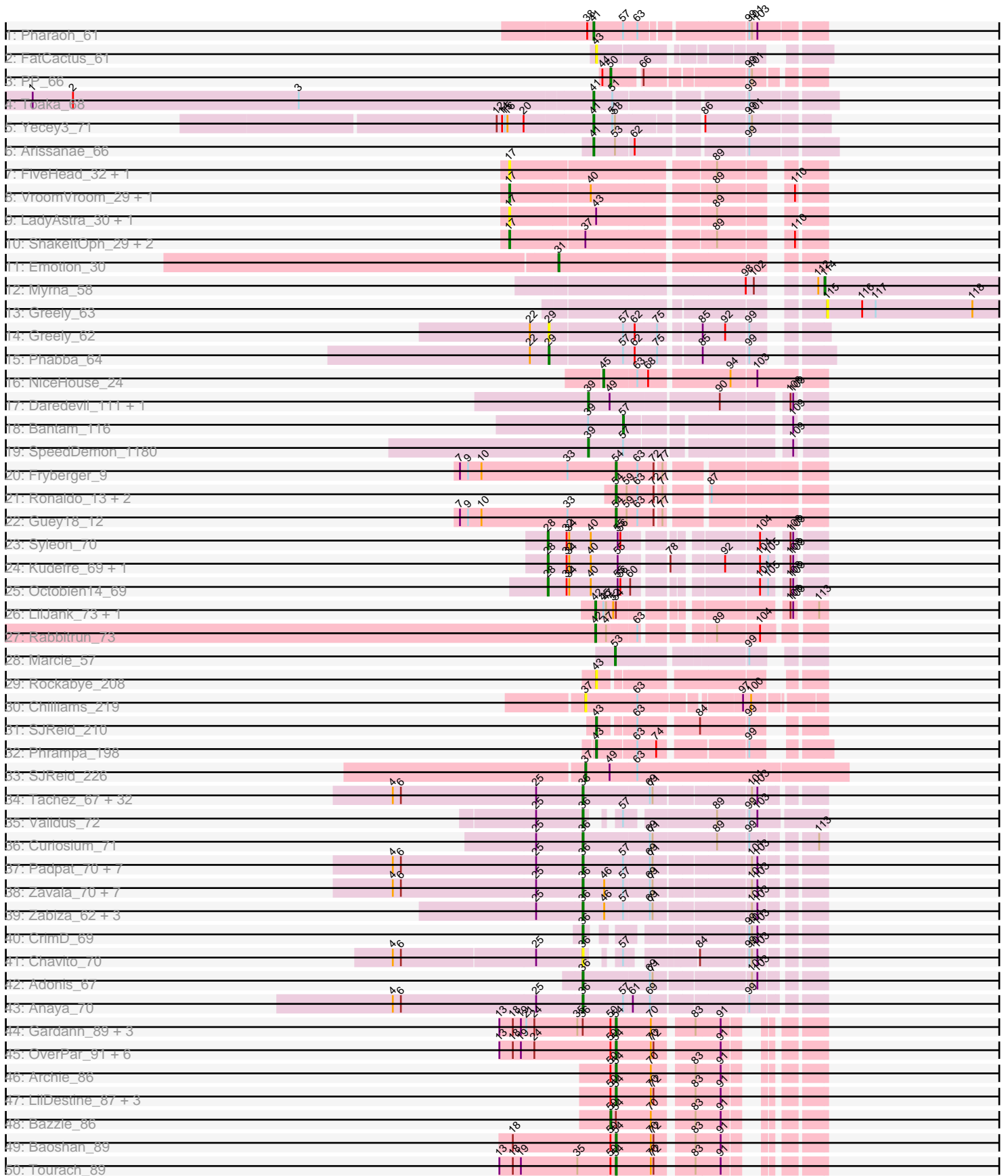


Pham 311296



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 311296 Report

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

Pham number 311296 has 165 members, 19 are drafts.

Phages represented in each track:

- Track 1 : Pharaoh_61
- Track 2 : FatCactus_61
- Track 3 : PP_66
- Track 4 : Toaka_68
- Track 5 : Yecey3_71
- Track 6 : Arissanae_66
- Track 7 : FiveHead_32, JohnThicc_31
- Track 8 : VroomVroom_29, AceofSpades_29
- Track 9 : LadyAstra_30, Origami_30
- Track 10 : ShakeltOph_29, JasmineDragon_29, MiniMommy_29
- Track 11 : Emotion_30
- Track 12 : Myrna_58
- Track 13 : Greely_63
- Track 14 : Greely_62
- Track 15 : Phabba_64
- Track 16 : NiceHouse_24
- Track 17 : Daredevil_111, Towmatter_111
- Track 18 : Bantam_116
- Track 19 : SpeedDemon_1180
- Track 20 : Fryberger_9
- Track 21 : Ronaldo_13, Ziko_14, Volt_13
- Track 22 : Guey18_12
- Track 23 : Syleon_70
- Track 24 : Kudrefre_69, Sephiroth_68
- Track 25 : Octobien14_69
- Track 26 : LilJank_73, Trax_73
- Track 27 : Rabbitrun_73
- Track 28 : Marcie_57
- Track 29 : Rockabye_208
- Track 30 : Chilliams_219
- Track 31 : SJReid_210
- Track 32 : Phrampa_198
- Track 33 : SJReid_226
- Track 34 : Tachez_67, BGlluviae_67, Jarvi_67, Blizzard_67, Llorens_67, Adephagia_67, Hyperbowlee_67, Inky_67, CaseJules_69, Homura_67, Spock_67, Rosmarinus_67, ShiaSurprise_68, Lunahalos_67, Boiiii_67, Durfee_67, Piatt_67, Capricorn_67, Joy99_67, Peel_67, Belladonna_67, Atiba_68, Padfoot_67,

Topper_67, Dalmuri_67, CallaLilly_67, Asayake_67, Jeckyll_67, Twitch_67,
 AlishaPH_67, CREW_67, BEEST_67, Geraldini_70
 • Track 35 : Validus_72
 • Track 36 : Curiosium_71
 • Track 37 : Padpat_70, Emerson_69, Pokerus_67, QuincyRose_65, Clipper_71,
 Beezoo_69, Ganymede_67, MacKat_63
 • Track 38 : Zavala_70, BarrelRoll_68, Rapunzel97_69, TruffulaTree_68,
 Slimphazie_68, Mynx_69, Jayhawk_69, MeaningOfLife_68
 • Track 39 : Zabiza_62, Ramen_68, ActinUp_67, HedwigODU_67
 • Track 40 : CrimD_69
 • Track 41 : Chavito_70
 • Track 42 : Adonis_67
 • Track 43 : Anaya_70
 • Track 44 : Gardann_89, Nicholasp3_89, Rumpelstiltskin_85, Underpass_81
 • Track 45 : OverPar_91, Loadrie_88, Faith1_89, Zakai_90, Itos_89, Crossroads_89,
 Gabriela_89
 • Track 46 : Archie_86
 • Track 47 : LilDestine_87, GuuelaD_86, Douge_90, ZhongYanYuan_86
 • Track 48 : Bazzle_86
 • Track 49 : Baoshan_89
 • Track 50 : Tourach_89
 • Track 51 : Claus_87
 • Track 52 : Wigglewiggle_89
 • Track 53 : Douzhi_90, Sheng711_91
 • Track 54 : ChutneyChips_91
 • Track 55 : FarmResident_91
 • Track 56 : Chaser_88
 • Track 57 : Kropertea_85
 • Track 58 : DyoEdafos_92
 • Track 59 : Aegeus_58, Baudelaire_58
 • Track 60 : Auspice_5, Izel_6, RoseMarie_5, IPhane7_5, Dulcita_6, KleverKiS_5,
 Bongo_5, Bricole_5, Skinny_6, TyDawg_5, LilhomieP_5, SlimJimmy_5,
 FreakyGoo_6, Diminimus_6, PegLeg_5, Glaske16_6, TpudiCK_6
 • Track 61 : Reindeer_4
 • Track 62 : MrMagoo_7, GardenSalsa_7
 • Track 63 : MrMagoo_6, GardenSalsa_6
 • Track 64 : Aziz_6, GenevaB15_6
 • Track 65 : Aziz_7, GenevaB15_7
 • Track 66 : Rey_5
 • Track 67 : Rey_6
 • Track 68 : Estes_7
 • Track 69 : Estes_6
 • Track 70 : Nanosmite_5
 • Track 71 : Nanosmite_6
 • Track 72 : Jace_69

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

The start number called the most often in the published annotations is 36, it was called in 58 of the 146 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ActinUp_67, Adephegia_67, Adonis_67, AlishaPH_67, Anaya_70, Asayake_67, Atiba_68, BEEST_67, BGIlluvia_67, BarrelRoll_68, Beezoo_69, Belladonna_67, Blizzard_67, Boiii_67, CREW_67, CallaLilly_67, Capricorn_67, CaseJules_69, Chavito_70, Clipper_71, CrimD_69, Curiosium_71, Dalmuri_67, Durfee_67, Emerson_69, Ganymede_67, Geraldini_70, HedwigODU_67, Homura_67, Hyperbowlee_67, Inky_67, Jarvi_67, Jayhawk_69, Jeckyll_67, Joy99_67, Llorens_67, Lunahalos_67, MacKat_63, MeaningOfLife_68, Mynx_69, Padfoot_67, Padpat_70, Peel_67, Piatt_67, Pokerus_67, QuincyRose_65, Ramen_68, Rapunzel97_69, Rosmarinus_67, ShiaSurprise_68, Slimphazie_68, Spock_67, Tachez_67, Topper_67, TruffulaTree_68, Twitch_67, Validus_72, Zabiza_62, Zavala_70,

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

- Gardann_89, Nicholasp3_89, Rumpelstiltskin_85, Underpass_81, Wigglewiggle_89,

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

- AceofSpades_29, Aegeus_58, Archie_86, Arissanae_66, Auspice_5, Aziz_6, Aziz_7, Bantam_116, Baoshan_89, Baudelaire_58, Bazzle_86, Bongo_5, Bricole_5, Chaser_88, Chilliams_219, ChutneyChips_91, Claus_87, Crossroads_89, Daredevil_111, Diminimus_6, Douge_90, Douzhi_90, Dulcita_6, DyoEdafos_92, Emotion_30, Estes_6, Estes_7, Faith1_89, FarmResident_91, FatCactus_61, FiveHead_32, FreakyGoo_6, Fryberger_9, Gabriela_89, GardenSalsa_6, GardenSalsa_7, GenevaB15_6, GenevaB15_7, Glaske16_6, Greely_62, Greely_63, Guey18_12, GuuelaD_86, IPhane7_5, Itos_89, Izel_6, Jace_69, JasmineDragon_29, JohnThicc_31, KleverKiS_5, Kropertea_85, Kudrefre_69, LadyAstra_30, LilDestine_87, LilJank_73, LilhomieP_5, Loadrie_88, Marcie_57, MiniMommy_29, MrMagoo_6, MrMagoo_7, Myrna_58, Nanosmite_5, Nanosmite_6, NiceHouse_24, Octobien14_69, Origami_30, OverPar_91, PP_66, PegLeg_5, Phabba_64, Pharaoh_61, Phrampa_198, Rabbitrun_73, Reindeer_4, Rey_5, Rey_6, Rockabye_208, Ronaldo_13, RoseMarie_5, SJReid_210, SJReid_226, Sephiroth_68, ShakeltOph_29, Sheng711_91, Skinny_6, SlimJimmy_5, SpeedDemon_1180, Syleon_70, Toaka_68, Tourach_89, Towmatter_111, TpudiCK_6, Trax_73, TyDawg_5, Volt_13, VroomVroom_29, Yecey3_71, Zakai_90, ZhongYanYuan_86, Ziko_14,

Summary by start number:

Start 17:

- Found in 9 of 165 (5.5%) of genes in pham
- Manual Annotations of this start: 4 of 146
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AceofSpades_29 (AZ4), FiveHead_32 (AZ4), JasmineDragon_29 (AZ4), JohnThicc_31 (AZ4), LadyAstra_30 (AZ4), MiniMommy_29 (AZ4), Origami_30 (AZ4), ShakeltOph_29 (AZ4), VroomVroom_29 (AZ4),

Start 28:

- Found in 4 of 165 (2.4%) of genes in pham
- Manual Annotations of this start: 4 of 146
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kudrefre_69 (DU1), Octobien14_69 (DU1), Sephiroth_68 (DU1), Syleon_70 (DU1),

Start 29:

- Found in 2 of 165 (1.2%) of genes in pham
- Manual Annotations of this start: 1 of 146
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Greely_62 (C2), Phabba_64 (C2),

Start 31:

- Found in 1 of 165 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 146
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Emotion_30 (AZ4),

Start 36:

- Found in 64 of 165 (38.8%) of genes in pham
- Manual Annotations of this start: 58 of 146
- Called 92.2% of time when present
- Phage (with cluster) where this start called: ActinUp_67 (K1), Adephagia_67 (K1), Adonis_67 (K1), AlishaPH_67 (K1), Anaya_70 (K1), Asayake_67 (K1), Atiba_68 (K1), BEEST_67 (K1), BGlluviae_67 (K1), BarrelRoll_68 (K1), Beezoo_69 (K1), Belladonna_67 (K1), Blizzard_67 (K1), Boiii_67 (K1), CREW_67 (K1), CallaLilly_67 (K1), Capricorn_67 (K1), CaseJules_69 (K1), Chavito_70 (K1), Clipper_71 (K1), CrimD_69 (K1), Curiosium_71 (K1), Dalmuri_67 (K1), Durfee_67 (K1), Emerson_69 (K1), Ganymede_67 (K1), Geraldini_70 (K1), HedwigODU_67 (K1), Homura_67 (K1), Hyperbowlee_67 (K1), Inky_67 (K1), Jarvi_67 (K1), Jayhawk_69 (K1), Jeckyll_67 (K1), Joy99_67 (K1), Llorens_67 (K1), Lunahalos_67 (K1), MacKat_63 (K1), MeaningOfLife_68 (K1), Mynx_69 (K1), Padfoot_67 (K1), Padpat_70 (K1), Peel_67 (K1), Piatt_67 (K1), Pokerus_67 (K1), QuincyRose_65 (K1), Ramen_68 (K1), Rapunzel97_69 (K1), Rosmarinus_67 (K1), ShiaSurprise_68 (K1), Slimphazie_68 (K1), Spock_67 (K1), Tachez_67 (K1), Topper_67 (K1), TruffulaTree_68 (K1), Twitch_67 (K1), Validus_72 (K1), Zabiza_62 (K1), Zavala_70 (K1),

Start 37:

- Found in 30 of 165 (18.2%) of genes in pham
- Manual Annotations of this start: 23 of 146
- Called 90.0% of time when present
- Phage (with cluster) where this start called: Auspice_5 (M1), Aziz_7 (M2), Bongo_5 (M1), Bricole_5 (M1), Chilliamps_219 (FC), Diminimus_6 (M1), Dulcita_6 (M1), Estes_7 (M2), FreakyGoo_6 (M1), GardenSalsa_7 (M2), GenevaB15_7 (M2), Glaske16_6 (M1), IPhane7_5 (M1), Izel_6 (M1), KleverKiS_5 (M1), LilhomieP_5 (M1), MrMagoo_7 (M2), Nanosmite_6 (M3), PegLeg_5 (M1), Reindeer_4 (M1), Rey_6 (M2), RoseMarie_5 (M1), SJReid_226 (FC), Skinny_6 (M1), SlimJimmy_5 (M1), TpudiCK_6 (M1), TyDawg_5 (M1),

Start 39:

- Found in 4 of 165 (2.4%) of genes in pham
- Manual Annotations of this start: 3 of 146
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Daredevil_111 (DL), SpeedDemon_1180 (DL), Towmatter_111 (DL),

Start 41:

- Found in 4 of 165 (2.4%) of genes in pham

- Manual Annotations of this start: 4 of 146
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arissanae_66 (A9), Pharaoh_61 (A12), Toaka_68 (A9), Yecey3_71 (A9),

Start 42:

- Found in 3 of 165 (1.8%) of genes in pham
- Manual Annotations of this start: 2 of 146
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LilJank_73 (DU2), Rabbitrun_73 (DU2), Trax_73 (DU2),

Start 43:

- Found in 14 of 165 (8.5%) of genes in pham
- Manual Annotations of this start: 8 of 146
- Called 71.4% of time when present
- Phage (with cluster) where this start called: Aziz_6 (M2), Estes_6 (M2), FatCactus_61 (A20), GardenSalsa_6 (M2), GenevaB15_6 (M2), MrMagoo_6 (M2), Nanosmite_5 (M3), Phrampa_198 (FC), Rockabye_208 (FC), SJReid_210 (FC),

Start 45:

- Found in 3 of 165 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 146
- Called 33.3% of time when present
- Phage (with cluster) where this start called: NiceHouse_24 (CE),

Start 48:

- Found in 3 of 165 (1.8%) of genes in pham
- Manual Annotations of this start: 3 of 146
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aegeus_58 (L5), Baudelaire_58 (L5), Jace_69 (singleton),

Start 50:

- Found in 29 of 165 (17.6%) of genes in pham
- Manual Annotations of this start: 2 of 146
- Called 6.9% of time when present
- Phage (with cluster) where this start called: Bazzle_86 (L2), PP_66 (A7),

Start 53:

- Found in 3 of 165 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 146
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Marcie_57 (EG),

Start 54:

- Found in 35 of 165 (21.2%) of genes in pham
- Manual Annotations of this start: 28 of 146
- Called 91.4% of time when present
- Phage (with cluster) where this start called: Archie_86 (L2), Baoshan_89 (L2), Chaser_88 (L4), ChutneyChips_91 (L4), Claus_87 (L2), Crossroads_89 (L2), Douge_90 (L4), Douzhi_90 (L4), DyoEdafos_92 (L4), Faith1_89 (L2), FarmResident_91 (L4), Fryberger_9 (DP), Gabriela_89 (L2), Gardann_89 (L2),

Guey18_12 (DP), GuuelaD_86 (L2), Itos_89 (L2), Kropertea_85 (L4), LilDestine_87 (L2), Loadrie_88 (L2), Nicholasp3_89 (L2), OverPar_91 (L2), Ronaldo_13 (DP), Rumpelstiltskin_85 (L2), Sheng711_91 (L4), Tourach_89 (L2), Underpass_81 (L2), Volt_13 (DP), Wigglewiggles_89 (L2), Zakai_90 (L2), ZhongYanYuan_86 (L2), Ziko_14 (DP),

Start 57:

- Found in 28 of 165 (17.0%) of genes in pham
- Manual Annotations of this start: 1 of 146
- Called 3.6% of time when present
- Phage (with cluster) where this start called: Bantam_116 (DL),

Start 58:

- Found in 3 of 165 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 146
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Rey_5 (M2),

Start 114:

- Found in 1 of 165 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 146
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Myrna_58 (C2),

Start 115:

- Found in 1 of 165 (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: Greely_63 (C2),

Summary by clusters:

There are 21 clusters represented in this pham: A20, DL, M3, A12, EG, DU1, L5, singleton, L4, K1, FC, L2, CE, A7, M2, A9, M1, DU2, AZ4, C2, DP,

Info for manual annotations of cluster A12:

- Start number 41 was manually annotated 1 time for cluster A12.

Info for manual annotations of cluster A7:

- Start number 50 was manually annotated 1 time for cluster A7.

Info for manual annotations of cluster A9:

- Start number 41 was manually annotated 3 times for cluster A9.

Info for manual annotations of cluster AZ4:

- Start number 17 was manually annotated 4 times for cluster AZ4.
- Start number 31 was manually annotated 1 time for cluster AZ4.

Info for manual annotations of cluster C2:

- Start number 29 was manually annotated 1 time for cluster C2.
- Start number 114 was manually annotated 1 time for cluster C2.

Info for manual annotations of cluster CE:

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

Info for manual annotations of cluster DL:

- Start number 39 was manually annotated 3 times for cluster DL.
- Start number 57 was manually annotated 1 time for cluster DL.

Info for manual annotations of cluster DP:

- Start number 54 was manually annotated 5 times for cluster DP.

Info for manual annotations of cluster DU1:

- Start number 28 was manually annotated 4 times for cluster DU1.

Info for manual annotations of cluster DU2:

- Start number 42 was manually annotated 2 times for cluster DU2.

Info for manual annotations of cluster EG:

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

Info for manual annotations of cluster FC:

- Start number 37 was manually annotated 1 time for cluster FC.
- Start number 43 was manually annotated 2 times for cluster FC.

Info for manual annotations of cluster K1:

- Start number 36 was manually annotated 58 times for cluster K1.

Info for manual annotations of cluster L2:

- Start number 50 was manually annotated 1 time for cluster L2.
- Start number 54 was manually annotated 18 times for cluster L2.

Info for manual annotations of cluster L4:

- Start number 54 was manually annotated 5 times for cluster L4.

Info for manual annotations of cluster L5:

- Start number 48 was manually annotated 2 times for cluster L5.

Info for manual annotations of cluster M1:

- Start number 37 was manually annotated 15 times for cluster M1.

Info for manual annotations of cluster M2:

- Start number 37 was manually annotated 6 times for cluster M2.
- Start number 43 was manually annotated 5 times for cluster M2.
- Start number 58 was manually annotated 1 time for cluster M2.

Info for manual annotations of cluster M3:

- Start number 37 was manually annotated 1 time for cluster M3.
- Start number 43 was manually annotated 1 time for cluster M3.

Gene Information:

Gene: AceofSpades_29 Start: 22403, Stop: 22708, Start Num: 17

Candidate Starts for AceofSpades_29:

(Start: 17 @22403 has 4 MA's), (40, 22490), (89, 22616), (110, 22679),

Gene: ActinUp_67 Start: 43706, Stop: 43945, Start Num: 36

Candidate Starts for ActinUp_67:

(25, 43655), (Start: 36 @43706 has 58 MA's), (46, 43730), (Start: 57 @43751 has 1 MA's), (69, 43778), (71, 43781), (101, 43880), (103, 43886),

Gene: Adephagia_67 Start: 43743, Stop: 43982, Start Num: 36

Candidate Starts for Adephagia_67:

(4, 43533), (6, 43542), (25, 43692), (Start: 36 @43743 has 58 MA's), (69, 43815), (71, 43818), (101, 43917), (103, 43923),

Gene: Adonis_67 Start: 43978, Stop: 44217, Start Num: 36

Candidate Starts for Adonis_67:

(Start: 36 @43978 has 58 MA's), (69, 44050), (71, 44053), (101, 44152), (103, 44158),

Gene: Aegeus_58 Start: 40986, Stop: 41207, Start Num: 48

Candidate Starts for Aegeus_58:

(Start: 48 @40986 has 3 MA's), (56, 41001), (Start: 58 @41007 has 1 MA's),

Gene: AlishaPH_67 Start: 44004, Stop: 44243, Start Num: 36

Candidate Starts for AlishaPH_67:

(4, 43794), (6, 43803), (25, 43953), (Start: 36 @44004 has 58 MA's), (69, 44076), (71, 44079), (101, 44178), (103, 44184),

Gene: Anaya_70 Start: 44697, Stop: 44936, Start Num: 36

Candidate Starts for Anaya_70:

(4, 44487), (6, 44496), (25, 44646), (Start: 36 @44697 has 58 MA's), (Start: 57 @44742 has 1 MA's), (61, 44751), (69, 44769), (99, 44868),

Gene: Archie_86 Start: 57063, Stop: 57242, Start Num: 54

Candidate Starts for Archie_86:

(Start: 50 @57057 has 2 MA's), (Start: 54 @57063 has 28 MA's), (70, 57102), (83, 57141), (91, 57168),

Gene: Arissanae_66 Start: 41220, Stop: 40978, Start Num: 41

Candidate Starts for Arissanae_66:

(Start: 41 @41220 has 4 MA's), (Start: 53 @41196 has 1 MA's), (62, 41178), (99, 41067),

Gene: Asayake_67 Start: 44058, Stop: 44297, Start Num: 36

Candidate Starts for Asayake_67:

(4, 43848), (6, 43857), (25, 44007), (Start: 36 @44058 has 58 MA's), (69, 44130), (71, 44133), (101, 44232), (103, 44238),

Gene: Atiba_68 Start: 43706, Stop: 43945, Start Num: 36

Candidate Starts for Atiba_68:

(4, 43496), (6, 43505), (25, 43655), (Start: 36 @43706 has 58 MA's), (69, 43778), (71, 43781), (101, 43880), (103, 43886),

Gene: Auspice_5 Start: 2366, Stop: 2133, Start Num: 37

Candidate Starts for Auspice_5:

(Start: 37 @2366 has 23 MA's), (46, 2348), (63, 2312), (65, 2306), (99, 2207), (103, 2198),

Gene: Aziz_6 Start: 2394, Stop: 2188, Start Num: 43
Candidate Starts for Aziz_6:
(Start: 43 @2394 has 8 MA's), (63, 2352), (79, 2316), (81, 2304),

Gene: Aziz_7 Start: 2636, Stop: 2391, Start Num: 37
Candidate Starts for Aziz_7:
(Start: 37 @2636 has 23 MA's), (63, 2579), (99, 2459), (101, 2456),

Gene: BEEST_67 Start: 44058, Stop: 44297, Start Num: 36
Candidate Starts for BEEST_67:
(4, 43848), (6, 43857), (25, 44007), (Start: 36 @44058 has 58 MA's), (69, 44130), (71, 44133), (101, 44232), (103, 44238),

Gene: BGlluviae_67 Start: 43861, Stop: 44100, Start Num: 36
Candidate Starts for BGlluviae_67:
(4, 43651), (6, 43660), (25, 43810), (Start: 36 @43861 has 58 MA's), (69, 43933), (71, 43936), (101, 44035), (103, 44041),

Gene: Bantam_116 Start: 73048, Stop: 73236, Start Num: 57
Candidate Starts for Bantam_116:
(Start: 39 @73009 has 3 MA's), (Start: 57 @73048 has 1 MA's), (109, 73207),

Gene: Baoshan_89 Start: 57717, Stop: 57896, Start Num: 54
Candidate Starts for Baoshan_89:
(18, 57603), (Start: 50 @57711 has 2 MA's), (Start: 54 @57717 has 28 MA's), (70, 57756), (72, 57759), (83, 57795), (91, 57822),

Gene: BarrelRoll_68 Start: 44144, Stop: 44383, Start Num: 36
Candidate Starts for BarrelRoll_68:
(4, 43934), (6, 43943), (25, 44093), (Start: 36 @44144 has 58 MA's), (46, 44168), (Start: 57 @44189 has 1 MA's), (69, 44216), (71, 44219), (101, 44318), (103, 44324),

Gene: Baudelaire_58 Start: 40986, Stop: 41207, Start Num: 48
Candidate Starts for Baudelaire_58:
(Start: 48 @40986 has 3 MA's), (56, 41001), (Start: 58 @41007 has 1 MA's),

Gene: Bazzle_86 Start: 57613, Stop: 57798, Start Num: 50
Candidate Starts for Bazzle_86:
(Start: 50 @57613 has 2 MA's), (Start: 54 @57619 has 28 MA's), (70, 57658), (83, 57697), (91, 57724),

Gene: Beezoo_69 Start: 44656, Stop: 44895, Start Num: 36
Candidate Starts for Beezoo_69:
(4, 44446), (6, 44455), (25, 44605), (Start: 36 @44656 has 58 MA's), (Start: 57 @44701 has 1 MA's), (69, 44728), (71, 44731), (101, 44830), (103, 44836),

Gene: Belladonna_67 Start: 43861, Stop: 44100, Start Num: 36
Candidate Starts for Belladonna_67:
(4, 43651), (6, 43660), (25, 43810), (Start: 36 @43861 has 58 MA's), (69, 43933), (71, 43936), (101, 44035), (103, 44041),

Gene: Blizzard_67 Start: 44058, Stop: 44297, Start Num: 36
Candidate Starts for Blizzard_67:

(4, 43848), (6, 43857), (25, 44007), (Start: 36 @44058 has 58 MA's), (69, 44130), (71, 44133), (101, 44232), (103, 44238),

Gene: Boiiii_67 Start: 44060, Stop: 44299, Start Num: 36

Candidate Starts for Boiiii_67:

(4, 43850), (6, 43859), (25, 44009), (Start: 36 @44060 has 58 MA's), (69, 44132), (71, 44135), (101, 44234), (103, 44240),

Gene: Bongo_5 Start: 2366, Stop: 2133, Start Num: 37

Candidate Starts for Bongo_5:

(Start: 37 @2366 has 23 MA's), (46, 2348), (63, 2312), (65, 2306), (99, 2207), (103, 2198),

Gene: Bricole_5 Start: 2365, Stop: 2132, Start Num: 37

Candidate Starts for Bricole_5:

(Start: 37 @2365 has 23 MA's), (46, 2347), (63, 2311), (65, 2305), (99, 2206), (103, 2197),

Gene: CREW_67 Start: 43861, Stop: 44100, Start Num: 36

Candidate Starts for CREW_67:

(4, 43651), (6, 43660), (25, 43810), (Start: 36 @43861 has 58 MA's), (69, 43933), (71, 43936), (101, 44035), (103, 44041),

Gene: CallaLilly_67 Start: 43784, Stop: 44023, Start Num: 36

Candidate Starts for CallaLilly_67:

(4, 43574), (6, 43583), (25, 43733), (Start: 36 @43784 has 58 MA's), (69, 43856), (71, 43859), (101, 43958), (103, 43964),

Gene: Capricorn_67 Start: 43861, Stop: 44100, Start Num: 36

Candidate Starts for Capricorn_67:

(4, 43651), (6, 43660), (25, 43810), (Start: 36 @43861 has 58 MA's), (69, 43933), (71, 43936), (101, 44035), (103, 44041),

Gene: CaseJules_69 Start: 44058, Stop: 44297, Start Num: 36

Candidate Starts for CaseJules_69:

(4, 43848), (6, 43857), (25, 44007), (Start: 36 @44058 has 58 MA's), (69, 44130), (71, 44133), (101, 44232), (103, 44238),

Gene: Chaser_88 Start: 56443, Stop: 56652, Start Num: 54

Candidate Starts for Chaser_88:

(8, 56272), (18, 56329), (30, 56371), (35, 56401), (Start: 50 @56437 has 2 MA's), (Start: 54 @56443 has 28 MA's), (65, 56470), (67, 56473), (87, 56536), (93, 56554),

Gene: Chavito_70 Start: 44900, Stop: 45100, Start Num: 36

Candidate Starts for Chavito_70:

(4, 44693), (6, 44702), (25, 44849), (Start: 36 @44900 has 58 MA's), (Start: 57 @44918 has 1 MA's), (84, 44981), (99, 45032), (101, 45035), (103, 45041),

Gene: Chilliams_219 Start: 144486, Stop: 144719, Start Num: 37

Candidate Starts for Chilliams_219:

(Start: 37 @144486 has 23 MA's), (63, 144543), (97, 144642), (100, 144651),

Gene: ChutneyChips_91 Start: 57198, Stop: 57401, Start Num: 54

Candidate Starts for ChutneyChips_91:

(Start: 50 @57192 has 2 MA's), (Start: 54 @57198 has 28 MA's), (65, 57225), (76, 57243), (82, 57267), (107, 57360),

Gene: Claus_87 Start: 57401, Stop: 57580, Start Num: 54

Candidate Starts for Claus_87:

(18, 57287), (27, 57320), (Start: 50 @57395 has 2 MA's), (Start: 54 @57401 has 28 MA's), (70, 57440), (83, 57479), (91, 57506),

Gene: Clipper_71 Start: 44760, Stop: 44999, Start Num: 36

Candidate Starts for Clipper_71:

(4, 44550), (6, 44559), (25, 44709), (Start: 36 @44760 has 58 MA's), (Start: 57 @44805 has 1 MA's), (69, 44832), (71, 44835), (101, 44934), (103, 44940),

Gene: CrimD_69 Start: 44683, Stop: 44892, Start Num: 36

Candidate Starts for CrimD_69:

(Start: 36 @44683 has 58 MA's), (99, 44824), (101, 44827), (103, 44833),

Gene: Crossroads_89 Start: 57560, Stop: 57739, Start Num: 54

Candidate Starts for Crossroads_89:

(13, 57431), (18, 57446), (19, 57455), (24, 57470), (Start: 50 @57554 has 2 MA's), (Start: 54 @57560 has 28 MA's), (70, 57599), (72, 57602), (91, 57665),

Gene: Curiosium_71 Start: 43377, Stop: 43622, Start Num: 36

Candidate Starts for Curiosium_71:

(25, 43326), (Start: 36 @43377 has 58 MA's), (69, 43449), (71, 43452), (89, 43521), (99, 43554), (113, 43614),

Gene: Dalmuri_67 Start: 43861, Stop: 44100, Start Num: 36

Candidate Starts for Dalmuri_67:

(4, 43651), (6, 43660), (25, 43810), (Start: 36 @43861 has 58 MA's), (69, 43933), (71, 43936), (101, 44035), (103, 44041),

Gene: Daredevil_111 Start: 69987, Stop: 70223, Start Num: 39

Candidate Starts for Daredevil_111:

(Start: 39 @69987 has 3 MA's), (49, 70011), (90, 70125), (108, 70191), (109, 70194),

Gene: Diminimus_6 Start: 2365, Stop: 2132, Start Num: 37

Candidate Starts for Diminimus_6:

(Start: 37 @2365 has 23 MA's), (46, 2347), (63, 2311), (65, 2305), (99, 2206), (103, 2197),

Gene: Douge_90 Start: 56768, Stop: 56947, Start Num: 54

Candidate Starts for Douge_90:

(Start: 50 @56762 has 2 MA's), (Start: 54 @56768 has 28 MA's), (70, 56807), (72, 56810), (83, 56846), (91, 56873),

Gene: Douzhi_90 Start: 57001, Stop: 57213, Start Num: 54

Candidate Starts for Douzhi_90:

(Start: 50 @56995 has 2 MA's), (Start: 54 @57001 has 28 MA's), (65, 57028), (67, 57031), (76, 57046), (106, 57166),

Gene: Dulcita_6 Start: 2365, Stop: 2132, Start Num: 37

Candidate Starts for Dulcita_6:

(Start: 37 @2365 has 23 MA's), (46, 2347), (63, 2311), (65, 2305), (99, 2206), (103, 2197),

Gene: Durfee_67 Start: 44058, Stop: 44297, Start Num: 36

Candidate Starts for Durfee_67:

(4, 43848), (6, 43857), (25, 44007), (Start: 36 @44058 has 58 MA's), (69, 44130), (71, 44133), (101, 44232), (103, 44238),

Gene: DyoEdafos_92 Start: 57153, Stop: 57365, Start Num: 54

Candidate Starts for DyoEdafos_92:

(13, 57024), (18, 57039), (19, 57048), (23, 57060), (24, 57063), (35, 57111), (Start: 43 @57132 has 8 MA's), (Start: 50 @57147 has 2 MA's), (Start: 54 @57153 has 28 MA's), (65, 57180), (67, 57183), (76, 57198), (106, 57318),

Gene: Emerson_69 Start: 44178, Stop: 44417, Start Num: 36

Candidate Starts for Emerson_69:

(4, 43968), (6, 43977), (25, 44127), (Start: 36 @44178 has 58 MA's), (Start: 57 @44223 has 1 MA's), (69, 44250), (71, 44253), (101, 44352), (103, 44358),

Gene: Emotion_30 Start: 23341, Stop: 23598, Start Num: 31

Candidate Starts for Emotion_30:

(Start: 31 @23341 has 1 MA's),

Gene: Estes_7 Start: 2641, Stop: 2399, Start Num: 37

Candidate Starts for Estes_7:

(Start: 37 @2641 has 23 MA's), (63, 2584), (80, 2536), (99, 2470), (101, 2467),

Gene: Estes_6 Start: 2402, Stop: 2196, Start Num: 43

Candidate Starts for Estes_6:

(26, 2465), (35, 2423), (Start: 43 @2402 has 8 MA's), (63, 2360), (67, 2351), (81, 2312),

Gene: Faith1_89 Start: 57485, Stop: 57664, Start Num: 54

Candidate Starts for Faith1_89:

(13, 57356), (18, 57371), (19, 57380), (24, 57395), (Start: 50 @57479 has 2 MA's), (Start: 54 @57485 has 28 MA's), (70, 57524), (72, 57527), (91, 57590),

Gene: FarmResident_91 Start: 56713, Stop: 56925, Start Num: 54

Candidate Starts for FarmResident_91:

(13, 56584), (18, 56599), (19, 56608), (21, 56614), (24, 56623), (Start: 50 @56707 has 2 MA's), (Start: 54 @56713 has 28 MA's), (64, 56737), (65, 56740), (67, 56743), (76, 56758), (106, 56878),

Gene: FatCactus_61 Start: 39939, Stop: 39736, Start Num: 43

Candidate Starts for FatCactus_61:

(Start: 43 @39939 has 8 MA's),

Gene: FiveHead_32 Start: 22415, Stop: 22720, Start Num: 17

Candidate Starts for FiveHead_32:

(Start: 17 @22415 has 4 MA's), (89, 22628),

Gene: FreakyGoo_6 Start: 2366, Stop: 2133, Start Num: 37

Candidate Starts for FreakyGoo_6:

(Start: 37 @2366 has 23 MA's), (46, 2348), (63, 2312), (65, 2306), (99, 2207), (103, 2198),

Gene: Fryberger_9 Start: 2013, Stop: 1810, Start Num: 54

Candidate Starts for Fryberger_9:

(7, 2187), (9, 2178), (10, 2163), (33, 2067), (Start: 54 @2013 has 28 MA's), (63, 1989), (72, 1971), (77, 1965),

Gene: Gabriela_89 Start: 56831, Stop: 57010, Start Num: 54

Candidate Starts for Gabriela_89:

(13, 56702), (18, 56717), (19, 56726), (24, 56741), (Start: 50 @56825 has 2 MA's), (Start: 54 @56831 has 28 MA's), (70, 56870), (72, 56873), (91, 56936),

Gene: Ganymede_67 Start: 44084, Stop: 44323, Start Num: 36

Candidate Starts for Ganymede_67:

(4, 43874), (6, 43883), (25, 44033), (Start: 36 @44084 has 58 MA's), (Start: 57 @44129 has 1 MA's), (69, 44156), (71, 44159), (101, 44258), (103, 44264),

Gene: Gardann_89 Start: 57320, Stop: 57499, Start Num: 54

Candidate Starts for Gardann_89:

(13, 57191), (18, 57206), (19, 57215), (21, 57221), (24, 57230), (35, 57278), (Start: 36 @57284 has 58 MA's), (Start: 50 @57314 has 2 MA's), (Start: 54 @57320 has 28 MA's), (70, 57359), (83, 57398), (91, 57425),

Gene: GardenSalsa_6 Start: 2415, Stop: 2209, Start Num: 43

Candidate Starts for GardenSalsa_6:

(Start: 43 @2415 has 8 MA's), (63, 2373), (81, 2325),

Gene: GardenSalsa_7 Start: 2660, Stop: 2412, Start Num: 37

Candidate Starts for GardenSalsa_7:

(Start: 37 @2660 has 23 MA's), (63, 2603), (73, 2585), (80, 2549), (99, 2483),

Gene: GenevaB15_7 Start: 2636, Stop: 2391, Start Num: 37

Candidate Starts for GenevaB15_7:

(Start: 37 @2636 has 23 MA's), (63, 2579), (99, 2459), (101, 2456),

Gene: GenevaB15_6 Start: 2394, Stop: 2188, Start Num: 43

Candidate Starts for GenevaB15_6:

(Start: 43 @2394 has 8 MA's), (63, 2352), (79, 2316), (81, 2304),

Gene: Geraldini_70 Start: 44740, Stop: 44979, Start Num: 36

Candidate Starts for Geraldini_70:

(4, 44530), (6, 44539), (25, 44689), (Start: 36 @44740 has 58 MA's), (69, 44812), (71, 44815), (101, 44914), (103, 44920),

Gene: Glaske16_6 Start: 2365, Stop: 2132, Start Num: 37

Candidate Starts for Glaske16_6:

(Start: 37 @2365 has 23 MA's), (46, 2347), (63, 2311), (65, 2305), (99, 2206), (103, 2197),

Gene: Greely_63 Start: 23265, Stop: 23489, Start Num: 115

Candidate Starts for Greely_63:

(115, 23265), (116, 23304), (117, 23319), (118, 23427),

Gene: Greely_62 Start: 23005, Stop: 23268, Start Num: 29

Candidate Starts for Greely_62:

(22, 22984), (Start: 29 @23005 has 1 MA's), (Start: 57 @23083 has 1 MA's), (62, 23095), (75, 23119), (85, 23158), (92, 23182), (99, 23206),

Gene: Guey18_12 Start: 2707, Stop: 2504, Start Num: 54

Candidate Starts for Guey18_12:

(7, 2881), (9, 2872), (10, 2857), (33, 2761), (Start: 54 @2707 has 28 MA's), (59, 2695), (63, 2683), (72, 2665), (77, 2659),

Gene: GuuelaD_86 Start: 57444, Stop: 57623, Start Num: 54

Candidate Starts for GuuelaD_86:

(Start: 50 @57438 has 2 MA's), (Start: 54 @57444 has 28 MA's), (70, 57483), (72, 57486), (83, 57522), (91, 57549),

Gene: HedwigODU_67 Start: 43706, Stop: 43945, Start Num: 36

Candidate Starts for HedwigODU_67:

(25, 43655), (Start: 36 @43706 has 58 MA's), (46, 43730), (Start: 57 @43751 has 1 MA's), (69, 43778), (71, 43781), (101, 43880), (103, 43886),

Gene: Homura_67 Start: 43861, Stop: 44100, Start Num: 36

Candidate Starts for Homura_67:

(4, 43651), (6, 43660), (25, 43810), (Start: 36 @43861 has 58 MA's), (69, 43933), (71, 43936), (101, 44035), (103, 44041),

Gene: Hyperbowlee_67 Start: 44058, Stop: 44297, Start Num: 36

Candidate Starts for Hyperbowlee_67:

(4, 43848), (6, 43857), (25, 44007), (Start: 36 @44058 has 58 MA's), (69, 44130), (71, 44133), (101, 44232), (103, 44238),

Gene: IPHane7_5 Start: 2366, Stop: 2133, Start Num: 37

Candidate Starts for IPHane7_5:

(Start: 37 @2366 has 23 MA's), (46, 2348), (63, 2312), (65, 2306), (99, 2207), (103, 2198),

Gene: Inky_67 Start: 43861, Stop: 44100, Start Num: 36

Candidate Starts for Inky_67:

(4, 43651), (6, 43660), (25, 43810), (Start: 36 @43861 has 58 MA's), (69, 43933), (71, 43936), (101, 44035), (103, 44041),

Gene: Itos_89 Start: 56391, Stop: 56570, Start Num: 54

Candidate Starts for Itos_89:

(13, 56262), (18, 56277), (19, 56286), (24, 56301), (Start: 50 @56385 has 2 MA's), (Start: 54 @56391 has 28 MA's), (70, 56430), (72, 56433), (91, 56496),

Gene: Izel_6 Start: 2365, Stop: 2132, Start Num: 37

Candidate Starts for Izel_6:

(Start: 37 @2365 has 23 MA's), (46, 2347), (63, 2311), (65, 2305), (99, 2206), (103, 2197),

Gene: Jace_69 Start: 40976, Stop: 41194, Start Num: 48

Candidate Starts for Jace_69:

(Start: 48 @40976 has 3 MA's), (63, 41009), (75, 41030), (99, 41126), (111, 41180),

Gene: Jarvi_67 Start: 43861, Stop: 44100, Start Num: 36

Candidate Starts for Jarvi_67:

(4, 43651), (6, 43660), (25, 43810), (Start: 36 @43861 has 58 MA's), (69, 43933), (71, 43936), (101, 44035), (103, 44041),

Gene: JasmineDragon_29 Start: 22315, Stop: 22620, Start Num: 17

Candidate Starts for JasmineDragon_29:

(Start: 17 @22315 has 4 MA's), (Start: 37 @22396 has 23 MA's), (89, 22528), (110, 22591),

Gene: Jayhawk_69 Start: 44204, Stop: 44443, Start Num: 36

Candidate Starts for Jayhawk_69:

(4, 43994), (6, 44003), (25, 44153), (Start: 36 @44204 has 58 MA's), (46, 44228), (Start: 57 @44249 has 1 MA's), (69, 44276), (71, 44279), (101, 44378), (103, 44384),

Gene: Jeckyll_67 Start: 43861, Stop: 44100, Start Num: 36

Candidate Starts for Jeckyll_67:

(4, 43651), (6, 43660), (25, 43810), (Start: 36 @43861 has 58 MA's), (69, 43933), (71, 43936), (101, 44035), (103, 44041),

Gene: JohnThicc_31 Start: 22415, Stop: 22720, Start Num: 17

Candidate Starts for JohnThicc_31:

(Start: 17 @22415 has 4 MA's), (89, 22628),

Gene: Joy99_67 Start: 43790, Stop: 44029, Start Num: 36

Candidate Starts for Joy99_67:

(4, 43580), (6, 43589), (25, 43739), (Start: 36 @43790 has 58 MA's), (69, 43862), (71, 43865), (101, 43964), (103, 43970),

Gene: KleverKiS_5 Start: 2362, Stop: 2132, Start Num: 37

Candidate Starts for KleverKiS_5:

(Start: 37 @2362 has 23 MA's), (46, 2344), (63, 2308), (65, 2302), (99, 2203), (103, 2194),

Gene: Kropertea_85 Start: 56433, Stop: 56645, Start Num: 54

Candidate Starts for Kropertea_85:

(Start: 50 @56427 has 2 MA's), (Start: 54 @56433 has 28 MA's), (64, 56457), (65, 56460), (67, 56463), (76, 56478), (106, 56598),

Gene: Kudfre_69 Start: 44258, Stop: 44521, Start Num: 28

Candidate Starts for Kudfre_69:

(Start: 28 @44258 has 4 MA's), (32, 44279), (34, 44282), (40, 44306), (55, 44336), (78, 44381), (92, 44429), (104, 44465), (105, 44474), (108, 44489), (109, 44492),

Gene: LadyAstra_30 Start: 22349, Stop: 22654, Start Num: 17

Candidate Starts for LadyAstra_30:

(Start: 17 @22349 has 4 MA's), (Start: 43 @22442 has 8 MA's), (89, 22562),

Gene: LilDestine_87 Start: 57157, Stop: 57336, Start Num: 54

Candidate Starts for LilDestine_87:

(Start: 50 @57151 has 2 MA's), (Start: 54 @57157 has 28 MA's), (70, 57196), (72, 57199), (83, 57235), (91, 57262),

Gene: LilJank_73 Start: 46004, Stop: 46207, Start Num: 42

Candidate Starts for LilJank_73:

(Start: 42 @46004 has 2 MA's), (Start: 45 @46013 has 1 MA's), (47, 46016), (52, 46022), (Start: 54 @46025 has 28 MA's), (108, 46175), (109, 46178), (113, 46199),

Gene: LilhomieP_5 Start: 2366, Stop: 2133, Start Num: 37

Candidate Starts for LilhomieP_5:

(Start: 37 @2366 has 23 MA's), (46, 2348), (63, 2312), (65, 2306), (99, 2207), (103, 2198),

Gene: Llorens_67 Start: 43861, Stop: 44100, Start Num: 36

Candidate Starts for Llorens_67:

(4, 43651), (6, 43660), (25, 43810), (Start: 36 @43861 has 58 MA's), (69, 43933), (71, 43936), (101, 44035), (103, 44041),

Gene: Loadrie_88 Start: 57652, Stop: 57831, Start Num: 54

Candidate Starts for Loadrie_88:

(13, 57523), (18, 57538), (19, 57547), (24, 57562), (Start: 50 @57646 has 2 MA's), (Start: 54 @57652 has 28 MA's), (70, 57691), (72, 57694), (91, 57757),

Gene: Lunahalos_67 Start: 43861, Stop: 44100, Start Num: 36

Candidate Starts for Lunahalos_67:

(4, 43651), (6, 43660), (25, 43810), (Start: 36 @43861 has 58 MA's), (69, 43933), (71, 43936), (101, 44035), (103, 44041),

Gene: MacKat_63 Start: 39644, Stop: 39883, Start Num: 36

Candidate Starts for MacKat_63:

(4, 39434), (6, 39443), (25, 39593), (Start: 36 @39644 has 58 MA's), (Start: 57 @39689 has 1 MA's), (69, 39716), (71, 39719), (101, 39818), (103, 39824),

Gene: Marcie_57 Start: 37372, Stop: 37181, Start Num: 53

Candidate Starts for Marcie_57:

(Start: 53 @37372 has 1 MA's), (99, 37240),

Gene: MeaningOfLife_68 Start: 44613, Stop: 44852, Start Num: 36

Candidate Starts for MeaningOfLife_68:

(4, 44403), (6, 44412), (25, 44562), (Start: 36 @44613 has 58 MA's), (46, 44637), (Start: 57 @44658 has 1 MA's), (69, 44685), (71, 44688), (101, 44787), (103, 44793),

Gene: MiniMommy_29 Start: 22316, Stop: 22621, Start Num: 17

Candidate Starts for MiniMommy_29:

(Start: 17 @22316 has 4 MA's), (Start: 37 @22397 has 23 MA's), (89, 22529), (110, 22592),

Gene: MrMagoo_7 Start: 2660, Stop: 2412, Start Num: 37

Candidate Starts for MrMagoo_7:

(Start: 37 @2660 has 23 MA's), (63, 2603), (73, 2585), (80, 2549), (99, 2483),

Gene: MrMagoo_6 Start: 2415, Stop: 2209, Start Num: 43

Candidate Starts for MrMagoo_6:

(Start: 43 @2415 has 8 MA's), (63, 2373), (81, 2325),

Gene: Mynx_69 Start: 44473, Stop: 44712, Start Num: 36

Candidate Starts for Mynx_69:

(4, 44263), (6, 44272), (25, 44422), (Start: 36 @44473 has 58 MA's), (46, 44497), (Start: 57 @44518 has 1 MA's), (69, 44545), (71, 44548), (101, 44647), (103, 44653),

Gene: Myrna_58 Start: 22613, Stop: 22840, Start Num: 114

Candidate Starts for Myrna_58:

(98, 22553), (102, 22562), (112, 22607), (Start: 114 @22613 has 1 MA's),

Gene: Nanosmite_5 Start: 2451, Stop: 2248, Start Num: 43

Candidate Starts for Nanosmite_5:

(26, 2514), (35, 2472), (Start: 43 @2451 has 8 MA's), (56, 2427),

Gene: Nanosmite_6 Start: 2681, Stop: 2448, Start Num: 37

Candidate Starts for Nanosmite_6:

(Start: 37 @2681 has 23 MA's), (63, 2624), (64, 2621), (86, 2564), (99, 2519),

Gene: NiceHouse_24 Start: 11340, Stop: 11110, Start Num: 45

Candidate Starts for NiceHouse_24:

(Start: 45 @11340 has 1 MA's), (63, 11304), (68, 11292), (94, 11208), (103, 11181),

Gene: Nicholasp3_89 Start: 57320, Stop: 57499, Start Num: 54

Candidate Starts for Nicholasp3_89:

(13, 57191), (18, 57206), (19, 57215), (21, 57221), (24, 57230), (35, 57278), (Start: 36 @57284 has 58 MA's), (Start: 50 @57314 has 2 MA's), (Start: 54 @57320 has 28 MA's), (70, 57359), (83, 57398), (91, 57425),

Gene: Octobien14_69 Start: 44537, Stop: 44797, Start Num: 28

Candidate Starts for Octobien14_69:

(Start: 28 @44537 has 4 MA's), (32, 44558), (34, 44561), (40, 44585), (55, 44615), (56, 44618), (60, 44627), (104, 44741), (105, 44750), (108, 44765), (109, 44768),

Gene: Origami_30 Start: 22349, Stop: 22654, Start Num: 17

Candidate Starts for Origami_30:

(Start: 17 @22349 has 4 MA's), (Start: 43 @22442 has 8 MA's), (89, 22562),

Gene: OverPar_91 Start: 57652, Stop: 57831, Start Num: 54

Candidate Starts for OverPar_91:

(13, 57523), (18, 57538), (19, 57547), (24, 57562), (Start: 50 @57646 has 2 MA's), (Start: 54 @57652 has 28 MA's), (70, 57691), (72, 57694), (91, 57757),

Gene: PP_66 Start: 45311, Stop: 45114, Start Num: 50

Candidate Starts for PP_66:

(44, 45320), (Start: 50 @45311 has 2 MA's), (66, 45284), (99, 45182), (101, 45179),

Gene: Padfoot_67 Start: 44058, Stop: 44297, Start Num: 36

Candidate Starts for Padfoot_67:

(4, 43848), (6, 43857), (25, 44007), (Start: 36 @44058 has 58 MA's), (69, 44130), (71, 44133), (101, 44232), (103, 44238),

Gene: Padpat_70 Start: 44178, Stop: 44417, Start Num: 36

Candidate Starts for Padpat_70:

(4, 43968), (6, 43977), (25, 44127), (Start: 36 @44178 has 58 MA's), (Start: 57 @44223 has 1 MA's), (69, 44250), (71, 44253), (101, 44352), (103, 44358),

Gene: Peel_67 Start: 43863, Stop: 44102, Start Num: 36

Candidate Starts for Peel_67:

(4, 43653), (6, 43662), (25, 43812), (Start: 36 @43863 has 58 MA's), (69, 43935), (71, 43938), (101, 44037), (103, 44043),

Gene: PegLeg_5 Start: 2365, Stop: 2132, Start Num: 37

Candidate Starts for PegLeg_5:

(Start: 37 @2365 has 23 MA's), (46, 2347), (63, 2311), (65, 2305), (99, 2206), (103, 2197),

Gene: Phabba_64 Start: 23037, Stop: 23306, Start Num: 29

Candidate Starts for Phabba_64:

(22, 23016), (Start: 29 @23037 has 1 MA's), (Start: 57 @23115 has 1 MA's), (62, 23127), (75, 23151), (85, 23190), (99, 23238),

Gene: Pharaoh_61 Start: 40405, Stop: 40172, Start Num: 41

Candidate Starts for Pharaoh_61:

(38, 40411), (Start: 41 @40405 has 4 MA's), (Start: 57 @40372 has 1 MA's), (63, 40357), (99, 40249), (101, 40246), (103, 40240),

Gene: Phrampa_198 Start: 141698, Stop: 141910, Start Num: 43

Candidate Starts for Phrampa_198:

(Start: 43 @141698 has 8 MA's), (63, 141740), (74, 141761), (99, 141848),

Gene: Piatt_67 Start: 44058, Stop: 44297, Start Num: 36

Candidate Starts for Piatt_67:

(4, 43848), (6, 43857), (25, 44007), (Start: 36 @44058 has 58 MA's), (69, 44130), (71, 44133), (101, 44232), (103, 44238),

Gene: Pokerus_67 Start: 44203, Stop: 44442, Start Num: 36

Candidate Starts for Pokerus_67:

(4, 43993), (6, 44002), (25, 44152), (Start: 36 @44203 has 58 MA's), (Start: 57 @44248 has 1 MA's), (69, 44275), (71, 44278), (101, 44377), (103, 44383),

Gene: QuincyRose_65 Start: 44084, Stop: 44323, Start Num: 36

Candidate Starts for QuincyRose_65:

(4, 43874), (6, 43883), (25, 44033), (Start: 36 @44084 has 58 MA's), (Start: 57 @44129 has 1 MA's), (69, 44156), (71, 44159), (101, 44258), (103, 44264),

Gene: Rabbitrun_73 Start: 44915, Stop: 45124, Start Num: 42

Candidate Starts for Rabbitrun_73:

(Start: 42 @44915 has 2 MA's), (47, 44927), (63, 44957), (89, 45020), (104, 45065),

Gene: Ramen_68 Start: 43708, Stop: 43947, Start Num: 36

Candidate Starts for Ramen_68:

(25, 43657), (Start: 36 @43708 has 58 MA's), (46, 43732), (Start: 57 @43753 has 1 MA's), (69, 43780), (71, 43783), (101, 43882), (103, 43888),

Gene: Rapunzel97_69 Start: 44159, Stop: 44398, Start Num: 36

Candidate Starts for Rapunzel97_69:

(4, 43949), (6, 43958), (25, 44108), (Start: 36 @44159 has 58 MA's), (46, 44183), (Start: 57 @44204 has 1 MA's), (69, 44231), (71, 44234), (101, 44333), (103, 44339),

Gene: Reindeer_4 Start: 2200, Stop: 1967, Start Num: 37

Candidate Starts for Reindeer_4:

(5, 2410), (Start: 37 @2200 has 23 MA's), (63, 2146), (65, 2140), (99, 2038), (103, 2029),

Gene: Rey_5 Start: 2370, Stop: 2203, Start Num: 58

Candidate Starts for Rey_5:

(26, 2466), (35, 2424), (Start: 43 @2403 has 8 MA's), (Start: 58 @2370 has 1 MA's), (63, 2358), (79, 2322), (81, 2310),

Gene: Rey_6 Start: 2648, Stop: 2400, Start Num: 37

Candidate Starts for Rey_6:
(Start: 37 @2648 has 23 MA's), (63, 2591), (73, 2573), (99, 2471),

Gene: Rockabye_208 Start: 136558, Stop: 136761, Start Num: 43
Candidate Starts for Rockabye_208:
(Start: 43 @136558 has 8 MA's),

Gene: Ronaldo_13 Start: 3139, Stop: 2936, Start Num: 54
Candidate Starts for Ronaldo_13:
(Start: 54 @3139 has 28 MA's), (59, 3127), (63, 3115), (72, 3097), (77, 3091), (87, 3052),

Gene: RoseMarie_5 Start: 2362, Stop: 2132, Start Num: 37
Candidate Starts for RoseMarie_5:
(Start: 37 @2362 has 23 MA's), (46, 2344), (63, 2308), (65, 2302), (99, 2203), (103, 2194),

Gene: Rosmarinus_67 Start: 43849, Stop: 44088, Start Num: 36
Candidate Starts for Rosmarinus_67:
(4, 43639), (6, 43648), (25, 43798), (Start: 36 @43849 has 58 MA's), (69, 43921), (71, 43924), (101, 44023), (103, 44029),

Gene: Rumpelstiltskin_85 Start: 57113, Stop: 57292, Start Num: 54
Candidate Starts for Rumpelstiltskin_85:
(13, 56984), (18, 56999), (19, 57008), (21, 57014), (24, 57023), (35, 57071), (Start: 36 @57077 has 58 MA's), (Start: 50 @57107 has 2 MA's), (Start: 54 @57113 has 28 MA's), (70, 57152), (83, 57191), (91, 57218),

Gene: SJReid_210 Start: 135453, Stop: 135656, Start Num: 43
Candidate Starts for SJReid_210:
(Start: 43 @135453 has 8 MA's), (63, 135489), (84, 135549), (99, 135600),

Gene: SJReid_226 Start: 142221, Stop: 142508, Start Num: 37
Candidate Starts for SJReid_226:
(Start: 37 @142221 has 23 MA's), (49, 142248), (63, 142278),

Gene: Sephiroth_68 Start: 44430, Stop: 44693, Start Num: 28
Candidate Starts for Sephiroth_68:
(Start: 28 @44430 has 4 MA's), (32, 44451), (34, 44454), (40, 44478), (55, 44508), (78, 44553), (92, 44601), (104, 44637), (105, 44646), (108, 44661), (109, 44664),

Gene: ShakeltOph_29 Start: 22315, Stop: 22620, Start Num: 17
Candidate Starts for ShakeltOph_29:
(Start: 17 @22315 has 4 MA's), (Start: 37 @22396 has 23 MA's), (89, 22528), (110, 22591),

Gene: Sheng711_91 Start: 57040, Stop: 57252, Start Num: 54
Candidate Starts for Sheng711_91:
(Start: 50 @57034 has 2 MA's), (Start: 54 @57040 has 28 MA's), (65, 57067), (67, 57070), (76, 57085), (106, 57205),

Gene: ShiaSurprise_68 Start: 44058, Stop: 44297, Start Num: 36
Candidate Starts for ShiaSurprise_68:
(4, 43848), (6, 43857), (25, 44007), (Start: 36 @44058 has 58 MA's), (69, 44130), (71, 44133), (101, 44232), (103, 44238),

Gene: Skinny_6 Start: 2365, Stop: 2132, Start Num: 37
Candidate Starts for Skinny_6:
(Start: 37 @2365 has 23 MA's), (46, 2347), (63, 2311), (65, 2305), (99, 2206), (103, 2197),

Gene: SlimJimmy_5 Start: 2365, Stop: 2132, Start Num: 37
Candidate Starts for SlimJimmy_5:
(Start: 37 @2365 has 23 MA's), (46, 2347), (63, 2311), (65, 2305), (99, 2206), (103, 2197),

Gene: Slimphazie_68 Start: 44159, Stop: 44398, Start Num: 36
Candidate Starts for Slimphazie_68:
(4, 43949), (6, 43958), (25, 44108), (Start: 36 @44159 has 58 MA's), (46, 44183), (Start: 57 @44204 has 1 MA's), (69, 44231), (71, 44234), (101, 44333), (103, 44339),

Gene: SpeedDemon_1180 Start: 76063, Stop: 76290, Start Num: 39
Candidate Starts for SpeedDemon_1180:
(Start: 39 @76063 has 3 MA's), (Start: 57 @76102 has 1 MA's), (109, 76261),

Gene: Spock_67 Start: 43862, Stop: 44101, Start Num: 36
Candidate Starts for Spock_67:
(4, 43652), (6, 43661), (25, 43811), (Start: 36 @43862 has 58 MA's), (69, 43934), (71, 43937), (101, 44036), (103, 44042),

Gene: Syleon_70 Start: 44371, Stop: 44631, Start Num: 28
Candidate Starts for Syleon_70:
(Start: 28 @44371 has 4 MA's), (32, 44392), (34, 44395), (40, 44419), (55, 44449), (56, 44452), (104, 44575), (108, 44599), (109, 44602),

Gene: Tachez_67 Start: 43706, Stop: 43945, Start Num: 36
Candidate Starts for Tachez_67:
(4, 43496), (6, 43505), (25, 43655), (Start: 36 @43706 has 58 MA's), (69, 43778), (71, 43781), (101, 43880), (103, 43886),

Gene: Toaka_68 Start: 40924, Stop: 40682, Start Num: 41
Candidate Starts for Toaka_68:
(1, 41545), (2, 41500), (3, 41248), (Start: 41 @40924 has 4 MA's), (51, 40903), (99, 40771),

Gene: Topper_67 Start: 43861, Stop: 44100, Start Num: 36
Candidate Starts for Topper_67:
(4, 43651), (6, 43660), (25, 43810), (Start: 36 @43861 has 58 MA's), (69, 43933), (71, 43936), (101, 44035), (103, 44041),

Gene: Tourach_89 Start: 58025, Stop: 58204, Start Num: 54
Candidate Starts for Tourach_89:
(13, 57896), (18, 57911), (19, 57920), (35, 57983), (Start: 50 @58019 has 2 MA's), (Start: 54 @58025 has 28 MA's), (70, 58064), (72, 58067), (83, 58103), (91, 58130),

Gene: Towmatter_111 Start: 70068, Stop: 70304, Start Num: 39
Candidate Starts for Towmatter_111:
(Start: 39 @70068 has 3 MA's), (49, 70092), (90, 70206), (108, 70272), (109, 70275),

Gene: TpudiCK_6 Start: 2365, Stop: 2132, Start Num: 37
Candidate Starts for TpudiCK_6:
(Start: 37 @2365 has 23 MA's), (46, 2347), (63, 2311), (65, 2305), (99, 2206), (103, 2197),

Gene: Trax_73 Start: 45629, Stop: 45832, Start Num: 42

Candidate Starts for Trax_73:

(Start: 42 @45629 has 2 MA's), (Start: 45 @45638 has 1 MA's), (47, 45641), (52, 45647), (Start: 54 @45650 has 28 MA's), (108, 45800), (109, 45803), (113, 45824),

Gene: TruffulaTree_68 Start: 44155, Stop: 44394, Start Num: 36

Candidate Starts for TruffulaTree_68:

(4, 43945), (6, 43954), (25, 44104), (Start: 36 @44155 has 58 MA's), (46, 44179), (Start: 57 @44200 has 1 MA's), (69, 44227), (71, 44230), (101, 44329), (103, 44335),

Gene: Twitch_67 Start: 43863, Stop: 44102, Start Num: 36

Candidate Starts for Twitch_67:

(4, 43653), (6, 43662), (25, 43812), (Start: 36 @43863 has 58 MA's), (69, 43935), (71, 43938), (101, 44037), (103, 44043),

Gene: TyDawg_5 Start: 2366, Stop: 2133, Start Num: 37

Candidate Starts for TyDawg_5:

(Start: 37 @2366 has 23 MA's), (46, 2348), (63, 2312), (65, 2306), (99, 2207), (103, 2198),

Gene: Underpass_81 Start: 52356, Stop: 52535, Start Num: 54

Candidate Starts for Underpass_81:

(13, 52227), (18, 52242), (19, 52251), (21, 52257), (24, 52266), (35, 52314), (Start: 36 @52320 has 58 MA's), (Start: 50 @52350 has 2 MA's), (Start: 54 @52356 has 28 MA's), (70, 52395), (83, 52434), (91, 52461),

Gene: Validus_72 Start: 44730, Stop: 44951, Start Num: 36

Candidate Starts for Validus_72:

(25, 44679), (Start: 36 @44730 has 58 MA's), (Start: 57 @44748 has 1 MA's), (89, 44838), (99, 44871), (103, 44880),

Gene: Volt_13 Start: 3139, Stop: 2936, Start Num: 54

Candidate Starts for Volt_13:

(Start: 54 @3139 has 28 MA's), (59, 3127), (63, 3115), (72, 3097), (77, 3091), (87, 3052),

Gene: VroomVroom_29 Start: 22410, Stop: 22715, Start Num: 17

Candidate Starts for VroomVroom_29:

(Start: 17 @22410 has 4 MA's), (40, 22497), (89, 22623), (110, 22686),

Gene: Wigglewiggles_89 Start: 57408, Stop: 57575, Start Num: 54

Candidate Starts for Wigglewiggles_89:

(8, 57243), (11, 57264), (13, 57279), (18, 57294), (35, 57366), (Start: 36 @57372 has 58 MA's), (Start: 50 @57402 has 2 MA's), (Start: 54 @57408 has 28 MA's), (64, 57432), (65, 57435), (88, 57495), (91, 57501), (95, 57519), (96, 57522),

Gene: Yecey3_71 Start: 41130, Stop: 40897, Start Num: 41

Candidate Starts for Yecey3_71:

(12, 41235), (14, 41229), (15, 41226), (16, 41223), (20, 41205), (Start: 41 @41130 has 4 MA's), (51, 41109), (Start: 53 @41106 has 1 MA's), (86, 41022), (99, 40977), (101, 40974),

Gene: Zabiza_62 Start: 40011, Stop: 40250, Start Num: 36

Candidate Starts for Zabiza_62:

(25, 39960), (Start: 36 @40011 has 58 MA's), (46, 40035), (Start: 57 @40056 has 1 MA's), (69, 40083), (71, 40086), (101, 40185), (103, 40191),

Gene: Zakai_90 Start: 57893, Stop: 58072, Start Num: 54

Candidate Starts for Zakai_90:

(13, 57764), (18, 57779), (19, 57788), (24, 57803), (Start: 50 @57887 has 2 MA's), (Start: 54 @57893 has 28 MA's), (70, 57932), (72, 57935), (91, 57998),

Gene: Zavala_70 Start: 44433, Stop: 44672, Start Num: 36

Candidate Starts for Zavala_70:

(4, 44223), (6, 44232), (25, 44382), (Start: 36 @44433 has 58 MA's), (46, 44457), (Start: 57 @44478 has 1 MA's), (69, 44505), (71, 44508), (101, 44607), (103, 44613),

Gene: ZhongYanYuan_86 Start: 57300, Stop: 57479, Start Num: 54

Candidate Starts for ZhongYanYuan_86:

(Start: 50 @57294 has 2 MA's), (Start: 54 @57300 has 28 MA's), (70, 57339), (72, 57342), (83, 57378), (91, 57405),

Gene: Ziko_14 Start: 3153, Stop: 2950, Start Num: 54

Candidate Starts for Ziko_14:

(Start: 54 @3153 has 28 MA's), (59, 3141), (63, 3129), (72, 3111), (77, 3105), (87, 3066),