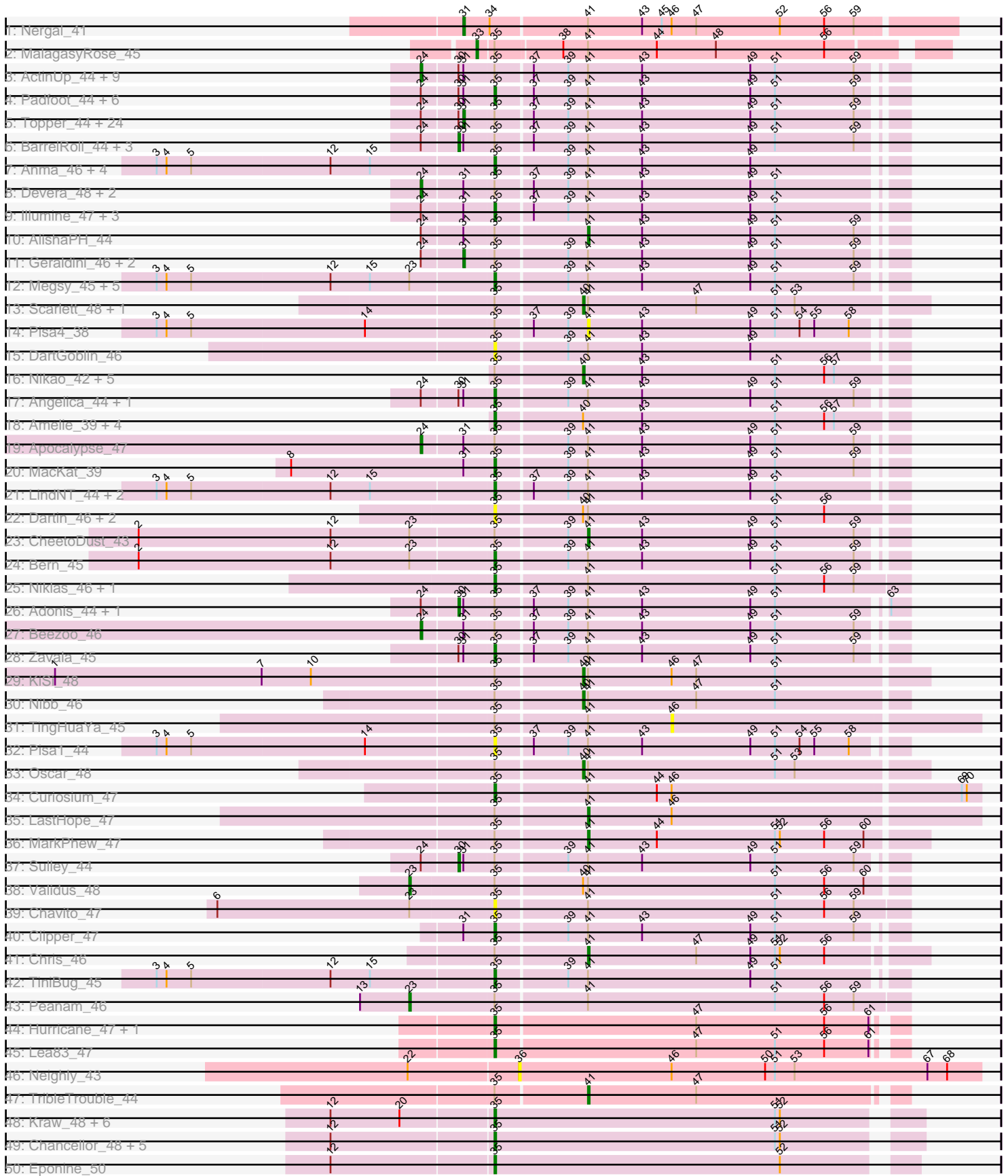


Pham 294433



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 294433 Report

This analysis was run 04/18/26 on database version 643.

Pham number 294433 has 209 members, 27 are drafts.

Phages represented in each track:

- Track 1 : Nergal_41
- Track 2 : MalagasyRose_45
- Track 3 : ActinUp_44, Ramen_44, CaseJules_45, Hyperbowlee_44, Atiba_44, Joy99_44, Blizzard_44, Zabiza_39, Durfee_44, Piatt_44
- Track 4 : Padfoot_44, Jayhawk_45, Asayake_44, Mynx_45, BEEST_44, Padpat_45, ShiaSurprise_45
- Track 5 : Topper_44, Llorens_44, Dalmuri_44, Jeckyll_44, Rosmarinus_44, CREW_44, Boiiii_44, BGIlluvia_44, TruffulaTree_44, CallaLilly_44, Belladonna_44, Veliki_44, Rapunzel97_44, Homura_44, Inky_44, Spock_44, Lunahalos_44, Capricorn_44, HedwigODU_44, YoureAdopted_43, Emerson_45, Jarvi_44, Twitch_44, Peel_44, Slimphazie_44
- Track 6 : BarrelRoll_44, Adephagia_44, Tachez_44, JAWS_44
- Track 7 : Anma_46, Bella96_45, Urkel_45, SamuelLPlaqson_45, DrHayes_45
- Track 8 : Devera_48, Ageofdapage_46, Murucutumbu_45
- Track 9 : Illumine_47, LaterM_45, Stinson_45, Dole_47
- Track 10 : AlishaPH_44
- Track 11 : Geraldini_46, BaghaKamala_43, Pokerus_43
- Track 12 : Megsy_45, MeaningOfLife_45, Ganymede_45, Tiri_45, QuincyRose_43, CrimD_44
- Track 13 : Scarlett_48, LeMond_48
- Track 14 : Pisa4_38
- Track 15 : DartGoblin_46
- Track 16 : Nikao_42, Teejan_42, Torres_42, SgtBeansprout_39, Trice_40, Enkosi_42
- Track 17 : Angelica_44, Deby_44
- Track 18 : Amelie_39, Binglebops_39, Nutello_39, LilPharaoh_39, Mdavu_40
- Track 19 : Apocalypse_47
- Track 20 : MacKat_39
- Track 21 : LindNT_44, Prithvi_45, TreyKay_45
- Track 22 : Dartin_46, McMater_46, Richo_46
- Track 23 : CheetoDust_43
- Track 24 : Bern_45
- Track 25 : Niklas_46, Shaobing_46
- Track 26 : Adonis_44, Anaya_46
- Track 27 : Beezoo_46
- Track 28 : Zavala_45
- Track 29 : KiSi_48

- Track 30 : Nibb_46
- Track 31 : TingHuaYa_45
- Track 32 : Pisa1_44
- Track 33 : Oscar_48
- Track 34 : Curiosium_47
- Track 35 : LastHope_47
- Track 36 : MarkPhew_47
- Track 37 : Sulley_44
- Track 38 : Validus_48
- Track 39 : Chavito_47
- Track 40 : Clipper_47
- Track 41 : Chris_46
- Track 42 : TiniBug_45
- Track 43 : Peanam_46
- Track 44 : Hurricane_47, Keshu_48
- Track 45 : Lea83_47
- Track 46 : Neighly_43
- Track 47 : TribbleTrouble_44
- Track 48 : Kraw_48, Reptar3000_46, Bobquesha_50, Juliette_50, YasnayaPolyana_48, Malthus_49, OmniCritical_47
- Track 49 : Chancellor_48, Qhanda_50, Slarp_48, Cheetobro_48, Taquito_48, Mitti_48
- Track 50 : Eponine_50
- Track 51 : Fionnbharth_48
- Track 52 : Patt_45
- Track 53 : Wintermute_48
- Track 54 : JF1_48, Y10_47, Y2_47
- Track 55 : MissDaisy_46
- Track 56 : Hammy_46
- Track 57 : Ekdilam_43
- Track 58 : Bryler_47, Tierra_47, Cain_47
- Track 59 : Ellie_42, Applecrisp_43, Amgine_44, Fefferhead_44, Lavahound_45
- Track 60 : Tigress9_50, Krueger_50
- Track 61 : November_44
- Track 62 : Amohnition_46
- Track 63 : Syra333_49
- Track 64 : PhelpsODU_46
- Track 65 : SirPhilip_46
- Track 66 : Marshawn_47
- Track 67 : TClif_48
- Track 68 : Ximenita_50
- Track 69 : Yuna_50
- Track 70 : Phrank_47
- Track 71 : Sunflower1121_50
- Track 72 : Shadow1_49
- Track 73 : DARTH_P_46
- Track 74 : Boilgate_43
- Track 75 : Vetrix_41, Underpass_41, DrSeegs_41
- Track 76 : Lynnae_41, Soap141_41, Hafay_41, Wilder_41, OverPar_42
- Track 77 : Nicholasp3_41
- Track 78 : GuuelaD_41, Crossroads_41, BobsGarage_41, SoJulia_42, Gabriela_41, Gardann_41, Itos_40, Rossetti_41, Finemlucis_41, Netyap_41, BigCheese_41, Miley16_41, Zakai_41

- Track 79 : DHan_42
- Track 80 : Claus_41, Baoshan_40
- Track 81 : Bazzle_41, Archie_41
- Track 82 : Tourach_41
- Track 83 : Samty_39
- Track 84 : LiyuLake_39
- Track 85 : Jobypre_39
- Track 86 : Lolly9_39
- Track 87 : ChutneyChips_38
- Track 88 : FarmResident_39
- Track 89 : Quby_39
- Track 90 : Aegeus_44, Baudelaire_44
- Track 91 : Nebkiss_69, Gaia_69

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

The start number called the most often in the published annotations is 35, it was called in 85 of the 182 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amelie_39, Amgine_44, Amohnition_46, Angelica_44, Anma_46, Applecrisp_43, Asayake_44, BEEST_44, Bella96_45, Bern_45, Biglebops_39, Bobquesha_50, Boilgate_43, Bryler_47, Cain_47, Chancellor_48, Chavito_47, Cheetobro_48, Clipper_47, CrimD_44, Curiosium_47, DartGoblin_46, DarthP_46, Dartin_46, Deby_44, Dole_47, DrHayes_45, Ekdilam_43, Ellie_42, Eponine_50, Fefferhead_44, Fionnbharth_48, Gaia_69, Ganymede_45, Hurricane_47, Illumine_47, JF1_48, Jayhawk_45, Juliette_50, Keshu_48, Kraw_48, Krueger_50, LaterM_45, Lavahound_45, Lea83_47, LilPharaoh_39, LindNT_44, MacKat_39, Malthus_49, Marshawn_47, McMater_46, Mdavu_40, MeaningOfLife_45, Megsy_45, MissDaisy_46, Mitti_48, Mynx_45, Nebkiss_69, Niklas_46, November_44, Nutello_39, OmniCritical_47, Padfoot_44, Padpat_45, Patt_45, PhelpsODU_46, Phrank_47, Pisa1_44, Prithvi_45, Qhanda_50, QuincyRose_43, Reptar3000_46, Richo_46, SamuelLPlaqson_45, Shadow1_49, Shaobing_46, ShiaSurprise_45, SirPhilip_46, Slarp_48, Stinson_45, Sunflower1121_50, Syra333_49, TClif_48, Taquito_48, Tierra_47, Tigress9_50, TiniBug_45, Tiri_45, TreyKay_45, Urkel_45, Wintermute_48, Y10_47, Y2_47, YasnayaPolyana_48, Yuna_50, Zavala_45,

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

- ActinUp_44, Adephegia_44, Adonis_44, Aegeus_44, Ageofdapage_46, AlishaPH_44, Anaya_46, Apocalypse_47, Atiba_44, BGiluviae_44, BaghaKamala_43, BarrelRoll_44, Baudelaire_44, Beezoo_46, Belladonna_44, Blizzard_44, Boiiii_44, CREW_44, CallaLilly_44, Capricorn_44, CaseJules_45, CheetoDust_43, Chris_46, Dalmuri_44, Devera_48, Durfee_44, Emerson_45, Enkosi_42, Geraldini_46, Hammy_46, HedwigODU_44, Homura_44, Hyperbowlee_44, Inky_44, JAWS_44, Jarvi_44, Jeckyll_44, Joy99_44, KiSi_48, LastHope_47, LeMond_48, Llorens_44, Lunahalos_44, MalagasyRose_45, MarkPhew_47, Murucutumbu_45, Nibb_46, Nikao_42, Oscar_48, Peanam_46, Peel_44, Piatt_44, Pisa4_38, Pokerus_43, Ramen_44, Rapunzel97_44, Rosmarinus_44, Scarlett_48, SgtBeansprout_39, Slimphazie_44, Spock_44, Sulley_44, Tachez_44, Teejan_42, TingHuaYa_45, Topper_44, Torres_42, TribleTrouble_44, Trice_40, TruffulaTree_44, Twitch_44,

Validus_48, Veliki_44, Ximenita_50, YoureAdopted_43, Zabiza_39,

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

- Archie_41, Baoshan_40, Bazzle_41, BigCheese_41, BobsGarage_41, ChutneyChips_38, Claus_41, Crossroads_41, DHan_42, DrSeegs_41, FarmResident_39, Finemlucis_41, Gabriela_41, Gardann_41, GuuelaD_41, Hafay_41, Itos_40, Jobypre_39, LiyuLake_39, Lolly9_39, Lynnae_41, Miley16_41, Neighly_43, Nergal_41, Netyap_41, Nicholasp3_41, OverPar_42, Quby_39, Rossetti_41, Samty_39, SoJulia_42, Soap141_41, Tourach_41, Underpass_41, Vetrix_41, Wilder_41, Zakai_41,

Summary by start number:

Start 23:

- Found in 13 of 209 (6.2%) of genes in pham
- Manual Annotations of this start: 2 of 182
- Called 15.4% of time when present
- Phage (with cluster) where this start called: Peanam_46 (K1), Validus_48 (K1),

Start 24:

- Found in 64 of 209 (30.6%) of genes in pham
- Manual Annotations of this start: 15 of 182
- Called 23.4% of time when present
- Phage (with cluster) where this start called: ActinUp_44 (K1), Ageofdapage_46 (K1), Apocalypse_47 (K1), Atiba_44 (K1), Beezoo_46 (K1), Blizzard_44 (K1), CaseJules_45 (K1), Devera_48 (K1), Durfee_44 (K1), Hyperbowlee_44 (K1), Joy99_44 (K1), Murucutumbu_45 (K1), Piatt_44 (K1), Ramen_44 (K1), Zabiza_39 (K1),

Start 26:

- Found in 25 of 209 (12.0%) of genes in pham
- Manual Annotations of this start: 1 of 182
- Called 4.0% of time when present
- Phage (with cluster) where this start called: Nicholasp3_41 (L2),

Start 30:

- Found in 53 of 209 (25.4%) of genes in pham
- Manual Annotations of this start: 7 of 182
- Called 13.2% of time when present
- Phage (with cluster) where this start called: Adephagia_44 (K1), Adonis_44 (K1), Anaya_46 (K1), BarrelRoll_44 (K1), JAWS_44 (K1), Sulley_44 (K1), Tachez_44 (K1),

Start 31:

- Found in 69 of 209 (33.0%) of genes in pham
- Manual Annotations of this start: 30 of 182
- Called 43.5% of time when present
- Phage (with cluster) where this start called: BGlluviae_44 (K1), BaghaKamala_43 (K1), Belladonna_44 (K1), Boiii_44 (K1), CREW_44 (K1), CallaLilly_44 (K1), Capricorn_44 (K1), Dalmuri_44 (K1), Emerson_45 (K1), Geraldini_46 (K1), HedwigODU_44 (K1), Homura_44 (K1), Inky_44 (K1), Jarvi_44 (K1), Jeckyll_44 (K1), Llorens_44 (K1), Lunahalos_44 (K1), Nergal_41 (AG), Peel_44 (K1), Pokerus_43 (K1), Rapunzel97_44 (K1), Rosmarinus_44 (K1), Slimphazie_44 (K1), Spock_44 (K1), Topper_44 (K1), TruffulaTree_44 (K1), Twitch_44 (K1), Veliki_44 (K1), Ximenita_50

(K6), YoureAdopted_43 (K1),

Start 32:

- Found in 35 of 209 (16.7%) of genes in pham
- Manual Annotations of this start: 6 of 182
- Called 17.1% of time when present
- Phage (with cluster) where this start called: Baoshan_40 (L2), Claus_41 (L2), DrSeegs_41 (L2), Tourach_41 (L2), Underpass_41 (L2), Vetrrix_41 (L2),

Start 33:

- Found in 1 of 209 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 182
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MalagasyRose_45 (AG),

Start 35:

- Found in 172 of 209 (82.3%) of genes in pham
- Manual Annotations of this start: 85 of 182
- Called 55.8% of time when present
- Phage (with cluster) where this start called: Amelie_39 (K1), Amgine_44 (K6), Amohnition_46 (K6), Angelica_44 (K1), Anma_46 (K1), Applecrisp_43 (K6), Asayake_44 (K1), BEEST_44 (K1), Bella96_45 (K1), Bern_45 (K1), Binglebops_39 (K1), Bobquesha_50 (K4), Boilgate_43 (K8), Bryler_47 (K6), Cain_47 (K6), Chancellor_48 (K4), Chavito_47 (K1), Cheetobro_48 (K4), Clipper_47 (K1), CrimD_44 (K1), Curiosium_47 (K1), DartGoblin_46 (K1), DarthP_46 (K6), Dartin_46 (K1), Deby_44 (K1), Dole_47 (K1), DrHayes_45 (K1), Ekdilam_43 (K6), Ellie_42 (K6), Eponine_50 (K4), Fefferhead_44 (K6), Fionnbharth_48 (K4), Gaia_69 (X), Ganymede_45 (K1), Hurricane_47 (K3), Illumine_47 (K1), JF1_48 (K4), Jayhawk_45 (K1), Juliette_50 (K4), Keshu_48 (K3), Kraw_48 (K4), Krueger_50 (K6), LaterM_45 (K1), Lavahound_45 (K6), Lea83_47 (K3), LilPharaoh_39 (K1), LindNT_44 (K1), MacKat_39 (K1), Malthus_49 (K4), Marshawn_47 (K6), McMater_46 (K1), Mdavu_40 (K1), MeaningOfLife_45 (K1), Megsy_45 (K1), MissDaisy_46 (K4), Mitti_48 (K4), Mynx_45 (K1), Nebkiss_69 (X), Niklas_46 (K1), November_44 (K6), Nutello_39 (K1), OmniCritical_47 (K4), Padfoot_44 (K1), Padpat_45 (K1), Patt_45 (K4), PhelpsODU_46 (K6), Phrank_47 (K6), Pisa1_44 (K1), Prithvi_45 (K1), Qhanda_50 (K4), QuincyRose_43 (K1), Reptar3000_46 (K4), Richo_46 (K1), SamuelLPlaqson_45 (K1), Shadow1_49 (K6), Shaobing_46 (K1), ShiaSurprise_45 (K1), SirPhilip_46 (K6), Slarp_48 (K4), Stinson_45 (K1), Sunflower1121_50 (K6), Syra333_49 (K6), TClif_48 (K6), Taquito_48 (K4), Tierra_47 (K6), Tigress9_50 (K6), TiniBug_45 (K1), Tiri_45 (K1), TreyKay_45 (K1), Urkel_45 (K1), Wintermute_48 (K4), Y10_47 (K4), Y2_47 (K4), YasnayaPolyana_48 (K4), Yuna_50 (K6), Zavala_45 (K1),

Start 36:

- Found in 1 of 209 (0.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Neighly_43 (K3),

Start 39:

- Found in 119 of 209 (56.9%) of genes in pham
- Manual Annotations of this start: 16 of 182
- Called 21.8% of time when present

- Phage (with cluster) where this start called: Aegeus_44 (L5), Archie_41 (L2), Baudelaire_44 (L5), Bazzle_41 (L2), BigCheese_41 (L2), BobsGarage_41 (L2), ChutneyChips_38 (L4), Crossroads_41 (L2), DHan_42 (L2), FarmResident_39 (L4), Finemlucis_41 (L2), Gabriela_41 (L2), Gardann_41 (L2), GuuelaD_41 (L2), Hafay_41 (L2), Itos_40 (L2), Lynnae_41 (L2), Miley16_41 (L2), Netyap_41 (L2), OverPar_42 (L2), Quby_39 (L4), Rossetti_41 (L2), SoJulia_42 (L2), Soap141_41 (L2), Wilder_41 (L2), Zakai_41 (L2),

Start 40:

- Found in 31 of 209 (14.8%) of genes in pham
- Manual Annotations of this start: 9 of 182
- Called 35.5% of time when present
- Phage (with cluster) where this start called: Enkosi_42 (K1), KiSi_48 (K1), LeMond_48 (K1), Nibb_46 (K1), Nikao_42 (K1), Oscar_48 (K1), Scarlett_48 (K1), SgtBeansprout_39 (K1), Teejan_42 (K1), Torres_42 (K1), Trice_40 (K1),

Start 41:

- Found in 122 of 209 (58.4%) of genes in pham
- Manual Annotations of this start: 7 of 182
- Called 6.6% of time when present
- Phage (with cluster) where this start called: AlishaPH_44 (K1), CheetoDust_43 (K1), Chris_46 (K1), Hammy_46 (K6), LastHope_47 (K1), MarkPhew_47 (K1), Pisa4_38 (K1), TribbleTrouble_44 (K3),

Start 42:

- Found in 4 of 209 (1.9%) of genes in pham
- Manual Annotations of this start: 2 of 182
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Jobypre_39 (L3), LiyuLake_39 (L3), Lolly9_39 (L3),

Start 44:

- Found in 6 of 209 (2.9%) of genes in pham
- Manual Annotations of this start: 1 of 182
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Samty_39 (L3),

Start 46:

- Found in 10 of 209 (4.8%) of genes in pham
- No Manual Annotations of this start.
- Called 10.0% of time when present
- Phage (with cluster) where this start called: TingHuaYa_45 (K1),

Summary by clusters:

There are 11 clusters represented in this pham: AG, K1, K3, L4, L5, L2, K6, K4, X, K8, L3,

Info for manual annotations of cluster AG:

- Start number 31 was manually annotated 1 time for cluster AG.
- Start number 33 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster K1:

- Start number 23 was manually annotated 2 times for cluster K1.
- Start number 24 was manually annotated 15 times for cluster K1.
- Start number 30 was manually annotated 7 times for cluster K1.
- Start number 31 was manually annotated 28 times for cluster K1.
- Start number 35 was manually annotated 39 times for cluster K1.
- Start number 40 was manually annotated 9 times for cluster K1.
- Start number 41 was manually annotated 5 times for cluster K1.

Info for manual annotations of cluster K3:

- Start number 35 was manually annotated 3 times for cluster K3.
- Start number 41 was manually annotated 1 time for cluster K3.

Info for manual annotations of cluster K4:

- Start number 35 was manually annotated 19 times for cluster K4.

Info for manual annotations of cluster K6:

- Start number 31 was manually annotated 1 time for cluster K6.
- Start number 35 was manually annotated 21 times for cluster K6.
- Start number 41 was manually annotated 1 time for cluster K6.

Info for manual annotations of cluster K8:

- Start number 35 was manually annotated 1 time for cluster K8.

Info for manual annotations of cluster L2:

- Start number 26 was manually annotated 1 time for cluster L2.
- Start number 32 was manually annotated 6 times for cluster L2.
- Start number 39 was manually annotated 14 times for cluster L2.

Info for manual annotations of cluster L3:

- Start number 42 was manually annotated 2 times for cluster L3.
- Start number 44 was manually annotated 1 time for cluster L3.

Info for manual annotations of cluster L5:

- Start number 39 was manually annotated 2 times for cluster L5.

Info for manual annotations of cluster X:

- Start number 35 was manually annotated 2 times for cluster X.

Gene Information:

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

Candidate Starts for ActinUp_44:

(Start: 24 @35120 has 15 MA's), (Start: 30 @35141 has 7 MA's), (Start: 31 @35144 has 30 MA's),
 (Start: 35 @35162 has 85 MA's), (37, 35183), (Start: 39 @35204 has 16 MA's), (Start: 41 @35216 has
 7 MA's), (43, 35249), (49, 35315), (51, 35330), (59, 35378),

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

Candidate Starts for Adephagia_44:

(Start: 24 @35117 has 15 MA's), (Start: 30 @35138 has 7 MA's), (Start: 31 @35141 has 30 MA's),
 (Start: 35 @35159 has 85 MA's), (37, 35180), (Start: 39 @35201 has 16 MA's), (Start: 41 @35213 has

7 MA's), (43, 35246), (49, 35312), (51, 35327), (59, 35375),

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

Candidate Starts for Adonis_44:

(Start: 24 @35415 has 15 MA's), (Start: 30 @35436 has 7 MA's), (Start: 31 @35439 has 30 MA's), (Start: 35 @35457 has 85 MA's), (37, 35478), (Start: 39 @35499 has 16 MA's), (Start: 41 @35511 has 7 MA's), (43, 35544), (49, 35610), (51, 35625), (63, 35685),

Gene: Aegeus_44 Start: 36838, Stop: 37059, Start Num: 39

Candidate Starts for Aegeus_44:

(Start: 35 @36796 has 85 MA's), (Start: 39 @36838 has 16 MA's), (Start: 41 @36850 has 7 MA's), (51, 36964), (52, 36967), (66, 37039),

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

Candidate Starts for Ageofdapage_46:

(Start: 24 @36088 has 15 MA's), (Start: 31 @36112 has 30 MA's), (Start: 35 @36130 has 85 MA's), (37, 36151), (Start: 39 @36172 has 16 MA's), (Start: 41 @36184 has 7 MA's), (43, 36217), (49, 36283), (51, 36298),

Gene: AlishaPH_44 Start: 35486, Stop: 35671, Start Num: 41

Candidate Starts for AlishaPH_44:

(Start: 24 @35390 has 15 MA's), (Start: 31 @35414 has 30 MA's), (Start: 35 @35432 has 85 MA's), (Start: 41 @35486 has 7 MA's), (43, 35519), (49, 35585), (51, 35600), (59, 35648),

Gene: Amelie_39 Start: 34739, Stop: 34984, Start Num: 35

Candidate Starts for Amelie_39:

(Start: 35 @34739 has 85 MA's), (Start: 40 @34790 has 9 MA's), (43, 34826), (51, 34907), (56, 34937), (57, 34943),

Gene: Amgine_44 Start: 36236, Stop: 36478, Start Num: 35

Candidate Starts for Amgine_44:

(Start: 35 @36236 has 85 MA's), (49, 36389),

Gene: Amohnition_46 Start: 36255, Stop: 36491, Start Num: 35

Candidate Starts for Amohnition_46:

(11, 36156), (Start: 35 @36255 has 85 MA's), (49, 36408), (56, 36453), (63, 36480),

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

Candidate Starts for Anaya_46:

(Start: 24 @35727 has 15 MA's), (Start: 30 @35748 has 7 MA's), (Start: 31 @35751 has 30 MA's), (Start: 35 @35769 has 85 MA's), (37, 35790), (Start: 39 @35811 has 16 MA's), (Start: 41 @35823 has 7 MA's), (43, 35856), (49, 35922), (51, 35937), (63, 35997),

Gene: Angelica_44 Start: 35389, Stop: 35628, Start Num: 35

Candidate Starts for Angelica_44:

(Start: 24 @35347 has 15 MA's), (Start: 30 @35368 has 7 MA's), (Start: 31 @35371 has 30 MA's), (Start: 35 @35389 has 85 MA's), (Start: 39 @35431 has 16 MA's), (Start: 41 @35443 has 7 MA's), (43, 35476), (49, 35542), (51, 35557), (59, 35605),

Gene: Anma_46 Start: 36056, Stop: 36295, Start Num: 35

Candidate Starts for Anma_46:

(3, 35855), (4, 35861), (5, 35876), (12, 35960), (15, 35984), (Start: 35 @36056 has 85 MA's), (Start: 39 @36098 has 16 MA's), (Start: 41 @36110 has 7 MA's), (43, 36143), (49, 36209),

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

Candidate Starts for Apocalypse_47:

(Start: 24 @36132 has 15 MA's), (Start: 31 @36156 has 30 MA's), (Start: 35 @36174 has 85 MA's),
(Start: 39 @36216 has 16 MA's), (Start: 41 @36228 has 7 MA's), (43, 36261), (49, 36327), (51,
36342), (59, 36390),

Gene: Applecrisp_43 Start: 35732, Stop: 35974, Start Num: 35

Candidate Starts for Applecrisp_43:

(Start: 35 @35732 has 85 MA's), (49, 35885),

Gene: Archie_41 Start: 34671, Stop: 34901, Start Num: 39

Candidate Starts for Archie_41:

(Start: 32 @34614 has 6 MA's), (Start: 39 @34671 has 16 MA's), (47, 34749), (50, 34791), (51, 34797),
(53, 34809), (68, 34890),

Gene: Asayake_44 Start: 35474, Stop: 35713, Start Num: 35

Candidate Starts for Asayake_44:

(Start: 24 @35432 has 15 MA's), (Start: 30 @35453 has 7 MA's), (Start: 31 @35456 has 30 MA's),
(Start: 35 @35474 has 85 MA's), (37, 35495), (Start: 39 @35516 has 16 MA's), (Start: 41 @35528 has
7 MA's), (43, 35561), (49, 35627), (51, 35642), (59, 35690),

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

Candidate Starts for Atiba_44:

(Start: 24 @35080 has 15 MA's), (Start: 30 @35101 has 7 MA's), (Start: 31 @35104 has 30 MA's),
(Start: 35 @35122 has 85 MA's), (37, 35143), (Start: 39 @35164 has 16 MA's), (Start: 41 @35176 has
7 MA's), (43, 35209), (49, 35275), (51, 35290), (59, 35338),

Gene: BEEST_44 Start: 35474, Stop: 35713, Start Num: 35

Candidate Starts for BEEST_44:

(Start: 24 @35432 has 15 MA's), (Start: 30 @35453 has 7 MA's), (Start: 31 @35456 has 30 MA's),
(Start: 35 @35474 has 85 MA's), (37, 35495), (Start: 39 @35516 has 16 MA's), (Start: 41 @35528 has
7 MA's), (43, 35561), (49, 35627), (51, 35642), (59, 35690),

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

Candidate Starts for BGlluviae_44:

(Start: 24 @35235 has 15 MA's), (Start: 30 @35256 has 7 MA's), (Start: 31 @35259 has 30 MA's),
(Start: 35 @35277 has 85 MA's), (37, 35298), (Start: 39 @35319 has 16 MA's), (Start: 41 @35331 has
7 MA's), (43, 35364), (49, 35430), (51, 35445), (59, 35493),

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

Candidate Starts for BaghaKamala_43:

(Start: 24 @34555 has 15 MA's), (Start: 31 @34579 has 30 MA's), (Start: 35 @34597 has 85 MA's),
(Start: 39 @34639 has 16 MA's), (Start: 41 @34651 has 7 MA's), (43, 34684), (49, 34750), (51,
34765), (59, 34813),

Gene: Baoshan_40 Start: 34271, Stop: 34558, Start Num: 32

Candidate Starts for Baoshan_40:

(Start: 32 @34271 has 6 MA's), (Start: 39 @34328 has 16 MA's), (46, 34391), (47, 34406), (50, 34448),
(51, 34454), (53, 34466),

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

Candidate Starts for BarrelRoll_44:

(Start: 24 @35103 has 15 MA's), (Start: 30 @35124 has 7 MA's), (Start: 31 @35127 has 30 MA's), (Start: 35 @35145 has 85 MA's), (37, 35166), (Start: 39 @35187 has 16 MA's), (Start: 41 @35199 has 7 MA's), (43, 35232), (49, 35298), (51, 35313), (59, 35361),

Gene: Baudelaire_44 Start: 36838, Stop: 37059, Start Num: 39

Candidate Starts for Baudelaire_44:

(Start: 35 @36796 has 85 MA's), (Start: 39 @36838 has 16 MA's), (Start: 41 @36850 has 7 MA's), (51, 36964), (52, 36967), (66, 37039),

Gene: Bazzle_41 Start: 34703, Stop: 34933, Start Num: 39

Candidate Starts for Bazzle_41:

(Start: 32 @34646 has 6 MA's), (Start: 39 @34703 has 16 MA's), (47, 34781), (50, 34823), (51, 34829), (53, 34841), (68, 34922),

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

Candidate Starts for Beezoo_46:

(Start: 24 @36078 has 15 MA's), (Start: 31 @36102 has 30 MA's), (Start: 35 @36120 has 85 MA's), (37, 36141), (Start: 39 @36162 has 16 MA's), (Start: 41 @36174 has 7 MA's), (43, 36207), (49, 36273), (51, 36288), (59, 36336),

Gene: Bella96_45 Start: 36011, Stop: 36250, Start Num: 35

Candidate Starts for Bella96_45:

(3, 35810), (4, 35816), (5, 35831), (12, 35915), (15, 35939), (Start: 35 @36011 has 85 MA's), (Start: 39 @36053 has 16 MA's), (Start: 41 @36065 has 7 MA's), (43, 36098), (49, 36164),

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

Candidate Starts for Belladonna_44:

(Start: 24 @35235 has 15 MA's), (Start: 30 @35256 has 7 MA's), (Start: 31 @35259 has 30 MA's), (Start: 35 @35277 has 85 MA's), (37, 35298), (Start: 39 @35319 has 16 MA's), (Start: 41 @35331 has 7 MA's), (43, 35364), (49, 35430), (51, 35445), (59, 35493),

Gene: Bern_45 Start: 34192, Stop: 34431, Start Num: 35

Candidate Starts for Bern_45:

(2, 33979), (12, 34096), (Start: 23 @34144 has 2 MA's), (Start: 35 @34192 has 85 MA's), (Start: 39 @34234 has 16 MA's), (Start: 41 @34246 has 7 MA's), (43, 34279), (49, 34345), (51, 34360), (59, 34408),

Gene: BigCheese_41 Start: 34467, Stop: 34697, Start Num: 39

Candidate Starts for BigCheese_41:

(Start: 26 @34392 has 1 MA's), (27, 34398), (Start: 32 @34410 has 6 MA's), (Start: 39 @34467 has 16 MA's), (50, 34587), (51, 34593), (53, 34605), (68, 34686),

Gene: Biglebops_39 Start: 34739, Stop: 34984, Start Num: 35

Candidate Starts for Biglebops_39:

(Start: 35 @34739 has 85 MA's), (Start: 40 @34790 has 9 MA's), (43, 34826), (51, 34907), (56, 34937), (57, 34943),

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

Candidate Starts for Blizzard_44:

(Start: 24 @35432 has 15 MA's), (Start: 30 @35453 has 7 MA's), (Start: 31 @35456 has 30 MA's), (Start: 35 @35474 has 85 MA's), (37, 35495), (Start: 39 @35516 has 16 MA's), (Start: 41 @35528 has 7 MA's), (43, 35561), (49, 35627), (51, 35642), (59, 35690),

Gene: Bobquesha_50 Start: 35544, Stop: 35792, Start Num: 35
Candidate Starts for Bobquesha_50:
(12, 35448), (20, 35490), (Start: 35 @35544 has 85 MA's), (51, 35715), (52, 35718),

Gene: BobsGarage_41 Start: 34467, Stop: 34697, Start Num: 39
Candidate Starts for BobsGarage_41:
(Start: 26 @34392 has 1 MA's), (27, 34398), (Start: 32 @34410 has 6 MA's), (Start: 39 @34467 has 16 MA's), (50, 34587), (51, 34593), (53, 34605), (68, 34686),

Gene: Boiiii_44 Start: 35458, Stop: 35715, Start Num: 31
Candidate Starts for Boiiii_44:
(Start: 24 @35434 has 15 MA's), (Start: 30 @35455 has 7 MA's), (Start: 31 @35458 has 30 MA's),
(Start: 35 @35476 has 85 MA's), (37, 35497), (Start: 39 @35518 has 16 MA's), (Start: 41 @35530 has 7 MA's), (43, 35563), (49, 35629), (51, 35644), (59, 35692),

Gene: Boilgate_43 Start: 36328, Stop: 36564, Start Num: 35
Candidate Starts for Boilgate_43:
(Start: 35 @36328 has 85 MA's), (60, 36550),

Gene: Bryler_47 Start: 35116, Stop: 35352, Start Num: 35
Candidate Starts for Bryler_47:
(Start: 35 @35116 has 85 MA's), (Start: 40 @35167 has 9 MA's), (Start: 41 @35170 has 7 MA's), (47, 35236),

Gene: CREW_44 Start: 35259, Stop: 35516, Start Num: 31
Candidate Starts for CREW_44:
(Start: 24 @35235 has 15 MA's), (Start: 30 @35256 has 7 MA's), (Start: 31 @35259 has 30 MA's),
(Start: 35 @35277 has 85 MA's), (37, 35298), (Start: 39 @35319 has 16 MA's), (Start: 41 @35331 has 7 MA's), (43, 35364), (49, 35430), (51, 35445), (59, 35493),

Gene: Cain_47 Start: 35104, Stop: 35340, Start Num: 35
Candidate Starts for Cain_47:
(Start: 35 @35104 has 85 MA's), (Start: 40 @35155 has 9 MA's), (Start: 41 @35158 has 7 MA's), (47, 35224),

Gene: CallaLilly_44 Start: 35182, Stop: 35439, Start Num: 31
Candidate Starts for CallaLilly_44:
(Start: 24 @35158 has 15 MA's), (Start: 30 @35179 has 7 MA's), (Start: 31 @35182 has 30 MA's),
(Start: 35 @35200 has 85 MA's), (37, 35221), (Start: 39 @35242 has 16 MA's), (Start: 41 @35254 has 7 MA's), (43, 35287), (49, 35353), (51, 35368), (59, 35416),

Gene: Capricorn_44 Start: 35259, Stop: 35516, Start Num: 31
Candidate Starts for Capricorn_44:
(Start: 24 @35235 has 15 MA's), (Start: 30 @35256 has 7 MA's), (Start: 31 @35259 has 30 MA's),
(Start: 35 @35277 has 85 MA's), (37, 35298), (Start: 39 @35319 has 16 MA's), (Start: 41 @35331 has 7 MA's), (43, 35364), (49, 35430), (51, 35445), (59, 35493),

Gene: CaseJules_45 Start: 35432, Stop: 35713, Start Num: 24
Candidate Starts for CaseJules_45:
(Start: 24 @35432 has 15 MA's), (Start: 30 @35453 has 7 MA's), (Start: 31 @35456 has 30 MA's),
(Start: 35 @35474 has 85 MA's), (37, 35495), (Start: 39 @35516 has 16 MA's), (Start: 41 @35528 has 7 MA's), (43, 35561), (49, 35627), (51, 35642), (59, 35690),

Gene: Chancellor_48 Start: 36169, Stop: 36417, Start Num: 35
Candidate Starts for Chancellor_48:
(12, 36073), (Start: 35 @36169 has 85 MA's), (51, 36340), (52, 36343),

Gene: Chavito_47 Start: 36519, Stop: 36767, Start Num: 35
Candidate Starts for Chavito_47:
(6, 36354), (Start: 23 @36471 has 2 MA's), (Start: 35 @36519 has 85 MA's), (Start: 41 @36573 has 7 MA's), (51, 36687), (56, 36717), (59, 36735),

Gene: CheetoDust_43 Start: 34700, Stop: 34885, Start Num: 41
Candidate Starts for CheetoDust_43:
(2, 34433), (12, 34550), (Start: 23 @34598 has 2 MA's), (Start: 35 @34646 has 85 MA's), (Start: 39 @34688 has 16 MA's), (Start: 41 @34700 has 7 MA's), (43, 34733), (49, 34799), (51, 34814), (59, 34862),

Gene: Cheetobro_48 Start: 36166, Stop: 36414, Start Num: 35
Candidate Starts for Cheetobro_48:
(12, 36070), (Start: 35 @36166 has 85 MA's), (51, 36337), (52, 36340),

Gene: Chris_46 Start: 35995, Stop: 36195, Start Num: 41
Candidate Starts for Chris_46:
(Start: 35 @35941 has 85 MA's), (Start: 41 @35995 has 7 MA's), (47, 36061), (49, 36094), (51, 36109), (52, 36112), (56, 36139),

Gene: ChutneyChips_38 Start: 33373, Stop: 33615, Start Num: 39
Candidate Starts for ChutneyChips_38:
(13, 33256), (19, 33277), (25, 33295), (Start: 26 @33298 has 1 MA's), (27, 33304), (Start: 32 @33316 has 6 MA's), (Start: 39 @33373 has 16 MA's), (53, 33511), (65, 33577),

Gene: Claus_41 Start: 34429, Stop: 34716, Start Num: 32
Candidate Starts for Claus_41:
(Start: 32 @34429 has 6 MA's), (Start: 39 @34486 has 16 MA's), (46, 34549), (47, 34564), (50, 34606), (51, 34612), (53, 34624),

Gene: Clipper_47 Start: 35793, Stop: 36032, Start Num: 35
Candidate Starts for Clipper_47:
(Start: 31 @35775 has 30 MA's), (Start: 35 @35793 has 85 MA's), (Start: 39 @35835 has 16 MA's), (Start: 41 @35847 has 7 MA's), (43, 35880), (49, 35946), (51, 35961), (59, 36009),

Gene: CrimD_44 Start: 35400, Stop: 35639, Start Num: 35
Candidate Starts for CrimD_44:
(3, 35199), (4, 35205), (5, 35220), (12, 35304), (15, 35328), (Start: 23 @35352 has 2 MA's), (Start: 35 @35400 has 85 MA's), (Start: 39 @35442 has 16 MA's), (Start: 41 @35454 has 7 MA's), (43, 35487), (49, 35553), (51, 35568), (59, 35616),

Gene: Crossroads_41 Start: 34469, Stop: 34699, Start Num: 39
Candidate Starts for Crossroads_41:
(Start: 26 @34394 has 1 MA's), (27, 34400), (Start: 32 @34412 has 6 MA's), (Start: 39 @34469 has 16 MA's), (50, 34589), (51, 34595), (53, 34607), (68, 34688),

Gene: Curiosium_47 Start: 34347, Stop: 34634, Start Num: 35
Candidate Starts for Curiosium_47:

(Start: 35 @34347 has 85 MA's), (Start: 41 @34401 has 7 MA's), (Start: 44 @34443 has 1 MA's), (46, 34452), (69, 34623), (70, 34626),

Gene: DHan_42 Start: 34427, Stop: 34657, Start Num: 39

Candidate Starts for DHan_42:

(Start: 32 @34370 has 6 MA's), (Start: 39 @34427 has 16 MA's), (46, 34490), (47, 34505), (50, 34547), (51, 34553), (53, 34565), (68, 34646),

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

Candidate Starts for Dalmuri_44:

(Start: 24 @35235 has 15 MA's), (Start: 30 @35256 has 7 MA's), (Start: 31 @35259 has 30 MA's), (Start: 35 @35277 has 85 MA's), (37, 35298), (Start: 39 @35319 has 16 MA's), (Start: 41 @35331 has 7 MA's), (43, 35364), (49, 35430), (51, 35445), (59, 35493),

Gene: DartGoblin_46 Start: 36004, Stop: 36243, Start Num: 35

Candidate Starts for DartGoblin_46:

(Start: 35 @36004 has 85 MA's), (Start: 39 @36046 has 16 MA's), (Start: 41 @36058 has 7 MA's), (43, 36091), (49, 36157),

Gene: DarthP_46 Start: 36145, Stop: 36378, Start Num: 35

Candidate Starts for DarthP_46:

(Start: 35 @36145 has 85 MA's), (Start: 41 @36199 has 7 MA's), (51, 36313), (56, 36343),

Gene: Dartin_46 Start: 35860, Stop: 36105, Start Num: 35

Candidate Starts for Dartin_46:

(Start: 35 @35860 has 85 MA's), (Start: 40 @35911 has 9 MA's), (Start: 41 @35914 has 7 MA's), (51, 36028), (56, 36058),

Gene: Deby_44 Start: 35405, Stop: 35644, Start Num: 35

Candidate Starts for Deby_44:

(Start: 24 @35363 has 15 MA's), (Start: 30 @35384 has 7 MA's), (Start: 31 @35387 has 30 MA's), (Start: 35 @35405 has 85 MA's), (Start: 39 @35447 has 16 MA's), (Start: 41 @35459 has 7 MA's), (43, 35492), (49, 35558), (51, 35573), (59, 35621),

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

Candidate Starts for Devera_48:

(Start: 24 @35896 has 15 MA's), (Start: 31 @35920 has 30 MA's), (Start: 35 @35938 has 85 MA's), (37, 35959), (Start: 39 @35980 has 16 MA's), (Start: 41 @35992 has 7 MA's), (43, 36025), (49, 36091), (51, 36106),

Gene: Dole_47 Start: 35940, Stop: 36179, Start Num: 35

Candidate Starts for Dole_47:

(Start: 24 @35898 has 15 MA's), (Start: 31 @35922 has 30 MA's), (Start: 35 @35940 has 85 MA's), (37, 35961), (Start: 39 @35982 has 16 MA's), (Start: 41 @35994 has 7 MA's), (43, 36027), (49, 36093), (51, 36108),

Gene: DrHayes_45 Start: 36056, Stop: 36295, Start Num: 35

Candidate Starts for DrHayes_45:

(3, 35855), (4, 35861), (5, 35876), (12, 35960), (15, 35984), (Start: 35 @36056 has 85 MA's), (Start: 39 @36098 has 16 MA's), (Start: 41 @36110 has 7 MA's), (43, 36143), (49, 36209),

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

Candidate Starts for DrSeegs_41:

(Start: 26 @34392 has 1 MA's), (27, 34398), (Start: 32 @34410 has 6 MA's), (Start: 39 @34467 has 16 MA's), (50, 34587), (51, 34593), (53, 34605), (68, 34686),

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

Candidate Starts for Durfee_44:

(Start: 24 @35432 has 15 MA's), (Start: 30 @35453 has 7 MA's), (Start: 31 @35456 has 30 MA's), (Start: 35 @35474 has 85 MA's), (37, 35495), (Start: 39 @35516 has 16 MA's), (Start: 41 @35528 has 7 MA's), (43, 35561), (49, 35627), (51, 35642), (59, 35690),

Gene: Ekdilam_43 Start: 35707, Stop: 35940, Start Num: 35

Candidate Starts for Ekdilam_43:

(9, 35590), (11, 35608), (Start: 35 @35707 has 85 MA's),

Gene: Ellie_42 Start: 35424, Stop: 35666, Start Num: 35

Candidate Starts for Ellie_42:

(Start: 35 @35424 has 85 MA's), (49, 35577),

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

Candidate Starts for Emerson_45:

(Start: 24 @35111 has 15 MA's), (Start: 30 @35132 has 7 MA's), (Start: 31 @35135 has 30 MA's), (Start: 35 @35153 has 85 MA's), (37, 35174), (Start: 39 @35195 has 16 MA's), (Start: 41 @35207 has 7 MA's), (43, 35240), (49, 35306), (51, 35321), (59, 35369),

Gene: Enkosi_42 Start: 37403, Stop: 37597, Start Num: 40

Candidate Starts for Enkosi_42:

(Start: 35 @37352 has 85 MA's), (Start: 40 @37403 has 9 MA's), (43, 37439), (51, 37520), (56, 37550), (57, 37556),

Gene: Eponine_50 Start: 36922, Stop: 37167, Start Num: 35

Candidate Starts for Eponine_50:

(12, 36826), (Start: 35 @36922 has 85 MA's), (52, 37096),

Gene: FarmResident_39 Start: 33175, Stop: 33417, Start Num: 39

Candidate Starts for FarmResident_39:

(13, 33058), (19, 33079), (25, 33097), (Start: 26 @33100 has 1 MA's), (27, 33106), (Start: 32 @33118 has 6 MA's), (Start: 39 @33175 has 16 MA's), (50, 33295), (53, 33313), (59, 33349),

Gene: Fefferhead_44 Start: 35375, Stop: 35617, Start Num: 35

Candidate Starts for Fefferhead_44:

(Start: 35 @35375 has 85 MA's), (49, 35528),

Gene: Finemlucis_41 Start: 34743, Stop: 34973, Start Num: 39

Candidate Starts for Finemlucis_41:

(Start: 26 @34668 has 1 MA's), (27, 34674), (Start: 32 @34686 has 6 MA's), (Start: 39 @34743 has 16 MA's), (50, 34863), (51, 34869), (53, 34881), (68, 34962),

Gene: Fionnbharth_48 Start: 36320, Stop: 36565, Start Num: 35

Candidate Starts for Fionnbharth_48:

(Start: 35 @36320 has 85 MA's), (52, 36494), (64, 36554),

Gene: Gabriela_41 Start: 34729, Stop: 34959, Start Num: 39

Candidate Starts for Gabriela_41:

(Start: 26 @34654 has 1 MA's), (27, 34660), (Start: 32 @34672 has 6 MA's), (Start: 39 @34729 has 16 MA's), (50, 34849), (51, 34855), (53, 34867), (68, 34948),

Gene: Gaia_69 Start: 45400, Stop: 45705, Start Num: 35

Candidate Starts for Gaia_69:

(Start: 35 @45400 has 85 MA's), (Start: 41 @45454 has 7 MA's), (43, 45487), (51, 45568), (59, 45616),

Gene: Ganymede_45 Start: 35592, Stop: 35831, Start Num: 35

Candidate Starts for Ganymede_45:

(3, 35391), (4, 35397), (5, 35412), (12, 35496), (15, 35520), (Start: 23 @35544 has 2 MA's), (Start: 35 @35592 has 85 MA's), (Start: 39 @35634 has 16 MA's), (Start: 41 @35646 has 7 MA's), (43, 35679), (49, 35745), (51, 35760), (59, 35808),

Gene: Gardann_41 Start: 34468, Stop: 34698, Start Num: 39

Candidate Starts for Gardann_41:

(Start: 26 @34393 has 1 MA's), (27, 34399), (Start: 32 @34411 has 6 MA's), (Start: 39 @34468 has 16 MA's), (50, 34588), (51, 34594), (53, 34606), (68, 34687),

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

Candidate Starts for Geraldini_46:

(Start: 24 @36167 has 15 MA's), (Start: 31 @36191 has 30 MA's), (Start: 35 @36209 has 85 MA's), (Start: 39 @36251 has 16 MA's), (Start: 41 @36263 has 7 MA's), (43, 36296), (49, 36362), (51, 36377), (59, 36425),

Gene: GuuelaD_41 Start: 34506, Stop: 34736, Start Num: 39

Candidate Starts for GuuelaD_41:

(Start: 26 @34431 has 1 MA's), (27, 34437), (Start: 32 @34449 has 6 MA's), (Start: 39 @34506 has 16 MA's), (50, 34626), (51, 34632), (53, 34644), (68, 34725),

Gene: Hafay_41 Start: 34501, Stop: 34731, Start Num: 39

Candidate Starts for Hafay_41:

(Start: 26 @34426 has 1 MA's), (27, 34432), (Start: 32 @34444 has 6 MA's), (Start: 39 @34501 has 16 MA's), (50, 34621), (51, 34627), (53, 34639), (62, 34693), (68, 34720),

Gene: Hammy_46 Start: 36187, Stop: 36366, Start Num: 41

Candidate Starts for Hammy_46:

(Start: 35 @36133 has 85 MA's), (Start: 41 @36187 has 7 MA's), (51, 36301), (56, 36331),

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

Candidate Starts for HedwigODU_44:

(Start: 24 @35120 has 15 MA's), (Start: 30 @35141 has 7 MA's), (Start: 31 @35144 has 30 MA's), (Start: 35 @35162 has 85 MA's), (37, 35183), (Start: 39 @35204 has 16 MA's), (Start: 41 @35216 has 7 MA's), (43, 35249), (49, 35315), (51, 35330), (59, 35378),

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

Candidate Starts for Homura_44:

(Start: 24 @35235 has 15 MA's), (Start: 30 @35256 has 7 MA's), (Start: 31 @35259 has 30 MA's), (Start: 35 @35277 has 85 MA's), (37, 35298), (Start: 39 @35319 has 16 MA's), (Start: 41 @35331 has 7 MA's), (43, 35364), (49, 35430), (51, 35445), (59, 35493),

Gene: Hurricane_47 Start: 35860, Stop: 36099, Start Num: 35

Candidate Starts for Hurricane_47:

(Start: 35 @35860 has 85 MA's), (47, 35980), (56, 36058), (61, 36085),

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

Candidate Starts for Hyperbowlee_44:

(Start: 24 @35432 has 15 MA's), (Start: 30 @35453 has 7 MA's), (Start: 31 @35456 has 30 MA's),
(Start: 35 @35474 has 85 MA's), (37, 35495), (Start: 39 @35516 has 16 MA's), (Start: 41 @35528 has
7 MA's), (43, 35561), (49, 35627), (51, 35642), (59, 35690),

Gene: Illumine_47 Start: 35940, Stop: 36179, Start Num: 35

Candidate Starts for Illumine_47:

(Start: 24 @35898 has 15 MA's), (Start: 31 @35922 has 30 MA's), (Start: 35 @35940 has 85 MA's),
(37, 35961), (Start: 39 @35982 has 16 MA's), (Start: 41 @35994 has 7 MA's), (43, 36027), (49,
36093), (51, 36108),

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

Candidate Starts for Inky_44:

(Start: 24 @35235 has 15 MA's), (Start: 30 @35256 has 7 MA's), (Start: 31 @35259 has 30 MA's),
(Start: 35 @35277 has 85 MA's), (37, 35298), (Start: 39 @35319 has 16 MA's), (Start: 41 @35331 has
7 MA's), (43, 35364), (49, 35430), (51, 35445), (59, 35493),

Gene: Itos_40 Start: 33373, Stop: 33603, Start Num: 39

Candidate Starts for Itos_40:

(Start: 26 @33298 has 1 MA's), (27, 33304), (Start: 32 @33316 has 6 MA's), (Start: 39 @33373 has 16
MA's), (50, 33493), (51, 33499), (53, 33511), (68, 33592),

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

Candidate Starts for JAWS_44:

(Start: 24 @35109 has 15 MA's), (Start: 30 @35130 has 7 MA's), (Start: 31 @35133 has 30 MA's),
(Start: 35 @35151 has 85 MA's), (37, 35172), (Start: 39 @35193 has 16 MA's), (Start: 41 @35205 has
7 MA's), (43, 35238), (49, 35304), (51, 35319), (59, 35367),

Gene: JF1_48 Start: 36237, Stop: 36485, Start Num: 35

Candidate Starts for JF1_48:

(Start: 35 @36237 has 85 MA's), (51, 36408), (52, 36411),

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

Candidate Starts for Jarvi_44:

(Start: 24 @35235 has 15 MA's), (Start: 30 @35256 has 7 MA's), (Start: 31 @35259 has 30 MA's),
(Start: 35 @35277 has 85 MA's), (37, 35298), (Start: 39 @35319 has 16 MA's), (Start: 41 @35331 has
7 MA's), (43, 35364), (49, 35430), (51, 35445), (59, 35493),

Gene: Jayhawk_45 Start: 35160, Stop: 35399, Start Num: 35

Candidate Starts for Jayhawk_45:

(Start: 24 @35118 has 15 MA's), (Start: 30 @35139 has 7 MA's), (Start: 31 @35142 has 30 MA's),
(Start: 35 @35160 has 85 MA's), (37, 35181), (Start: 39 @35202 has 16 MA's), (Start: 41 @35214 has
7 MA's), (43, 35247), (49, 35313), (51, 35328), (59, 35376),

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

Candidate Starts for Jeckyll_44:

(Start: 24 @35235 has 15 MA's), (Start: 30 @35256 has 7 MA's), (Start: 31 @35259 has 30 MA's),
(Start: 35 @35277 has 85 MA's), (37, 35298), (Start: 39 @35319 has 16 MA's), (Start: 41 @35331 has
7 MA's), (43, 35364), (49, 35430), (51, 35445), (59, 35493),

Gene: Jobypre_39 Start: 34742, Stop: 34954, Start Num: 42

Candidate Starts for Jobypre_39:

(Start: 32 @34655 has 6 MA's), (Start: 42 @34742 has 2 MA's), (51, 34838), (53, 34850),

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

Candidate Starts for Joy99_44:

(Start: 24 @35164 has 15 MA's), (Start: 30 @35185 has 7 MA's), (Start: 31 @35188 has 30 MA's),
(Start: 35 @35206 has 85 MA's), (37, 35227), (Start: 39 @35248 has 16 MA's), (Start: 41 @35260 has
7 MA's), (43, 35293), (49, 35359), (51, 35374), (59, 35422),

Gene: Juliette_50 Start: 36393, Stop: 36641, Start Num: 35

Candidate Starts for Juliette_50:

(12, 36297), (20, 36339), (Start: 35 @36393 has 85 MA's), (51, 36564), (52, 36567),

Gene: Keshu_48 Start: 35918, Stop: 36157, Start Num: 35

Candidate Starts for Keshu_48:

(Start: 35 @35918 has 85 MA's), (47, 36038), (56, 36116), (61, 36143),

Gene: KiSi_48 Start: 36394, Stop: 36600, Start Num: 40

Candidate Starts for KiSi_48:

(1, 36079), (7, 36205), (10, 36235), (Start: 35 @36343 has 85 MA's), (Start: 40 @36394 has 9 MA's),
(Start: 41 @36397 has 7 MA's), (46, 36448), (47, 36463), (51, 36511),

Gene: Kraw_48 Start: 36081, Stop: 36329, Start Num: 35

Candidate Starts for Kraw_48:

(12, 35985), (20, 36027), (Start: 35 @36081 has 85 MA's), (51, 36252), (52, 36255),

Gene: Krueger_50 Start: 36110, Stop: 36346, Start Num: 35

Candidate Starts for Krueger_50:

(Start: 35 @36110 has 85 MA's), (Start: 40 @36161 has 9 MA's), (47, 36230), (49, 36263), (51, 36278),
(53, 36290),

Gene: LastHope_47 Start: 34715, Stop: 34948, Start Num: 41

Candidate Starts for LastHope_47:

(Start: 35 @34661 has 85 MA's), (Start: 41 @34715 has 7 MA's), (46, 34766),

Gene: LaterM_45 Start: 36054, Stop: 36293, Start Num: 35

Candidate Starts for LaterM_45:

(Start: 24 @36012 has 15 MA's), (Start: 31 @36036 has 30 MA's), (Start: 35 @36054 has 85 MA's),
(37, 36075), (Start: 39 @36096 has 16 MA's), (Start: 41 @36108 has 7 MA's), (43, 36141), (49,
36207), (51, 36222),

Gene: Lavahound_45 Start: 36357, Stop: 36599, Start Num: 35

Candidate Starts for Lavahound_45:

(Start: 35 @36357 has 85 MA's), (49, 36510),

Gene: LeMond_48 Start: 36378, Stop: 36584, Start Num: 40

Candidate Starts for LeMond_48:

(Start: 35 @36327 has 85 MA's), (Start: 40 @36378 has 9 MA's), (Start: 41 @36381 has 7 MA's), (47,
36447), (51, 36495), (53, 36507),

Gene: Lea83_47 Start: 35892, Stop: 36131, Start Num: 35

Candidate Starts for Lea83_47:

(Start: 35 @35892 has 85 MA's), (47, 36012), (51, 36060), (56, 36090), (61, 36117),

Gene: LilPharaoh_39 Start: 34467, Stop: 34712, Start Num: 35

Candidate Starts for LilPharaoh_39:

(Start: 35 @34467 has 85 MA's), (Start: 40 @34518 has 9 MA's), (43, 34554), (51, 34635), (56, 34665), (57, 34671),

Gene: LindNT_44 Start: 35343, Stop: 35582, Start Num: 35

Candidate Starts for LindNT_44:

(3, 35142), (4, 35148), (5, 35163), (12, 35247), (15, 35271), (Start: 35 @35343 has 85 MA's), (37, 35364), (Start: 39 @35385 has 16 MA's), (Start: 41 @35397 has 7 MA's), (43, 35430), (49, 35496), (51, 35511),

Gene: LiyuLake_39 Start: 34726, Stop: 34938, Start Num: 42

Candidate Starts for LiyuLake_39:

(19, 34600), (Start: 32 @34639 has 6 MA's), (Start: 42 @34726 has 2 MA's), (Start: 44 @34750 has 1 MA's), (51, 34822), (53, 34834), (56, 34852),

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

Candidate Starts for Llorens_44:

(Start: 24 @35235 has 15 MA's), (Start: 30 @35256 has 7 MA's), (Start: 31 @35259 has 30 MA's), (Start: 35 @35277 has 85 MA's), (37, 35298), (Start: 39 @35319 has 16 MA's), (Start: 41 @35331 has 7 MA's), (43, 35364), (49, 35430), (51, 35445), (59, 35493),

Gene: Lolly9_39 Start: 34550, Stop: 34762, Start Num: 42

Candidate Starts for Lolly9_39:

(19, 34424), (Start: 32 @34463 has 6 MA's), (Start: 42 @34550 has 2 MA's), (Start: 44 @34574 has 1 MA's), (51, 34646), (53, 34658), (56, 34676),

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

Candidate Starts for Lunahalos_44:

(Start: 24 @35235 has 15 MA's), (Start: 30 @35256 has 7 MA's), (Start: 31 @35259 has 30 MA's), (Start: 35 @35277 has 85 MA's), (37, 35298), (Start: 39 @35319 has 16 MA's), (Start: 41 @35331 has 7 MA's), (43, 35364), (49, 35430), (51, 35445), (59, 35493),

Gene: Lynnae_41 Start: 34456, Stop: 34686, Start Num: 39

Candidate Starts for Lynnae_41:

(Start: 26 @34381 has 1 MA's), (27, 34387), (Start: 32 @34399 has 6 MA's), (Start: 39 @34456 has 16 MA's), (50, 34576), (51, 34582), (53, 34594), (62, 34648), (68, 34675),

Gene: MacKat_39 Start: 30677, Stop: 30916, Start Num: 35

Candidate Starts for MacKat_39:

(8, 30554), (Start: 31 @30659 has 30 MA's), (Start: 35 @30677 has 85 MA's), (Start: 39 @30719 has 16 MA's), (Start: 41 @30731 has 7 MA's), (43, 30764), (49, 30830), (51, 30845), (59, 30893),

Gene: MalagasyRose_45 Start: 33899, Stop: 34168, Start Num: 33

Candidate Starts for MalagasyRose_45:

(Start: 33 @33899 has 1 MA's), (Start: 35 @33908 has 85 MA's), (38, 33947), (Start: 41 @33962 has 7 MA's), (Start: 44 @34004 has 1 MA's), (48, 34040), (56, 34106),

Gene: Malthus_49 Start: 36081, Stop: 36329, Start Num: 35

Candidate Starts for Malthus_49:

(12, 35985), (20, 36027), (Start: 35 @36081 has 85 MA's), (51, 36252), (52, 36255),

Gene: MarkPhew_47 Start: 35823, Stop: 36026, Start Num: 41

Candidate Starts for MarkPhew_47:

(Start: 35 @35769 has 85 MA's), (Start: 41 @35823 has 7 MA's), (Start: 44 @35865 has 1 MA's), (51, 35937), (52, 35940), (56, 35967), (60, 35991),

Gene: Marshawn_47 Start: 36184, Stop: 36432, Start Num: 35

Candidate Starts for Marshawn_47:

(Start: 35 @36184 has 85 MA's), (37, 36205), (Start: 41 @36238 has 7 MA's), (51, 36352), (56, 36382), (60, 36406),

Gene: McMater_46 Start: 35860, Stop: 36105, Start Num: 35

Candidate Starts for McMater_46:

(Start: 35 @35860 has 85 MA's), (Start: 40 @35911 has 9 MA's), (Start: 41 @35914 has 7 MA's), (51, 36028), (56, 36058),

Gene: Mdavu_40 Start: 34728, Stop: 34973, Start Num: 35

Candidate Starts for Mdavu_40:

(Start: 35 @34728 has 85 MA's), (Start: 40 @34779 has 9 MA's), (43, 34815), (51, 34896), (56, 34926), (57, 34932),

Gene: MeaningOfLife_45 Start: 36086, Stop: 36325, Start Num: 35

Candidate Starts for MeaningOfLife_45:

(3, 35885), (4, 35891), (5, 35906), (12, 35990), (15, 36014), (Start: 23 @36038 has 2 MA's), (Start: 35 @36086 has 85 MA's), (Start: 39 @36128 has 16 MA's), (Start: 41 @36140 has 7 MA's), (43, 36173), (49, 36239), (51, 36254), (59, 36302),

Gene: Megsy_45 Start: 35402, Stop: 35641, Start Num: 35

Candidate Starts for Megsy_45:

(3, 35201), (4, 35207), (5, 35222), (12, 35306), (15, 35330), (Start: 23 @35354 has 2 MA's), (Start: 35 @35402 has 85 MA's), (Start: 39 @35444 has 16 MA's), (Start: 41 @35456 has 7 MA's), (43, 35489), (49, 35555), (51, 35570), (59, 35618),

Gene: Miley16_41 Start: 34467, Stop: 34697, Start Num: 39

Candidate Starts for Miley16_41:

(Start: 26 @34392 has 1 MA's), (27, 34398), (Start: 32 @34410 has 6 MA's), (Start: 39 @34467 has 16 MA's), (50, 34587), (51, 34593), (53, 34605), (68, 34686),

Gene: MissDaisy_46 Start: 35556, Stop: 35804, Start Num: 35

Candidate Starts for MissDaisy_46:

(17, 35493), (28, 35529), (29, 35535), (Start: 35 @35556 has 85 MA's), (51, 35727), (52, 35730),

Gene: Mitti_48 Start: 36257, Stop: 36505, Start Num: 35

Candidate Starts for Mitti_48:

(12, 36161), (Start: 35 @36257 has 85 MA's), (51, 36428), (52, 36431),

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

Candidate Starts for Murucutumbu_45:

(Start: 24 @36105 has 15 MA's), (Start: 31 @36129 has 30 MA's), (Start: 35 @36147 has 85 MA's), (37, 36168), (Start: 39 @36189 has 16 MA's), (Start: 41 @36201 has 7 MA's), (43, 36234), (49, 36300), (51, 36315),

Gene: Mynx_45 Start: 35478, Stop: 35717, Start Num: 35

Candidate Starts for Mynx_45:

(Start: 24 @35436 has 15 MA's), (Start: 30 @35457 has 7 MA's), (Start: 31 @35460 has 30 MA's),
(Start: 35 @35478 has 85 MA's), (37, 35499), (Start: 39 @35520 has 16 MA's), (Start: 41 @35532 has
7 MA's), (43, 35565), (49, 35631), (51, 35646), (59, 35694),

Gene: Nebkiss_69 Start: 44011, Stop: 44316, Start Num: 35

Candidate Starts for Nebkiss_69:

(Start: 35 @44011 has 85 MA's), (Start: 41 @44065 has 7 MA's), (43, 44098), (51, 44179), (59, 44227),

Gene: Neighly_43 Start: 34451, Stop: 34732, Start Num: 36

Candidate Starts for Neighly_43:

(22, 34385), (36, 34451), (46, 34544), (50, 34601), (51, 34607), (53, 34619), (67, 34700), (68, 34712),

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

Candidate Starts for Nergal_41:

(Start: 31 @33794 has 30 MA's), (34, 33809), (Start: 41 @33866 has 7 MA's), (43, 33899), (45, 33911),
(46, 33917), (47, 33932), (52, 33983), (56, 34010), (59, 34028),

Gene: Netyap_41 Start: 34467, Stop: 34697, Start Num: 39

Candidate Starts for Netyap_41:

(Start: 26 @34392 has 1 MA's), (27, 34398), (Start: 32 @34410 has 6 MA's), (Start: 39 @34467 has 16
MA's), (50, 34587), (51, 34593), (53, 34605), (68, 34686),

Gene: Nibb_46 Start: 35544, Stop: 35738, Start Num: 40

Candidate Starts for Nibb_46:

(Start: 35 @35493 has 85 MA's), (Start: 40 @35544 has 9 MA's), (Start: 41 @35547 has 7 MA's), (47,
35613), (51, 35661),

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

Candidate Starts for Nicholasp3_41:

(Start: 26 @34393 has 1 MA's), (27, 34399), (Start: 32 @34411 has 6 MA's), (Start: 39 @34468 has 16
MA's), (50, 34588), (51, 34594), (53, 34606), (68, 34687),

Gene: Nikao_42 Start: 37403, Stop: 37597, Start Num: 40

Candidate Starts for Nikao_42:

(Start: 35 @37352 has 85 MA's), (Start: 40 @37403 has 9 MA's), (43, 37439), (51, 37520), (56, 37550),
(57, 37556),

Gene: Niklas_46 Start: 35918, Stop: 36166, Start Num: 35

Candidate Starts for Niklas_46:

(Start: 35 @35918 has 85 MA's), (Start: 41 @35972 has 7 MA's), (51, 36086), (56, 36116), (59, 36134),

Gene: November_44 Start: 35863, Stop: 36099, Start Num: 35

Candidate Starts for November_44:

(11, 35764), (Start: 35 @35863 has 85 MA's), (49, 36016), (56, 36061), (63, 36088),

Gene: Nutello_39 Start: 34739, Stop: 34984, Start Num: 35

Candidate Starts for Nutello_39:

(Start: 35 @34739 has 85 MA's), (Start: 40 @34790 has 9 MA's), (43, 34826), (51, 34907), (56, 34937),
(57, 34943),

Gene: OmniCritical_47 Start: 36066, Stop: 36314, Start Num: 35

Candidate Starts for OmniCritical_47:

(12, 35970), (20, 36012), (Start: 35 @36066 has 85 MA's), (51, 36237), (52, 36240),

Gene: Oscar_48 Start: 36280, Stop: 36486, Start Num: 40

Candidate Starts for Oscar_48:

(Start: 35 @36229 has 85 MA's), (Start: 40 @36280 has 9 MA's), (Start: 41 @36283 has 7 MA's), (51, 36397), (53, 36409),

Gene: OverPar_42 Start: 34499, Stop: 34729, Start Num: 39

Candidate Starts for OverPar_42:

(Start: 26 @34424 has 1 MA's), (27, 34430), (Start: 32 @34442 has 6 MA's), (Start: 39 @34499 has 16 MA's), (50, 34619), (51, 34625), (53, 34637), (62, 34691), (68, 34718),

Gene: Padfoot_44 Start: 35474, Stop: 35713, Start Num: 35

Candidate Starts for Padfoot_44:

(Start: 24 @35432 has 15 MA's), (Start: 30 @35453 has 7 MA's), (Start: 31 @35456 has 30 MA's), (Start: 35 @35474 has 85 MA's), (37, 35495), (Start: 39 @35516 has 16 MA's), (Start: 41 @35528 has 7 MA's), (43, 35561), (49, 35627), (51, 35642), (59, 35690),

Gene: Padpat_45 Start: 35153, Stop: 35392, Start Num: 35

Candidate Starts for Padpat_45:

(Start: 24 @35111 has 15 MA's), (Start: 30 @35132 has 7 MA's), (Start: 31 @35135 has 30 MA's), (Start: 35 @35153 has 85 MA's), (37, 35174), (Start: 39 @35195 has 16 MA's), (Start: 41 @35207 has 7 MA's), (43, 35240), (49, 35306), (51, 35321), (59, 35369),

Gene: Patt_45 Start: 35280, Stop: 35528, Start Num: 35

Candidate Starts for Patt_45:

(17, 35217), (28, 35253), (29, 35259), (Start: 35 @35280 has 85 MA's), (51, 35451), (52, 35454),

Gene: Peanam_46 Start: 35828, Stop: 36124, Start Num: 23

Candidate Starts for Peanam_46:

(13, 35798), (Start: 23 @35828 has 2 MA's), (Start: 35 @35876 has 85 MA's), (Start: 41 @35930 has 7 MA's), (51, 36044), (56, 36074), (59, 36092),

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

Candidate Starts for Peel_44:

(Start: 24 @35237 has 15 MA's), (Start: 30 @35258 has 7 MA's), (Start: 31 @35261 has 30 MA's), (Start: 35 @35279 has 85 MA's), (37, 35300), (Start: 39 @35321 has 16 MA's), (Start: 41 @35333 has 7 MA's), (43, 35366), (49, 35432), (51, 35447), (59, 35495),

Gene: PhelpsODU_46 Start: 35137, Stop: 35373, Start Num: 35

Candidate Starts for PhelpsODU_46:

(10, 35029), (Start: 35 @35137 has 85 MA's), (Start: 40 @35188 has 9 MA's), (Start: 41 @35191 has 7 MA's), (47, 35257), (49, 35290),

Gene: Phrank_47 Start: 35094, Stop: 35330, Start Num: 35

Candidate Starts for Phrank_47:

(Start: 23 @35046 has 2 MA's), (Start: 35 @35094 has 85 MA's), (Start: 40 @35145 has 9 MA's), (Start: 41 @35148 has 7 MA's), (47, 35214),

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

Candidate Starts for Piatt_44:

(Start: 24 @35432 has 15 MA's), (Start: 30 @35453 has 7 MA's), (Start: 31 @35456 has 30 MA's), (Start: 35 @35474 has 85 MA's), (37, 35495), (Start: 39 @35516 has 16 MA's), (Start: 41 @35528 has 7 MA's), (43, 35561), (49, 35627), (51, 35642), (59, 35690),

Gene: Pisa1_44 Start: 36447, Stop: 36686, Start Num: 35

Candidate Starts for Pisa1_44:

(3, 36246), (4, 36252), (5, 36267), (14, 36372), (Start: 35 @36447 has 85 MA's), (37, 36468), (Start: 39 @36489 has 16 MA's), (Start: 41 @36501 has 7 MA's), (43, 36534), (49, 36600), (51, 36615), (54, 36630), (55, 36639), (58, 36660),

Gene: Pisa4_38 Start: 31870, Stop: 32055, Start Num: 41

Candidate Starts for Pisa4_38:

(3, 31615), (4, 31621), (5, 31636), (14, 31741), (Start: 35 @31816 has 85 MA's), (37, 31837), (Start: 39 @31858 has 16 MA's), (Start: 41 @31870 has 7 MA's), (43, 31903), (49, 31969), (51, 31984), (54, 31999), (55, 32008), (58, 32029),

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

Candidate Starts for Pokerus_43:

(Start: 24 @35158 has 15 MA's), (Start: 31 @35182 has 30 MA's), (Start: 35 @35200 has 85 MA's), (Start: 39 @35242 has 16 MA's), (Start: 41 @35254 has 7 MA's), (43, 35287), (49, 35353), (51, 35368), (59, 35416),

Gene: Prithvi_45 Start: 35343, Stop: 35582, Start Num: 35

Candidate Starts for Prithvi_45:

(3, 35142), (4, 35148), (5, 35163), (12, 35247), (15, 35271), (Start: 35 @35343 has 85 MA's), (37, 35364), (Start: 39 @35385 has 16 MA's), (Start: 41 @35397 has 7 MA's), (43, 35430), (49, 35496), (51, 35511),

Gene: Qhanda_50 Start: 36178, Stop: 36426, Start Num: 35

Candidate Starts for Qhanda_50:

(12, 36082), (Start: 35 @36178 has 85 MA's), (51, 36349), (52, 36352),

Gene: Quby_39 Start: 33131, Stop: 33373, Start Num: 39

Candidate Starts for Quby_39:

(13, 33014), (19, 33035), (25, 33053), (Start: 26 @33056 has 1 MA's), (27, 33062), (Start: 32 @33074 has 6 MA's), (Start: 39 @33131 has 16 MA's), (46, 33194), (50, 33251), (53, 33269), (59, 33305),

Gene: QuincyRose_43 Start: 35592, Stop: 35831, Start Num: 35

Candidate Starts for QuincyRose_43:

(3, 35391), (4, 35397), (5, 35412), (12, 35496), (15, 35520), (Start: 23 @35544 has 2 MA's), (Start: 35 @35592 has 85 MA's), (Start: 39 @35634 has 16 MA's), (Start: 41 @35646 has 7 MA's), (43, 35679), (49, 35745), (51, 35760), (59, 35808),

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

Candidate Starts for Ramen_44:

(Start: 24 @35122 has 15 MA's), (Start: 30 @35143 has 7 MA's), (Start: 31 @35146 has 30 MA's), (Start: 35 @35164 has 85 MA's), (37, 35185), (Start: 39 @35206 has 16 MA's), (Start: 41 @35218 has 7 MA's), (43, 35251), (49, 35317), (51, 35332), (59, 35380),

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

Candidate Starts for Rapunzel97_44:

(Start: 24 @35118 has 15 MA's), (Start: 30 @35139 has 7 MA's), (Start: 31 @35142 has 30 MA's), (Start: 35 @35160 has 85 MA's), (37, 35181), (Start: 39 @35202 has 16 MA's), (Start: 41 @35214 has 7 MA's), (43, 35247), (49, 35313), (51, 35328), (59, 35376),

Gene: Reptar3000_46 Start: 35271, Stop: 35519, Start Num: 35

Candidate Starts for Reptar3000_46:

(12, 35175), (20, 35217), (Start: 35 @35271 has 85 MA's), (51, 35442), (52, 35445),

Gene: Richo_46 Start: 35860, Stop: 36105, Start Num: 35

Candidate Starts for Richo_46:

(Start: 35 @35860 has 85 MA's), (Start: 40 @35911 has 9 MA's), (Start: 41 @35914 has 7 MA's), (51, 36028), (56, 36058),

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

Candidate Starts for Rosmarinus_44:

(Start: 24 @35223 has 15 MA's), (Start: 30 @35244 has 7 MA's), (Start: 31 @35247 has 30 MA's), (Start: 35 @35265 has 85 MA's), (37, 35286), (Start: 39 @35307 has 16 MA's), (Start: 41 @35319 has 7 MA's), (43, 35352), (49, 35418), (51, 35433), (59, 35481),

Gene: Rossetti_41 Start: 34734, Stop: 34964, Start Num: 39

Candidate Starts for Rossetti_41:

(Start: 26 @34659 has 1 MA's), (27, 34665), (Start: 32 @34677 has 6 MA's), (Start: 39 @34734 has 16 MA's), (50, 34854), (51, 34860), (53, 34872), (68, 34953),

Gene: Samty_39 Start: 34767, Stop: 34955, Start Num: 44

Candidate Starts for Samty_39:

(Start: 32 @34656 has 6 MA's), (Start: 42 @34743 has 2 MA's), (Start: 44 @34767 has 1 MA's), (51, 34839), (53, 34851),

Gene: SamuelLPlaqson_45 Start: 36056, Stop: 36295, Start Num: 35

Candidate Starts for SamuelLPlaqson_45:

(3, 35855), (4, 35861), (5, 35876), (12, 35960), (15, 35984), (Start: 35 @36056 has 85 MA's), (Start: 39 @36098 has 16 MA's), (Start: 41 @36110 has 7 MA's), (43, 36143), (49, 36209),

Gene: Scarlett_48 Start: 36272, Stop: 36478, Start Num: 40

Candidate Starts for Scarlett_48:

(Start: 35 @36221 has 85 MA's), (Start: 40 @36272 has 9 MA's), (Start: 41 @36275 has 7 MA's), (47, 36341), (51, 36389), (53, 36401),

Gene: SgtBeansprout_39 Start: 34790, Stop: 34984, Start Num: 40

Candidate Starts for SgtBeansprout_39:

(Start: 35 @34739 has 85 MA's), (Start: 40 @34790 has 9 MA's), (43, 34826), (51, 34907), (56, 34937), (57, 34943),

Gene: Shadow1_49 Start: 36255, Stop: 36491, Start Num: 35

Candidate Starts for Shadow1_49:

(Start: 35 @36255 has 85 MA's), (Start: 40 @36306 has 9 MA's), (47, 36375), (53, 36435),

Gene: Shaobing_46 Start: 35893, Stop: 36141, Start Num: 35

Candidate Starts for Shaobing_46:

(Start: 35 @35893 has 85 MA's), (Start: 41 @35947 has 7 MA's), (51, 36061), (56, 36091), (59, 36109),

Gene: ShiaSurprise_45 Start: 35474, Stop: 35713, Start Num: 35

Candidate Starts for ShiaSurprise_45:

(Start: 24 @35432 has 15 MA's), (Start: 30 @35453 has 7 MA's), (Start: 31 @35456 has 30 MA's), (Start: 35 @35474 has 85 MA's), (37, 35495), (Start: 39 @35516 has 16 MA's), (Start: 41 @35528 has 7 MA's), (43, 35561), (49, 35627), (51, 35642), (59, 35690),

Gene: SirPhilip_46 Start: 36474, Stop: 36710, Start Num: 35
Candidate Starts for SirPhilip_46:
(16, 36405), (Start: 23 @36426 has 2 MA's), (Start: 35 @36474 has 85 MA's), (Start: 40 @36525 has 9 MA's), (Start: 41 @36528 has 7 MA's), (49, 36627), (56, 36672),

Gene: Slarp_48 Start: 36169, Stop: 36417, Start Num: 35
Candidate Starts for Slarp_48:
(12, 36073), (Start: 35 @36169 has 85 MA's), (51, 36340), (52, 36343),

Gene: Slimphazie_44 Start: 35142, Stop: 35399, Start Num: 31
Candidate Starts for Slimphazie_44:
(Start: 24 @35118 has 15 MA's), (Start: 30 @35139 has 7 MA's), (Start: 31 @35142 has 30 MA's),
(Start: 35 @35160 has 85 MA's), (37, 35181), (Start: 39 @35202 has 16 MA's), (Start: 41 @35214 has 7 MA's), (43, 35247), (49, 35313), (51, 35328), (59, 35376),

Gene: SoJulia_42 Start: 34727, Stop: 34957, Start Num: 39
Candidate Starts for SoJulia_42:
(Start: 26 @34652 has 1 MA's), (27, 34658), (Start: 32 @34670 has 6 MA's), (Start: 39 @34727 has 16 MA's), (50, 34847), (51, 34853), (53, 34865), (68, 34946),

Gene: Soap141_41 Start: 34501, Stop: 34731, Start Num: 39
Candidate Starts for Soap141_41:
(Start: 26 @34426 has 1 MA's), (27, 34432), (Start: 32 @34444 has 6 MA's), (Start: 39 @34501 has 16 MA's), (50, 34621), (51, 34627), (53, 34639), (62, 34693), (68, 34720),

Gene: Spock_44 Start: 35260, Stop: 35517, Start Num: 31
Candidate Starts for Spock_44:
(Start: 24 @35236 has 15 MA's), (Start: 30 @35257 has 7 MA's), (Start: 31 @35260 has 30 MA's),
(Start: 35 @35278 has 85 MA's), (37, 35299), (Start: 39 @35320 has 16 MA's), (Start: 41 @35332 has 7 MA's), (43, 35365), (49, 35431), (51, 35446), (59, 35494),

Gene: Stinson_45 Start: 35667, Stop: 35906, Start Num: 35
Candidate Starts for Stinson_45:
(Start: 24 @35625 has 15 MA's), (Start: 31 @35649 has 30 MA's), (Start: 35 @35667 has 85 MA's),
(37, 35688), (Start: 39 @35709 has 16 MA's), (Start: 41 @35721 has 7 MA's), (43, 35754), (49, 35820), (51, 35835),

Gene: Sulley_44 Start: 35383, Stop: 35643, Start Num: 30
Candidate Starts for Sulley_44:
(Start: 24 @35362 has 15 MA's), (Start: 30 @35383 has 7 MA's), (Start: 31 @35386 has 30 MA's),
(Start: 35 @35404 has 85 MA's), (Start: 39 @35446 has 16 MA's), (Start: 41 @35458 has 7 MA's), (43, 35491), (49, 35557), (51, 35572), (59, 35620),

Gene: Sunflower1121_50 Start: 36356, Stop: 36592, Start Num: 35
Candidate Starts for Sunflower1121_50:
(Start: 35 @36356 has 85 MA's), (Start: 40 @36407 has 9 MA's), (47, 36476), (51, 36524), (53, 36536),

Gene: Syra333_49 Start: 36023, Stop: 36259, Start Num: 35
Candidate Starts for Syra333_49:
(Start: 35 @36023 has 85 MA's), (Start: 40 @36074 has 9 MA's), (47, 36143), (53, 36203),

Gene: TClif_48 Start: 36322, Stop: 36570, Start Num: 35
Candidate Starts for TClif_48:

(Start: 35 @36322 has 85 MA's), (43, 36409), (49, 36475), (51, 36490), (56, 36520),

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

Candidate Starts for Tachez_44:

(Start: 24 @35080 has 15 MA's), (Start: 30 @35101 has 7 MA's), (Start: 31 @35104 has 30 MA's),
(Start: 35 @35122 has 85 MA's), (37, 35143), (Start: 39 @35164 has 16 MA's), (Start: 41 @35176 has
7 MA's), (43, 35209), (49, 35275), (51, 35290), (59, 35338),

Gene: Taquito_48 Start: 36416, Stop: 36664, Start Num: 35

Candidate Starts for Taquito_48:

(12, 36320), (Start: 35 @36416 has 85 MA's), (51, 36587), (52, 36590),

Gene: Teejan_42 Start: 37403, Stop: 37597, Start Num: 40

Candidate Starts for Teejan_42:

(Start: 35 @37352 has 85 MA's), (Start: 40 @37403 has 9 MA's), (43, 37439), (51, 37520), (56, 37550),
(57, 37556),

Gene: Tierra_47 Start: 35905, Stop: 36141, Start Num: 35

Candidate Starts for Tierra_47:

(Start: 35 @35905 has 85 MA's), (Start: 40 @35956 has 9 MA's), (Start: 41 @35959 has 7 MA's), (47,
36025),

Gene: Tigress9_50 Start: 36110, Stop: 36346, Start Num: 35

Candidate Starts for Tigress9_50:

(Start: 35 @36110 has 85 MA's), (Start: 40 @36161 has 9 MA's), (47, 36230), (49, 36263), (51, 36278),
(53, 36290),

Gene: TingHuaYa_45 Start: 34549, Stop: 34731, Start Num: 46

Candidate Starts for TingHuaYa_45:

(Start: 35 @34444 has 85 MA's), (Start: 41 @34498 has 7 MA's), (46, 34549),

Gene: TiniBug_45 Start: 36052, Stop: 36291, Start Num: 35

Candidate Starts for TiniBug_45:

(3, 35851), (4, 35857), (5, 35872), (12, 35956), (15, 35980), (Start: 35 @36052 has 85 MA's), (Start: 39
@36094 has 16 MA's), (Start: 41 @36106 has 7 MA's), (49, 36205), (51, 36220),

Gene: Tiri_45 Start: 35452, Stop: 35691, Start Num: 35

Candidate Starts for Tiri_45:

(3, 35251), (4, 35257), (5, 35272), (12, 35356), (15, 35380), (Start: 23 @35404 has 2 MA's), (Start: 35
@35452 has 85 MA's), (Start: 39 @35494 has 16 MA's), (Start: 41 @35506 has 7 MA's), (43, 35539),
(49, 35605), (51, 35620), (59, 35668),

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

Candidate Starts for Topper_44:

(Start: 24 @35235 has 15 MA's), (Start: 30 @35256 has 7 MA's), (Start: 31 @35259 has 30 MA's),
(Start: 35 @35277 has 85 MA's), (37, 35298), (Start: 39 @35319 has 16 MA's), (Start: 41 @35331 has
7 MA's), (43, 35364), (49, 35430), (51, 35445), (59, 35493),

Gene: Torres_42 Start: 37404, Stop: 37598, Start Num: 40

Candidate Starts for Torres_42:

(Start: 35 @37353 has 85 MA's), (Start: 40 @37404 has 9 MA's), (43, 37440), (51, 37521), (56, 37551),
(57, 37557),

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

Candidate Starts for Tourach_41:

(13, 34365), (Start: 32 @34425 has 6 MA's), (Start: 39 @34482 has 16 MA's), (47, 34560), (50, 34602), (51, 34608), (53, 34620),

Gene: TreyKay_45 Start: 35343, Stop: 35582, Start Num: 35

Candidate Starts for TreyKay_45:

(3, 35142), (4, 35148), (5, 35163), (12, 35247), (15, 35271), (Start: 35 @35343 has 85 MA's), (37, 35364), (Start: 39 @35385 has 16 MA's), (Start: 41 @35397 has 7 MA's), (43, 35430), (49, 35496), (51, 35511),

Gene: TribbleTrouble_44 Start: 35315, Stop: 35500, Start Num: 41

Candidate Starts for TribbleTrouble_44:

(Start: 35 @35261 has 85 MA's), (Start: 41 @35315 has 7 MA's), (47, 35381),

Gene: Trice_40 Start: 34791, Stop: 34985, Start Num: 40

Candidate Starts for Trice_40:

(Start: 35 @34740 has 85 MA's), (Start: 40 @34791 has 9 MA's), (43, 34827), (51, 34908), (56, 34938), (57, 34944),

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

Candidate Starts for TruffulaTree_44:

(Start: 24 @35114 has 15 MA's), (Start: 30 @35135 has 7 MA's), (Start: 31 @35138 has 30 MA's), (Start: 35 @35156 has 85 MA's), (37, 35177), (Start: 39 @35198 has 16 MA's), (Start: 41 @35210 has 7 MA's), (43, 35243), (49, 35309), (51, 35324), (59, 35372),

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

Candidate Starts for Twitch_44:

(Start: 24 @35237 has 15 MA's), (Start: 30 @35258 has 7 MA's), (Start: 31 @35261 has 30 MA's), (Start: 35 @35279 has 85 MA's), (37, 35300), (Start: 39 @35321 has 16 MA's), (Start: 41 @35333 has 7 MA's), (43, 35366), (49, 35432), (51, 35447), (59, 35495),

Gene: Underpass_41 Start: 34411, Stop: 34698, Start Num: 32

Candidate Starts for Underpass_41:

(Start: 26 @34393 has 1 MA's), (27, 34399), (Start: 32 @34411 has 6 MA's), (Start: 39 @34468 has 16 MA's), (50, 34588), (51, 34594), (53, 34606), (68, 34687),

Gene: Urkel_45 Start: 36056, Stop: 36295, Start Num: 35

Candidate Starts for Urkel_45:

(3, 35855), (4, 35861), (5, 35876), (12, 35960), (15, 35984), (Start: 35 @36056 has 85 MA's), (Start: 39 @36098 has 16 MA's), (Start: 41 @36110 has 7 MA's), (43, 36143), (49, 36209),

Gene: Validus_48 Start: 35897, Stop: 36190, Start Num: 23

Candidate Starts for Validus_48:

(Start: 23 @35897 has 2 MA's), (Start: 35 @35945 has 85 MA's), (Start: 40 @35996 has 9 MA's), (Start: 41 @35999 has 7 MA's), (51, 36113), (56, 36143), (60, 36167),

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

Candidate Starts for Veliki_44:

(Start: 24 @35154 has 15 MA's), (Start: 30 @35175 has 7 MA's), (Start: 31 @35178 has 30 MA's), (Start: 35 @35196 has 85 MA's), (37, 35217), (Start: 39 @35238 has 16 MA's), (Start: 41 @35250 has 7 MA's), (43, 35283), (49, 35349), (51, 35364), (59, 35412),

Gene: Vetric_41 Start: 34417, Stop: 34704, Start Num: 32

Candidate Starts for Vetric_41:

(Start: 26 @34399 has 1 MA's), (27, 34405), (Start: 32 @34417 has 6 MA's), (Start: 39 @34474 has 16 MA's), (50, 34594), (51, 34600), (53, 34612), (68, 34693),

Gene: Wilder_41 Start: 34473, Stop: 34703, Start Num: 39

Candidate Starts for Wilder_41:

(Start: 26 @34398 has 1 MA's), (27, 34404), (Start: 32 @34416 has 6 MA's), (Start: 39 @34473 has 16 MA's), (50, 34593), (51, 34599), (53, 34611), (62, 34665), (68, 34692),

Gene: Wintermute_48 Start: 36318, Stop: 36566, Start Num: 35

Candidate Starts for Wintermute_48:

(12, 36222), (18, 36258), (Start: 35 @36318 has 85 MA's), (51, 36489), (52, 36492),

Gene: Ximenita_50 Start: 36194, Stop: 36445, Start Num: 31

Candidate Starts for Ximenita_50:

(21, 36161), (Start: 30 @36191 has 7 MA's), (Start: 31 @36194 has 30 MA's), (Start: 35 @36209 has 85 MA's), (Start: 41 @36263 has 7 MA's), (47, 36329), (51, 36377), (53, 36389),

Gene: Y10_47 Start: 36237, Stop: 36485, Start Num: 35

Candidate Starts for Y10_47:

(Start: 35 @36237 has 85 MA's), (51, 36408), (52, 36411),

Gene: Y2_47 Start: 36237, Stop: 36485, Start Num: 35

Candidate Starts for Y2_47:

(Start: 35 @36237 has 85 MA's), (51, 36408), (52, 36411),

Gene: YasnayaPolyana_48 Start: 36168, Stop: 36416, Start Num: 35

Candidate Starts for YasnayaPolyana_48:

(12, 36072), (20, 36114), (Start: 35 @36168 has 85 MA's), (51, 36339), (52, 36342),

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

Candidate Starts for YoureAdopted_43:

(Start: 24 @35319 has 15 MA's), (Start: 30 @35340 has 7 MA's), (Start: 31 @35343 has 30 MA's), (Start: 35 @35361 has 85 MA's), (37, 35382), (Start: 39 @35403 has 16 MA's), (Start: 41 @35415 has 7 MA's), (43, 35448), (49, 35514), (51, 35529), (59, 35577),

Gene: Yuna_50 Start: 36971, Stop: 37204, Start Num: 35

Candidate Starts for Yuna_50:

(Start: 35 @36971 has 85 MA's), (47, 37091), (51, 37139), (53, 37151),

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

Candidate Starts for Zabiza_39:

(Start: 24 @31425 has 15 MA's), (Start: 30 @31446 has 7 MA's), (Start: 31 @31449 has 30 MA's), (Start: 35 @31467 has 85 MA's), (37, 31488), (Start: 39 @31509 has 16 MA's), (Start: 41 @31521 has 7 MA's), (43, 31554), (49, 31620), (51, 31635), (59, 31683),

Gene: Zakai_41 Start: 34725, Stop: 34955, Start Num: 39

Candidate Starts for Zakai_41:

(Start: 26 @34650 has 1 MA's), (27, 34656), (Start: 32 @34668 has 6 MA's), (Start: 39 @34725 has 16 MA's), (50, 34845), (51, 34851), (53, 34863), (68, 34944),

Gene: Zavala_45 Start: 35438, Stop: 35677, Start Num: 35

Candidate Starts for Zavala_45:

(Start: 30 @35417 has 7 MA's), (Start: 31 @35420 has 30 MA's), (Start: 35 @35438 has 85 MA's), (37, 35459), (Start: 39 @35480 has 16 MA's), (Start: 41 @35492 has 7 MA's), (43, 35525), (49, 35591), (51, 35606), (59, 35654),