 31 @140478 has 34 MA's), (45, 140517), (54, 140535), (65, 140568), (70, 140595), (83, 140628), (102, 140715), (108, 140757), (123, 140856),

Gene: Chaser_95 Start: 58821, Stop: 59228, Start Num: 35

Candidate Starts for Chaser_95:

(Start: 35 @58821 has 68 MA's), (44, 58842), (51, 58857), (84, 58974), (103, 59070), (116, 59124), (123, 59175), (128, 59202), (129, 59205), (133, 59220),

Gene: ChisanaKitsune_96 Start: 72440, Stop: 72853, Start Num: 42

Candidate Starts for ChisanaKitsune_96:

(18, 72365), (25, 72383), (Start: 42 @72440 has 1 MA's), (72, 72536), (78, 72563), (83, 72575), (84, 72578), (97, 72626),

Gene: CicholasNage_88 Start: 57029, Stop: 57439, Start Num: 35

Candidate Starts for CicholasNage_88:

(Start: 35 @57029 has 68 MA's), (47, 57059), (49, 57062), (64, 57107), (84, 57185), (95, 57227), (101, 57263), (109, 57305), (110, 57311), (119, 57359), (127, 57404), (133, 57431),

Gene: Claus_94 Start: 59528, Stop: 59941, Start Num: 35

Candidate Starts for Claus_94:

(Start: 35 @59528 has 68 MA's), (71, 59639), (80, 59678), (84, 59687), (101, 59765), (116, 59837), (128, 59915), (133, 59933),

Gene: Clautastrophe_90 Start: 59235, Stop: 59642, Start Num: 35

Candidate Starts for Clautastrophe_90:

(Start: 35 @59235 has 68 MA's), (44, 59256), (83, 59385), (84, 59388), (101, 59466), (106, 59502), (123, 59589), (128, 59616),

Gene: Concombres_255 Start: 144217, Stop: 144666, Start Num: 31

Candidate Starts for Concombres_255:

(Start: 31 @144217 has 34 MA's), (45, 144256), (54, 144274), (60, 144295), (65, 144307), (70, 144334), (83, 144367), (102, 144454),

Gene: Corndog_33 Start: 15066, Stop: 15548, Start Num: 27

Candidate Starts for Corndog_33:

(Start: 27 @15066 has 3 MA's), (Start: 30 @15078 has 7 MA's), (41, 15111), (Start: 53 @15138 has 1 MA's), (62, 15171), (63, 15174), (66, 15177), (94, 15300), (102, 15342), (130, 15513), (134, 15540),

Gene: Crossroads_95 Start: 59527, Stop: 59940, Start Num: 35

Candidate Starts for Crossroads_95:

(Start: 35 @59527 has 68 MA's), (71, 59638), (80, 59677), (84, 59686), (101, 59764), (116, 59836), (128, 59914), (133, 59932),

Gene: CrystalP_38 Start: 33934, Stop: 33542, Start Num: 61

Candidate Starts for CrystalP_38:

(5, 34129), (21, 34063), (33, 34021), (Start: 61 @33934 has 1 MA's), (81, 33856), (83, 33853), (90, 33817),

Gene: DHan_98 Start: 59751, Stop: 60164, Start Num: 35

Candidate Starts for DHan_98:

(Start: 35 @59751 has 68 MA's), (71, 59862), (80, 59901), (84, 59910), (101, 59988), (116, 60060), (128, 60138), (133, 60156),

Gene: DanBing_94 Start: 59444, Stop: 59857, Start Num: 35

Candidate Starts for DanBing_94:

(Start: 35 @59444 has 68 MA's), (71, 59555), (80, 59594), (84, 59603), (101, 59681), (116, 59753), (128, 59831), (133, 59849),

Gene: Darko_249 Start: 142196, Stop: 142645, Start Num: 31

Candidate Starts for Darko_249:

(Start: 31 @142196 has 34 MA's), (45, 142235), (54, 142253), (65, 142286), (70, 142313), (83, 142346), (102, 142433), (108, 142475), (123, 142574),

Gene: Demodog_256 Start: 144227, Stop: 144676, Start Num: 31

Candidate Starts for Demodog_256:

(Start: 31 @144227 has 34 MA's), (45, 144266), (54, 144284), (60, 144305), (65, 144317), (70, 144344), (83, 144377), (102, 144464),

Gene: DirkDirk_88 Start: 56705, Stop: 57115, Start Num: 35

Candidate Starts for DirkDirk_88:

(Start: 35 @56705 has 68 MA's), (47, 56735), (49, 56738), (64, 56783), (84, 56861), (95, 56903), (101, 56939), (109, 56981), (110, 56987), (119, 57035), (127, 57080), (133, 57107),

Gene: Douge_96 Start: 58940, Stop: 59347, Start Num: 35

Candidate Starts for Douge_96:

(Start: 35 @58940 has 68 MA's), (44, 58961), (84, 59093), (103, 59189), (116, 59243), (123, 59294), (128, 59321), (129, 59324), (133, 59339),

Gene: Douzhi_96 Start: 59209, Stop: 59616, Start Num: 35

Candidate Starts for Douzhi_96:

(Start: 35 @59209 has 68 MA's), (44, 59230), (84, 59362), (103, 59458), (116, 59512), (123, 59563), (128, 59590), (129, 59593), (133, 59608),

Gene: DrSeegs_94 Start: 59815, Stop: 60228, Start Num: 35

Candidate Starts for DrSeegs_94:

(Start: 35 @59815 has 68 MA's), (71, 59926), (83, 59971), (84, 59974), (103, 60070), (116, 60124), (128, 60202), (133, 60220),

Gene: DuncansLeg_92 Start: 59254, Stop: 59661, Start Num: 35

Candidate Starts for DuncansLeg_92:

(Start: 35 @59254 has 68 MA's), (44, 59275), (71, 59359), (83, 59404), (84, 59407), (101, 59485), (106, 59521), (123, 59608), (128, 59635),

Gene: DyoEdafos_98 Start: 59531, Stop: 59938, Start Num: 35

Candidate Starts for DyoEdafos_98:

(Start: 35 @59531 has 68 MA's), (44, 59552), (51, 59567), (84, 59684), (91, 59720), (103, 59780), (116, 59834), (123, 59885), (128, 59912), (133, 59930),

Gene: Ellson_91 Start: 59569, Stop: 59976, Start Num: 35

Candidate Starts for Ellson_91:

(Start: 35 @59569 has 68 MA's), (44, 59590), (71, 59674), (83, 59719), (84, 59722), (101, 59800), (106, 59836), (123, 59923), (128, 59950),

Gene: EmToTheThree_250 Start: 143104, Stop: 143553, Start Num: 31

Candidate Starts for EmToTheThree_250:

(Start: 31 @143104 has 34 MA's), (45, 143143), (54, 143161), (65, 143194), (70, 143221), (83, 143254), (102, 143341), (108, 143383), (123, 143482),

Gene: Enceladus_88 Start: 57406, Stop: 57816, Start Num: 35

Candidate Starts for Enceladus_88:

(Start: 35 @57406 has 68 MA's), (47, 57436), (49, 57439), (64, 57484), (84, 57562), (95, 57604), (101, 57640), (109, 57682), (110, 57688), (119, 57736), (127, 57781), (133, 57808),

Gene: Erdmann_251 Start: 143072, Stop: 143521, Start Num: 31

Candidate Starts for Erdmann_251:

(Start: 31 @143072 has 34 MA's), (45, 143111), (54, 143129), (65, 143162), (70, 143189), (83, 143222), (102, 143309), (108, 143351), (123, 143450),

Gene: ErnieJ_243 Start: 139900, Stop: 140349, Start Num: 31

Candidate Starts for ErnieJ_243:

(Start: 31 @139900 has 34 MA's), (45, 139939), (54, 139957), (65, 139990), (70, 140017), (83, 140050), (102, 140137), (108, 140179), (123, 140278),

Gene: Faith1_95 Start: 59452, Stop: 59865, Start Num: 35

Candidate Starts for Faith1_95:

(Start: 35 @59452 has 68 MA's), (71, 59563), (83, 59608), (84, 59611), (103, 59707), (116, 59761), (128, 59839), (133, 59857),

Gene: Familton_32 Start: 14624, Stop: 15094, Start Num: 30

Candidate Starts for Familton_32:

(Start: 27 @14612 has 3 MA's), (Start: 30 @14624 has 7 MA's), (41, 14657), (Start: 53 @14684 has 1 MA's), (62, 14717), (63, 14720), (66, 14723), (94, 14846), (102, 14888), (130, 15059), (134, 15086),

Gene: FarmResident_97 Start: 59091, Stop: 59498, Start Num: 35

Candidate Starts for FarmResident_97:

(Start: 35 @59091 has 68 MA's), (44, 59112), (51, 59127), (84, 59244), (103, 59340), (116, 59394), (123, 59445), (128, 59472), (129, 59475), (133, 59490),

Gene: Finemlucis_96 Start: 60566, Stop: 60979, Start Num: 35

Candidate Starts for Finemlucis_96:

(Start: 35 @60566 has 68 MA's), (71, 60677), (80, 60716), (84, 60725), (101, 60803), (116, 60875), (128, 60953), (133, 60971),

Gene: Finnry_92 Start: 59588, Stop: 59995, Start Num: 35

Candidate Starts for Finnry_92:

(Start: 35 @59588 has 68 MA's), (44, 59609), (83, 59738), (84, 59741), (101, 59819), (106, 59855), (123, 59942), (128, 59969),

Gene: FoulBall_31 Start: 14618, Stop: 15088, Start Num: 30

Candidate Starts for FoulBall_31:

(Start: 27 @14606 has 3 MA's), (Start: 30 @14618 has 7 MA's), (41, 14651), (Start: 53 @14678 has 1 MA's), (62, 14711), (63, 14714), (66, 14717), (94, 14840), (102, 14882), (130, 15053), (134, 15080),

Gene: FoxtrotP1_248 Start: 143658, Stop: 144107, Start Num: 31

Candidate Starts for FoxtrotP1_248:

(Start: 31 @143658 has 34 MA's), (45, 143697), (54, 143715), (65, 143748), (70, 143775), (83, 143808), (102, 143895), (108, 143937), (123, 144036),

Gene: FudgeTart_245 Start: 142162, Stop: 142611, Start Num: 31

Candidate Starts for FudgeTart_245:

(Start: 31 @142162 has 34 MA's), (45, 142201), (54, 142219), (65, 142252), (70, 142279), (83, 142312), (102, 142399), (108, 142441), (123, 142540),

Gene: GMA6_81 Start: 64168, Stop: 64497, Start Num: 72

Candidate Starts for GMA6_81:

(12, 63964), (17, 63982), (48, 64081), (54, 64090), (62, 64123), (63, 64126), (71, 64162), (72, 64168), (77, 64189), (78, 64195), (81, 64204), (86, 64222), (100, 64288), (107, 64336), (132, 64474),

Gene: Gabriela_95 Start: 58798, Stop: 59211, Start Num: 35

Candidate Starts for Gabriela_95:

(Start: 35 @58798 has 68 MA's), (71, 58909), (83, 58954), (84, 58957), (103, 59053), (116, 59107), (128, 59185), (133, 59203),

Gene: Gardann_95 Start: 59299, Stop: 59712, Start Num: 35

Candidate Starts for Gardann_95:

(Start: 35 @59299 has 68 MA's), (71, 59410), (80, 59449), (84, 59458), (101, 59536), (116, 59608), (128, 59686), (133, 59704),

Gene: Geodirt_33 Start: 32468, Stop: 31986, Start Num: 28

Candidate Starts for Geodirt_33:

(3, 32606), (6, 32552), (7, 32549), (20, 32495), (Start: 28 @32468 has 1 MA's), (79, 32285), (83, 32273), (114, 32111), (120, 32066),

Gene: Gizmo_255 Start: 144989, Stop: 145438, Start Num: 31

Candidate Starts for Gizmo_255:

(Start: 31 @144989 has 34 MA's), (45, 145028), (54, 145046), (65, 145079), (70, 145106), (83, 145139), (102, 145226), (108, 145268), (123, 145367),

Gene: Gonephishing_48 Start: 38804, Stop: 38457, Start Num: 69

Candidate Starts for Gonephishing_48:

(10, 38996), (23, 38954), (37, 38909), (69, 38804), (78, 38777), (86, 38750), (91, 38726), (112, 38615),

Gene: GuuelaD_92 Start: 59411, Stop: 59824, Start Num: 35

Candidate Starts for GuuelaD_92:

(Start: 35 @59411 has 68 MA's), (71, 59522), (80, 59561), (84, 59570), (101, 59648), (116, 59720), (128, 59798), (133, 59816),

Gene: Gwendoluna_12 Start: 7666, Stop: 8121, Start Num: 22

Candidate Starts for Gwendoluna_12:

(Start: 22 @7666 has 4 MA's), (Start: 35 @7699 has 68 MA's), (65, 7786), (80, 7846), (90, 7888), (104, 7966), (106, 7975), (120, 8056), (125, 8095),

Gene: Hafay_96 Start: 59523, Stop: 59936, Start Num: 35

Candidate Starts for Hafay_96:

(Start: 35 @59523 has 68 MA's), (71, 59634), (80, 59673), (84, 59682), (101, 59760), (116, 59832), (128, 59910), (133, 59928),

Gene: Halena_88 Start: 56292, Stop: 56702, Start Num: 35

Candidate Starts for Halena_88:

(Start: 35 @56292 has 68 MA's), (47, 56322), (49, 56325), (64, 56370), (84, 56448), (95, 56490), (101, 56526), (109, 56568), (110, 56574), (119, 56622), (127, 56667), (133, 56694),

Gene: Hannaconda_99 Start: 57411, Stop: 57815, Start Num: 59

Candidate Starts for Hannaconda_99:

(8, 57240), (16, 57273), (21, 57291), (38, 57348), (Start: 59 @57411 has 2 MA's), (65, 57426), (67, 57444), (83, 57501), (85, 57507), (99, 57567), (113, 57660), (135, 57801),

Gene: Idergollasper_31 Start: 14618, Stop: 15088, Start Num: 30

Candidate Starts for Idergollasper_31:

(Start: 27 @14606 has 3 MA's), (Start: 30 @14618 has 7 MA's), (41, 14651), (Start: 53 @14678 has 1 MA's), (62, 14711), (63, 14714), (66, 14717), (94, 14840), (102, 14882), (130, 15053), (134, 15080),

Gene: Issimir_243 Start: 142261, Stop: 142710, Start Num: 31

Candidate Starts for Issimir_243:

(Start: 31 @142261 has 34 MA's), (45, 142300), (54, 142318), (65, 142351), (70, 142378), (83, 142411), (102, 142498), (108, 142540), (123, 142639),

Gene: Itos_95 Start: 58358, Stop: 58771, Start Num: 35

Candidate Starts for Itos_95:

(Start: 35 @58358 has 68 MA's), (71, 58469), (83, 58514), (84, 58517), (103, 58613), (116, 58667), (128, 58745), (133, 58763),

Gene: JPickles_247 Start: 141311, Stop: 141760, Start Num: 31

Candidate Starts for JPickles_247:

(Start: 31 @141311 has 34 MA's), (45, 141350), (54, 141368), (65, 141401), (70, 141428), (83, 141461), (102, 141548), (108, 141590), (123, 141689),

Gene: Jalammah_18 Start: 10634, Stop: 11050, Start Num: 43

Candidate Starts for Jalammah_18:

(11, 10535), (Start: 15 @10544 has 2 MA's), (29, 10595), (Start: 43 @10634 has 1 MA's), (81, 10763), (83, 10766), (84, 10769), (90, 10802), (92, 10808), (100, 10844), (107, 10892), (111, 10913),

Gene: JangDynasty_31 Start: 14713, Stop: 15183, Start Num: 30

Candidate Starts for JangDynasty_31:

(Start: 27 @14701 has 3 MA's), (Start: 30 @14713 has 7 MA's), (41, 14746), (Start: 53 @14773 has 1 MA's), (62, 14806), (63, 14809), (66, 14812), (94, 14935), (102, 14977), (130, 15148), (134, 15175),

Gene: Janiyra_253 Start: 142848, Stop: 143297, Start Num: 31

Candidate Starts for Janiyra_253:

(Start: 31 @142848 has 34 MA's), (45, 142887), (54, 142905), (65, 142938), (70, 142965), (83, 142998), (102, 143085), (108, 143127), (123, 143226),

Gene: Jobypre_92 Start: 59235, Stop: 59642, Start Num: 35

Candidate Starts for Jobypre_92:

(Start: 35 @59235 has 68 MA's), (44, 59256), (83, 59385), (84, 59388), (101, 59466), (106, 59502), (123, 59589), (128, 59616),

Gene: JoeDirt_92 Start: 57967, Stop: 58377, Start Num: 35

Candidate Starts for JoeDirt_92:

(Start: 35 @57967 has 68 MA's), (47, 57997), (49, 58000), (64, 58045), (84, 58123), (95, 58165), (101, 58201), (109, 58243), (110, 58249), (119, 58297), (127, 58342), (133, 58369),

Gene: Jubie_91 Start: 59370, Stop: 59777, Start Num: 35

Candidate Starts for Jubie_91:

(Start: 35 @59370 has 68 MA's), (44, 59391), (83, 59520), (84, 59523), (101, 59601), (106, 59637), (123, 59724), (128, 59751),

Gene: Kahlid_94 Start: 59217, Stop: 59630, Start Num: 35

Candidate Starts for Kahlid_94:

(Start: 35 @59217 has 68 MA's), (71, 59328), (80, 59367), (84, 59376), (101, 59454), (116, 59526), (128, 59604), (133, 59622),

Gene: KingPhillip3_29 Start: 14678, Stop: 15088, Start Num: 53

Candidate Starts for KingPhillip3_29:

(Start: 27 @14606 has 3 MA's), (Start: 30 @14618 has 7 MA's), (41, 14651), (Start: 53 @14678 has 1 MA's), (62, 14711), (63, 14714), (66, 14717), (94, 14840), (102, 14882), (130, 15053), (134, 15080),

Gene: Kingsolomon_90 Start: 59344, Stop: 59751, Start Num: 35

Candidate Starts for Kingsolomon_90:

(Start: 35 @59344 has 68 MA's), (44, 59365), (83, 59494), (84, 59497), (101, 59575), (106, 59611), (123, 59698), (128, 59725),

Gene: KirDoubleO7_90 Start: 59256, Stop: 59663, Start Num: 35

Candidate Starts for KirDoubleO7_90:

(Start: 35 @59256 has 68 MA's), (44, 59277), (71, 59361), (83, 59406), (84, 59409), (101, 59487), (106, 59523), (123, 59610), (128, 59637),

Gene: Kropertea_91 Start: 58811, Stop: 59221, Start Num: 35

Candidate Starts for Kropertea_91:

(Start: 35 @58811 has 68 MA's), (44, 58832), (51, 58847), (84, 58967), (91, 59003), (103, 59063), (116, 59117), (123, 59168), (128, 59195), (133, 59213),

Gene: Krypton555_94 Start: 59747, Stop: 60154, Start Num: 35

Candidate Starts for Krypton555_94:

(Start: 35 @59747 has 68 MA's), (44, 59768), (71, 59852), (83, 59897), (84, 59900), (101, 59978), (106, 60014), (123, 60101), (128, 60128),

Gene: LeBron_90 Start: 56599, Stop: 57009, Start Num: 35

Candidate Starts for LeBron_90:

(Start: 35 @56599 has 68 MA's), (47, 56629), (49, 56632), (64, 56677), (84, 56755), (95, 56797), (101, 56833), (109, 56875), (110, 56881), (119, 56929), (127, 56974), (133, 57001),

Gene: Lee7_249 Start: 144611, Stop: 145060, Start Num: 31

Candidate Starts for Lee7_249:

(Start: 31 @144611 has 34 MA's), (45, 144650), (54, 144668), (65, 144701), (70, 144728), (83, 144761), (102, 144848), (108, 144890), (123, 144989),

Gene: Lewan_96 Start: 59451, Stop: 59864, Start Num: 35

Candidate Starts for Lewan_96:

(Start: 35 @59451 has 68 MA's), (71, 59562), (80, 59601), (84, 59610), (101, 59688), (116, 59760), (128, 59838), (133, 59856),

Gene: LilDestine_93 Start: 59128, Stop: 59541, Start Num: 35

Candidate Starts for LilDestine_93:

(Start: 35 @59128 has 68 MA's), (71, 59239), (80, 59278), (84, 59287), (101, 59365), (116, 59437), (128, 59515), (133, 59533),

Gene: LiyuLake_91 Start: 59329, Stop: 59736, Start Num: 35

Candidate Starts for LiyuLake_91:

(Start: 35 @59329 has 68 MA's), (44, 59350), (71, 59434), (83, 59479), (84, 59482), (101, 59560), (106, 59596), (123, 59683), (128, 59710),

Gene: Loadrie_94 Start: 59619, Stop: 60032, Start Num: 35

Candidate Starts for Loadrie_94:

(Start: 35 @59619 has 68 MA's), (71, 59730), (80, 59769), (84, 59778), (101, 59856), (116, 59928), (128, 60006), (133, 60024),

Gene: Lolly9_91 Start: 59420, Stop: 59827, Start Num: 35

Candidate Starts for Lolly9_91:

(Start: 35 @59420 has 68 MA's), (44, 59441), (71, 59525), (83, 59570), (101, 59651), (106, 59687), (123, 59774), (128, 59801),

Gene: Lumos_92 Start: 59232, Stop: 59639, Start Num: 35

Candidate Starts for Lumos_92:

(Start: 35 @59232 has 68 MA's), (44, 59253), (83, 59382), (84, 59385), (101, 59463), (106, 59499), (123, 59586), (128, 59613),

Gene: MAckerman_89 Start: 56285, Stop: 56695, Start Num: 35

Candidate Starts for MAckerman_89:

(Start: 35 @56285 has 68 MA's), (47, 56315), (49, 56318), (64, 56363), (84, 56441), (95, 56483), (101, 56519), (109, 56561), (110, 56567), (119, 56615), (127, 56660), (133, 56687),

Gene: Maby2021_250 Start: 143650, Stop: 144099, Start Num: 31

Candidate Starts for Maby2021_250:

(Start: 31 @143650 has 34 MA's), (45, 143689), (54, 143707), (65, 143740), (70, 143767), (83, 143800), (102, 143887), (108, 143929), (123, 144028),

Gene: Malachai_17 Start: 10279, Stop: 10785, Start Num: 15

Candidate Starts for Malachai_17:

(Start: 15 @10279 has 2 MA's), (Start: 43 @10369 has 1 MA's), (84, 10504), (90, 10537), (102, 10588), (116, 10681), (123, 10723),

Gene: MargaretKali_52 Start: 31304, Stop: 31582, Start Num: 88

Candidate Starts for MargaretKali_52:

(6, 30998), (32, 31097), (34, 31103), (Start: 88 @31304 has 1 MA's), (93, 31319), (101, 31361), (115, 31445),

Gene: Marleymoo_134 Start: 76219, Stop: 76599, Start Num: 75

Candidate Starts for Marleymoo_134:

(9, 76000), (40, 76102), (48, 76123), (50, 76126), (68, 76189), (75, 76219), (77, 76228), (87, 76261), (98, 76306), (112, 76393), (121, 76453), (126, 76489), (136, 76585),

Gene: McGee_251 Start: 142298, Stop: 142747, Start Num: 31

Candidate Starts for McGee_251:

(Start: 31 @142298 has 34 MA's), (45, 142337), (54, 142355), (65, 142388), (70, 142415), (83, 142448), (102, 142535), (108, 142577), (123, 142676),

Gene: Miley16_95 Start: 59815, Stop: 60228, Start Num: 35

Candidate Starts for Miley16_95:

(Start: 35 @59815 has 68 MA's), (71, 59926), (83, 59971), (84, 59974), (103, 60070), (116, 60124), (128, 60202), (133, 60220),

Gene: MiniLon_96 Start: 59421, Stop: 59828, Start Num: 35

Candidate Starts for MiniLon_96:

(Start: 35 @59421 has 68 MA's), (44, 59442), (71, 59526), (83, 59571), (101, 59652), (106, 59688), (123, 59775), (128, 59802),

Gene: MiniMac_96 Start: 59416, Stop: 59823, Start Num: 35

Candidate Starts for MiniMac_96:

(Start: 35 @59416 has 68 MA's), (44, 59437), (71, 59521), (83, 59566), (101, 59647), (106, 59683), (123, 59770), (128, 59797),

Gene: MintFritos_94 Start: 72730, Stop: 73143, Start Num: 42

Candidate Starts for MintFritos_94:

(18, 72655), (25, 72673), (Start: 42 @72730 has 1 MA's), (72, 72826), (78, 72853), (83, 72865), (84, 72868), (97, 72916),

Gene: MkaliMitinis3_97 Start: 59582, Stop: 59995, Start Num: 35

Candidate Starts for MkaliMitinis3_97:

(Start: 35 @59582 has 68 MA's), (71, 59693), (80, 59732), (84, 59741), (101, 59819), (116, 59891), (128, 59969), (133, 59987),

Gene: Moostard_89 Start: 59339, Stop: 59746, Start Num: 35

Candidate Starts for Moostard_89:

(Start: 35 @59339 has 68 MA's), (44, 59360), (83, 59489), (84, 59492), (101, 59570), (106, 59606), (123, 59693), (128, 59720),

Gene: Morizzled23_247 Start: 141326, Stop: 141775, Start Num: 31

Candidate Starts for Morizzled23_247:

(Start: 31 @141326 has 34 MA's), (45, 141365), (54, 141383), (65, 141416), (70, 141443), (83, 141476), (102, 141563), (108, 141605), (123, 141704),

Gene: MsGreen_92 Start: 59234, Stop: 59641, Start Num: 35

Candidate Starts for MsGreen_92:

(Start: 35 @59234 has 68 MA's), (44, 59255), (83, 59384), (84, 59387), (101, 59465), (106, 59501), (123, 59588), (128, 59615),

Gene: Netyap_94 Start: 59453, Stop: 59866, Start Num: 35

Candidate Starts for Netyap_94:

(Start: 35 @59453 has 68 MA's), (71, 59564), (83, 59609), (84, 59612), (103, 59708), (116, 59762), (128, 59840), (133, 59858),

Gene: NewHope4_34 Start: 27320, Stop: 27021, Start Num: 83

Candidate Starts for NewHope4_34:

(16, 27527), (19, 27512), (36, 27461), (38, 27452), (55, 27410), (58, 27395), (62, 27383), (63, 27380), (68, 27359), (83, 27320), (90, 27284), (107, 27194), (117, 27128), (122, 27098),

Gene: Nicholas_90 Start: 59344, Stop: 59751, Start Num: 35

Candidate Starts for Nicholas_90:

(Start: 35 @59344 has 68 MA's), (44, 59365), (83, 59494), (84, 59497), (101, 59575), (106, 59611), (123, 59698), (128, 59725),

Gene: Nicholasp3_95 Start: 59299, Stop: 59712, Start Num: 35

Candidate Starts for Nicholasp3_95:

(Start: 35 @59299 has 68 MA's), (71, 59410), (80, 59449), (84, 59458), (101, 59536), (116, 59608), (128, 59686), (133, 59704),

Gene: Odette_154 Start: 81698, Stop: 82069, Start Num: 77

Candidate Starts for Odette_154:

(9, 81470), (40, 81572), (48, 81593), (50, 81596), (68, 81659), (75, 81689), (77, 81698), (87, 81731), (98, 81776), (112, 81863), (121, 81923), (126, 81959), (136, 82055),

Gene: OhShagHennessy_87 Start: 56542, Stop: 56952, Start Num: 35

Candidate Starts for OhShagHennessy_87:

(Start: 35 @56542 has 68 MA's), (47, 56572), (49, 56575), (64, 56620), (84, 56698), (95, 56740), (101, 56776), (109, 56818), (110, 56824), (119, 56872), (127, 56917), (133, 56944),

Gene: PYPDinur_96 Start: 59772, Stop: 60179, Start Num: 35

Candidate Starts for PYPDinur_96:

(Start: 35 @59772 has 68 MA's), (44, 59793), (84, 59925), (103, 60021), (116, 60075), (123, 60126), (128, 60153), (129, 60156), (133, 60171),

Gene: Poochiewood_89 Start: 57939, Stop: 58349, Start Num: 35

Candidate Starts for Poochiewood_89:

(Start: 35 @57939 has 68 MA's), (47, 57969), (49, 57972), (64, 58017), (84, 58095), (95, 58137), (101, 58173), (109, 58215), (110, 58221), (119, 58269), (127, 58314), (133, 58341),

Gene: Primadonna_244 Start: 142325, Stop: 142774, Start Num: 31

Candidate Starts for Primadonna_244:

(Start: 31 @142325 has 34 MA's), (45, 142364), (54, 142382), (65, 142415), (70, 142442), (83, 142475), (102, 142562), (108, 142604), (123, 142703),

Gene: PurduePete_250 Start: 143690, Stop: 144139, Start Num: 31

Candidate Starts for PurduePete_250:

(Start: 31 @143690 has 34 MA's), (45, 143729), (54, 143747), (65, 143780), (70, 143807), (83, 143840), (102, 143927), (108, 143969), (123, 144068),

Gene: Quby_96 Start: 59183, Stop: 59590, Start Num: 35

Candidate Starts for Quby_96:

(Start: 35 @59183 has 68 MA's), (84, 59336), (103, 59432), (116, 59486), (123, 59537), (128, 59564), (129, 59567), (133, 59582),

Gene: Rearden_102 Start: 60176, Stop: 60565, Start Num: 65

Candidate Starts for Rearden_102:

(1, 59861), (2, 59885), (8, 59990), (16, 60023), (21, 60041), (38, 60098), (Start: 59 @60161 has 2 MA's), (65, 60176), (67, 60194), (83, 60251), (85, 60257), (99, 60317), (113, 60410), (135, 60551),

Gene: Red305_93 Start: 59235, Stop: 59642, Start Num: 35

Candidate Starts for Red305_93:

(Start: 35 @59235 has 68 MA's), (44, 59256), (83, 59385), (84, 59388), (101, 59466), (106, 59502), (123, 59589), (128, 59616),

Gene: RedWattleHog_27 Start: 28545, Stop: 28156, Start Num: 52

Candidate Starts for RedWattleHog_27:

(16, 28650), (Start: 52 @28545 has 1 MA's), (84, 28443), (105, 28326), (131, 28179),

Gene: Rose5_92 Start: 57809, Stop: 58219, Start Num: 35

Candidate Starts for Rose5_92:

(Start: 35 @57809 has 68 MA's), (47, 57839), (49, 57842), (64, 57887), (84, 57965), (95, 58007), (101, 58043), (109, 58085), (110, 58091), (119, 58139), (127, 58184), (133, 58211),

Gene: Rumpelstiltskin_91 Start: 59092, Stop: 59505, Start Num: 35

Candidate Starts for Rumpelstiltskin_91:

(Start: 35 @59092 has 68 MA's), (71, 59203), (80, 59242), (84, 59251), (101, 59329), (116, 59401), (128, 59479), (133, 59497),

Gene: Ryadel_34 Start: 15422, Stop: 15904, Start Num: 27

Candidate Starts for Ryadel_34:

(Start: 27 @15422 has 3 MA's), (Start: 30 @15434 has 7 MA's), (41, 15467), (Start: 53 @15494 has 1 MA's), (62, 15527), (63, 15530), (66, 15533), (94, 15656), (102, 15698), (130, 15869), (134, 15896),

Gene: Salacia_251 Start: 144116, Stop: 144565, Start Num: 31

Candidate Starts for Salacia_251:

(Start: 31 @144116 has 34 MA's), (45, 144155), (54, 144173), (65, 144206), (70, 144233), (83, 144266), (102, 144353), (108, 144395), (123, 144494),

Gene: Samty_91 Start: 59332, Stop: 59739, Start Num: 35

Candidate Starts for Samty_91:

(Start: 35 @59332 has 68 MA's), (44, 59353), (83, 59482), (84, 59485), (101, 59563), (106, 59599), (123, 59686), (128, 59713),

Gene: Sarshaun_96 Start: 60210, Stop: 60623, Start Num: 35

Candidate Starts for Sarshaun_96:

(Start: 35 @60210 has 68 MA's), (71, 60321), (80, 60360), (84, 60369), (101, 60447), (116, 60519), (128, 60597), (133, 60615),

Gene: SchoolBus_31 Start: 14621, Stop: 15091, Start Num: 30

Candidate Starts for SchoolBus_31:

(Start: 27 @14609 has 3 MA's), (Start: 30 @14621 has 7 MA's), (41, 14654), (Start: 53 @14681 has 1 MA's), (62, 14714), (63, 14717), (66, 14720), (94, 14843), (102, 14885), (130, 15056), (134, 15083),

Gene: ScoobyDoobyDoo_251 Start: 151338, Stop: 151754, Start Num: 39

Candidate Starts for ScoobyDoobyDoo_251:

(13, 151257), (Start: 39 @151338 has 1 MA's), (46, 151356), (56, 151383), (65, 151401), (71, 151422), (78, 151452), (90, 151500), (96, 151515), (105, 151581), (118, 151668),

Gene: ScoobyDoobyDoo_60 Start: 22027, Stop: 22503, Start Num: 22

Candidate Starts for ScoobyDoobyDoo_60:

(4, 21928), (Start: 22 @22027 has 4 MA's), (82, 22225), (124, 22462),

Gene: Sheng711_97 Start: 59248, Stop: 59655, Start Num: 35

Candidate Starts for Sheng711_97:

(Start: 35 @59248 has 68 MA's), (44, 59269), (84, 59401), (103, 59497), (116, 59551), (123, 59602), (128, 59629), (129, 59632), (133, 59647),

Gene: Shrimp_252 Start: 143727, Stop: 144176, Start Num: 31

Candidate Starts for Shrimp_252:

(Start: 31 @143727 has 34 MA's), (45, 143766), (54, 143784), (65, 143817), (70, 143844), (83, 143877), (102, 143964), (108, 144006), (123, 144105),

Gene: SilverChicken_59 Start: 36550, Stop: 36966, Start Num: 57

Candidate Starts for SilverChicken_59:

(14, 36415), (Start: 15 @36418 has 2 MA's), (Start: 43 @36508 has 1 MA's), (57, 36550), (74, 36610), (90, 36676), (100, 36718), (107, 36766),

Gene: Silverleaf_90 Start: 57305, Stop: 57715, Start Num: 35

Candidate Starts for Silverleaf_90:

(Start: 35 @57305 has 68 MA's), (47, 57335), (49, 57338), (64, 57383), (84, 57461), (95, 57503), (101, 57539), (109, 57581), (110, 57587), (119, 57635), (127, 57680), (133, 57707),

Gene: Snenia_91 Start: 59236, Stop: 59643, Start Num: 35

Candidate Starts for Snenia_91:

(Start: 35 @59236 has 68 MA's), (44, 59257), (83, 59386), (84, 59389), (101, 59467), (106, 59503), (123, 59590), (128, 59617),

Gene: SoJulia_97 Start: 60975, Stop: 61388, Start Num: 35

Candidate Starts for SoJulia_97:

(Start: 35 @60975 has 68 MA's), (71, 61086), (80, 61125), (84, 61134), (101, 61212), (116, 61284), (128, 61362), (133, 61380),

Gene: Soap141_95 Start: 60210, Stop: 60623, Start Num: 35

Candidate Starts for Soap141_95:

(Start: 35 @60210 has 68 MA's), (71, 60321), (80, 60360), (84, 60369), (101, 60447), (116, 60519), (128, 60597), (133, 60615),

Gene: Sour_34 Start: 32659, Stop: 32288, Start Num: 59

Candidate Starts for Sour_34:

(26, 32755), (Start: 59 @32659 has 2 MA's), (71, 32617), (75, 32599), (76, 32596), (86, 32557), (106, 32449), (125, 32329),

Gene: Specks_254 Start: 143067, Stop: 143516, Start Num: 31

Candidate Starts for Specks_254:

(Start: 31 @143067 has 34 MA's), (45, 143106), (54, 143124), (65, 143157), (70, 143184), (83, 143217), (102, 143304), (108, 143346), (123, 143445),

Gene: SpeedDemon_100 Start: 4893, Stop: 5351, Start Num: 24

Candidate Starts for SpeedDemon_100:

(Start: 24 @4893 has 1 MA's), (73, 5040), (77, 5055), (81, 5070), (89, 5109), (100, 5151), (107, 5199), (128, 5319),

Gene: SrishMeg2525_247 Start: 143222, Stop: 143671, Start Num: 31

Candidate Starts for SrishMeg2525_247:

(Start: 31 @143222 has 34 MA's), (45, 143261), (54, 143279), (65, 143312), (70, 143339), (83, 143372), (102, 143459), (108, 143501), (123, 143600),

Gene: StubbySaigey_256 Start: 142752, Stop: 143201, Start Num: 31

Candidate Starts for StubbySaigey_256:

(Start: 31 @142752 has 34 MA's), (45, 142791), (54, 142809), (65, 142842), (70, 142869), (83, 142902), (102, 142989), (108, 143031), (123, 143130),

Gene: Target_12 Start: 7244, Stop: 7699, Start Num: 22

Candidate Starts for Target_12:

(Start: 22 @7244 has 4 MA's), (Start: 35 @7277 has 68 MA's), (65, 7364), (80, 7424), (90, 7466), (104, 7544), (106, 7553), (120, 7634), (125, 7673),

Gene: Teardrop_248 Start: 142079, Stop: 142528, Start Num: 31

Candidate Starts for Teardrop_248:

(Start: 31 @142079 has 34 MA's), (45, 142118), (54, 142136), (65, 142169), (70, 142196), (83, 142229), (102, 142316), (108, 142358), (123, 142457),

Gene: TheloniousMonk_12 Start: 7471, Stop: 7926, Start Num: 22

Candidate Starts for TheloniousMonk_12:

(Start: 22 @7471 has 4 MA's), (Start: 35 @7504 has 68 MA's), (65, 7591), (80, 7651), (90, 7693), (104, 7771), (106, 7780), (120, 7861), (125, 7900),

Gene: TinyTim_248 Start: 142046, Stop: 142495, Start Num: 31

Candidate Starts for TinyTim_248:

(Start: 31 @142046 has 34 MA's), (45, 142085), (54, 142103), (65, 142136), (70, 142163), (83, 142196), (102, 142283), (108, 142325), (123, 142424),

Gene: Tourach_95 Start: 60189, Stop: 60602, Start Num: 35

Candidate Starts for Tourach_95:

(Start: 35 @60189 has 68 MA's), (64, 60270), (71, 60300), (83, 60345), (84, 60348), (103, 60444), (116, 60498), (128, 60576), (133, 60594),

Gene: TriFive_92 Start: 59348, Stop: 59755, Start Num: 35

Candidate Starts for TriFive_92:

(Start: 35 @59348 has 68 MA's), (44, 59369), (83, 59498), (84, 59501), (101, 59579), (106, 59615), (123, 59702), (128, 59729),

Gene: Trinitium_246 Start: 140800, Stop: 141249, Start Num: 31

Candidate Starts for Trinitium_246:

(Start: 31 @140800 has 34 MA's), (45, 140839), (54, 140857), (65, 140890), (70, 140917), (83, 140950), (102, 141037), (108, 141079), (123, 141178),

Gene: Tyson_92 Start: 57702, Stop: 58112, Start Num: 35

Candidate Starts for Tyson_92:

(Start: 35 @57702 has 68 MA's), (47, 57732), (49, 57735), (64, 57780), (84, 57858), (95, 57900), (101, 57936), (109, 57978), (110, 57984), (119, 58032), (127, 58077), (133, 58104),

Gene: UPIE_90 Start: 57298, Stop: 57708, Start Num: 35

Candidate Starts for UPIE_90:

(Start: 35 @57298 has 68 MA's), (47, 57328), (49, 57331), (64, 57376), (84, 57454), (95, 57496), (101, 57532), (109, 57574), (110, 57580), (119, 57628), (127, 57673), (133, 57700),

Gene: Underpass_85 Start: 54335, Stop: 54748, Start Num: 35

Candidate Starts for Underpass_85:

(Start: 35 @54335 has 68 MA's), (71, 54446), (80, 54485), (84, 54494), (101, 54572), (116, 54644), (128, 54722), (133, 54740),

Gene: Vetrix_93 Start: 59073, Stop: 59486, Start Num: 35

Candidate Starts for Vetrix_93:

(Start: 35 @59073 has 68 MA's), (71, 59184), (80, 59223), (84, 59232), (101, 59310), (116, 59382), (128, 59460), (133, 59478),

Gene: Wamburgexpress_90 Start: 57426, Stop: 57836, Start Num: 35

Candidate Starts for Wamburgexpress_90:

(Start: 35 @57426 has 68 MA's), (47, 57456), (49, 57459), (64, 57504), (84, 57582), (95, 57624), (101, 57660), (109, 57702), (110, 57708), (119, 57756), (127, 57801), (133, 57828),

Gene: Whirlwind_93 Start: 59575, Stop: 59982, Start Num: 35

Candidate Starts for Whirlwind_93:

(Start: 35 @59575 has 68 MA's), (44, 59596), (83, 59725), (84, 59728), (101, 59806), (106, 59842), (123, 59929), (128, 59956),

Gene: Wigglewobble_95 Start: 59375, Stop: 59788, Start Num: 35

Candidate Starts for Wigglewobble_95:

(Start: 35 @59375 has 68 MA's), (71, 59486), (83, 59531), (84, 59534), (103, 59630), (116, 59684), (128, 59762), (133, 59780),

Gene: Wilder_96 Start: 59217, Stop: 59630, Start Num: 35

Candidate Starts for Wilder_96:

(Start: 35 @59217 has 68 MA's), (71, 59328), (80, 59367), (84, 59376), (101, 59454), (116, 59526), (128, 59604), (133, 59622),

Gene: Winget_32 Start: 14875, Stop: 15357, Start Num: 27

Candidate Starts for Winget_32:

(Start: 27 @14875 has 3 MA's), (Start: 30 @14887 has 7 MA's), (41, 14920), (Start: 53 @14947 has 1 MA's), (62, 14980), (63, 14983), (66, 14986), (94, 15109), (102, 15151), (130, 15322), (134, 15349),

Gene: Winky_95 Start: 59815, Stop: 60228, Start Num: 35

Candidate Starts for Winky_95:

(Start: 35 @59815 has 68 MA's), (71, 59926), (83, 59971), (84, 59974), (103, 60070), (116, 60124), (128, 60202), (133, 60220),

Gene: Wyatt2_92 Start: 57733, Stop: 58143, Start Num: 35

Candidate Starts for Wyatt2_92:

(Start: 35 @57733 has 68 MA's), (47, 57763), (49, 57766), (64, 57811), (84, 57889), (95, 57931), (101, 57967), (109, 58009), (110, 58015), (119, 58063), (127, 58108), (133, 58135),

Gene: Yucca_250 Start: 143605, Stop: 144054, Start Num: 31

Candidate Starts for Yucca_250:

(Start: 31 @143605 has 34 MA's), (45, 143644), (54, 143662), (65, 143695), (70, 143722), (83, 143755), (102, 143842), (108, 143884), (123, 143983),

Gene: YungJamal_34 Start: 14950, Stop: 15420, Start Num: 30

Candidate Starts for YungJamal_34:

(Start: 27 @14938 has 3 MA's), (Start: 30 @14950 has 7 MA's), (41, 14983), (Start: 53 @15010 has 1 MA's), (62, 15043), (63, 15046), (66, 15049), (94, 15172), (102, 15214), (130, 15385), (134, 15412),

Gene: Zakai_96 Start: 59860, Stop: 60273, Start Num: 35

Candidate Starts for Zakai_96:

(Start: 35 @59860 has 68 MA's), (71, 59971), (80, 60010), (84, 60019), (101, 60097), (116, 60169), (128, 60247), (133, 60265),

Gene: Zaria_91 Start: 56841, Stop: 57251, Start Num: 35

Candidate Starts for Zaria_91:

(Start: 35 @56841 has 68 MA's), (47, 56871), (49, 56874), (64, 56919), (84, 56997), (95, 57039), (101, 57075), (109, 57117), (110, 57123), (119, 57171), (127, 57216), (133, 57243),

Gene: Zebo_30 Start: 14681, Stop: 15091, Start Num: 53

Candidate Starts for Zebo_30:

(Start: 27 @14609 has 3 MA's), (Start: 30 @14621 has 7 MA's), (41, 14654), (Start: 53 @14681 has 1 MA's), (62, 14714), (63, 14717), (66, 14720), (94, 14843), (102, 14885), (130, 15056), (134, 15083),

Gene: ZhongYanYuan_92 Start: 59271, Stop: 59684, Start Num: 35

Candidate Starts for ZhongYanYuan_92:

(Start: 35 @59271 has 68 MA's), (71, 59382), (80, 59421), (84, 59430), (101, 59508), (116, 59580), (128, 59658), (133, 59676),

Gene: ZygoTaiga_246 Start: 143902, Stop: 144351, Start Num: 31

Candidate Starts for ZygoTaiga_246:

(Start: 31 @143902 has 34 MA's), (45, 143941), (54, 143959), (65, 143992), (70, 144019), (83, 144052), (102, 144139), (108, 144181), (123, 144280),