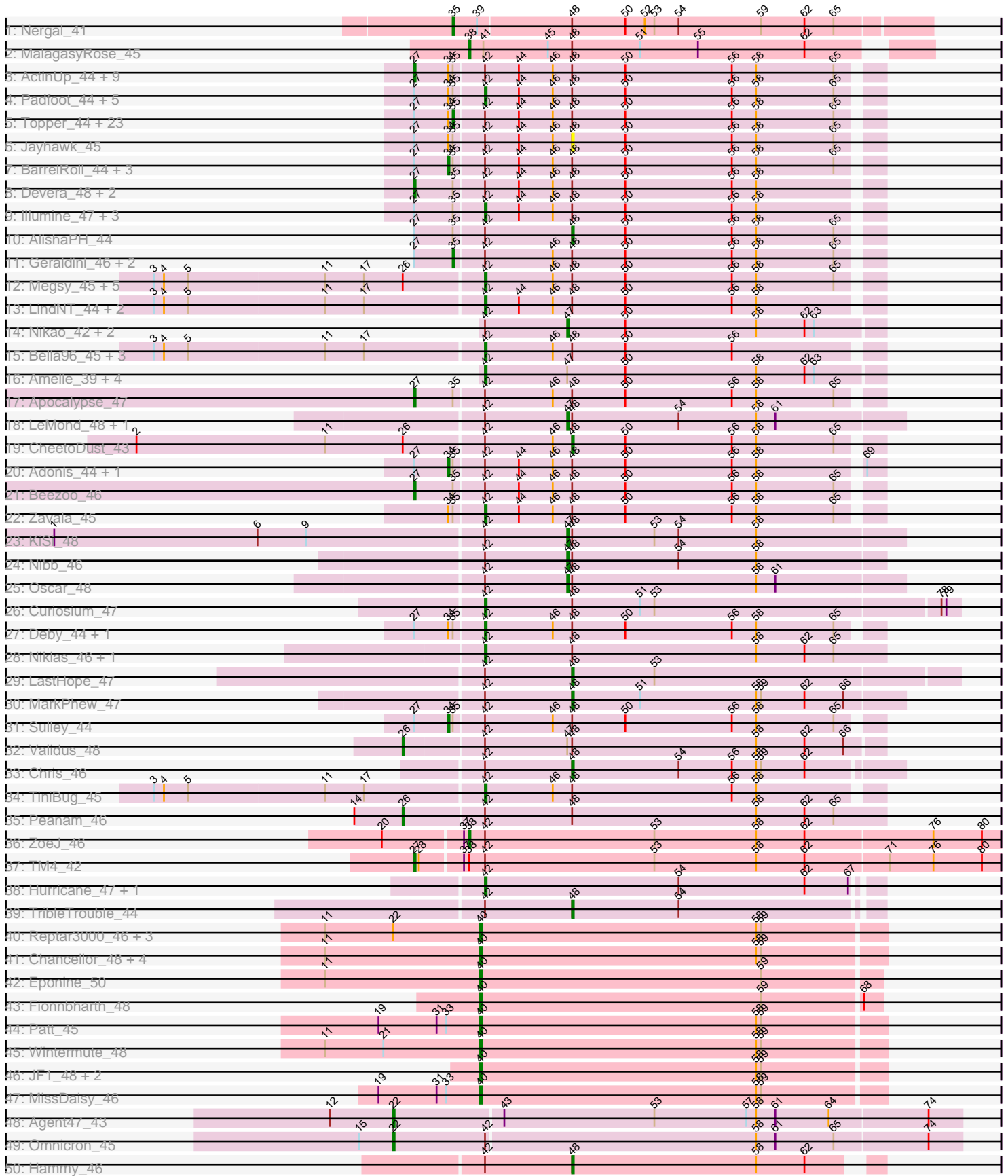


Pham 171207



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 171207 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171207 has 203 members, 8 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_40, Durfee_44, Piatt_44
- Track 4 : Padfoot_44, Asayake_44, BEEST_44, Mynx_45, Padpat_45, ShiaSurprise_45
- Track 5 : Topper_44, Dalmuri_44, Jeckyll_44, Llorens_44, Rosmarinus_44, CREW_44, Boiiii_44, Emerson_45, BGlluviae_44, Belladonna_44, Veliki_44, Rapunzel97_44, Homura_44, Inky_44, Spock_44, Lunahalos_44, Capricorn_44, HedwigODU_44, TruffulaTree_44, YoureAdopted_43, Jarvi_44, Twitch_44, Peel_44, Slimphazie_44
- Track 6 : Jayhawk_45
- Track 7 : BarrelRoll_44, Adephagia_44, JAWS_44, Tachez_44
- 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, QuincyRose_43, CrimD_44, Tiri_45
- Track 13 : LindNT_44, Prithvi_45, TreyKay_45
- Track 14 : Nikao_42, SgtBeansprout_39, Enkosi_42
- Track 15 : Bella96_45, Urkel_45, SamuelLPlaqson_45, DrHayes_45
- Track 16 : Amelie_39, Binglebops_39, LilPharaoh_39, Mdavu_40, Nutello_39
- Track 17 : Apocalypse_47
- Track 18 : LeMond_48, Scarlett_48
- Track 19 : CheetoDust_43
- Track 20 : Adonis_44, Anaya_46
- Track 21 : Beezoo_46
- Track 22 : Zavala_45
- Track 23 : KiSi_48
- Track 24 : Nibb_46
- Track 25 : Oscar_48
- Track 26 : Curiosium_47
- Track 27 : Deby_44, Angelica_44
- Track 28 : Niklas_46, Shaobing_46
- Track 29 : LastHope_47
- Track 30 : MarkPhew_47

- Track 31 : Sulley_44
- Track 32 : Validus_48
- Track 33 : Chris_46
- Track 34 : TiniBug_45
- Track 35 : Peanam_46
- Track 36 : ZoeJ_46
- Track 37 : TM4_42
- Track 38 : Hurricane_47, Keshu_48
- Track 39 : TribbleTrouble_44
- Track 40 : Reptar3000_46, Juliette_50, OmniCritical_47, Malthus_49
- Track 41 : Chancellor_48, Slarp_48, Cheetobro_48, Taquito_48, Mitti_48
- Track 42 : Eponine_50
- Track 43 : Fionnbharth_48
- Track 44 : Patt_45
- Track 45 : Wintermute_48
- Track 46 : JF1_48, Y2_47, Y10_47
- Track 47 : MissDaisy_46
- Track 48 : Agent47_43
- Track 49 : Omnicron_45
- Track 50 : Hammy_46
- Track 51 : Ekdilam_43
- Track 52 : Bryler_47, Tierra_47, Cain_47
- Track 53 : Sunflower1121_50
- Track 54 : Krueger_50
- Track 55 : Amohnition_46
- Track 56 : Syra333_49
- Track 57 : Ellie_42, Amgine_44, Fefferhead_44
- Track 58 : PhelpsODU_46
- Track 59 : SirPhilip_46
- Track 60 : Marshawn_47
- Track 61 : TClif_49
- Track 62 : DARTH_P_46
- Track 63 : Ximenita_50
- Track 64 : Yuna_50
- Track 65 : Phrank_47
- Track 66 : Shadow1_49
- Track 67 : Boilgate_43
- Track 68 : Rose5_38, Calm_39, Halena_38, CicholasNage_39, Wyatt2_39, Zaria_39, Tyson_38, Acquire49_39, Silverleaf_38, MAckerman_38, AvadaKedavra_39
- Track 69 : LeBron_39, UPIE_39, JoeDirt_38
- Track 70 : OhShagHennessy_38, Wamburgxpress_39, Enceladus_38, Appletree2_38, DirkDirk_38
- Track 71 : Vetrix_41, DrSeegs_41
- Track 72 : Lewan_41
- Track 73 : Nicholasp3_41, Faith1_41, Winky_41, Breezona_41, Rumpelstiltskin_41
- Track 74 : Kahlid_41, Loadrie_41, Wigglewiggle_41
- Track 75 : MkaliMitinis3_41, LilDestine_41
- Track 76 : Tourach_41
- Track 77 : Ellson_39
- Track 78 : Nicholas_39, Jubie_39, Snenia_39, Lumos_39, Clautastrophe_39, MsGreen_39, Kingsolomon_39
- Track 79 : MiniLon_39

- Track 80 : MiniMac_39
- Track 81 : Bellis_39, Finnry_39, Moostard_39
- Track 82 : Whirlwind_40
- Track 83 : Krypton555_39
- Track 84 : DuncansLeg_39
- Track 85 : DyoEdafos_40
- Track 86 : Bromden_40
- Track 87 : Chaser_38
- Track 88 : Douge_38
- Track 89 : 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 42, it was called in 57 of the 195 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amelie_39, Amgine_44, Amohnition_46, Angelica_44, Asayake_44, BEEST_44, Bella96_45, Biglebops_39, Bryler_47, Cain_47, CrimD_44, Curiosium_47, DarthP_46, Deby_44, Dole_47, DrHayes_45, Ekdilam_43, Ellie_42, Fefferhead_44, Gaia_69, Ganymede_45, Hurricane_47, Illumine_47, Keshu_48, Krueger_50, LaterM_45, LilPharaoh_39, LindNT_44, Marshawn_47, Mdavu_40, MeaningOfLife_45, Megsy_45, Mynx_45, Nebkiss_69, Niklas_46, Nutello_39, Padfoot_44, Padpat_45, PhelpsODU_46, Phrank_47, Prithvi_45, QuincyRose_43, SamuelLPlaqson_45, Shadow1_49, Shaobing_46, ShiaSurprise_45, SirPhilip_46, Stinson_45, Sunflower1121_50, Syra333_49, TClif_49, Tierra_47, TiniBug_45, Tiri_45, TreyKay_45, Urkel_45, Yuna_50, Zavala_45,

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

- ActinUp_44, Adephegia_44, Adonis_44, Ageofdapage_46, AlishaPH_44, Anaya_46, Apocalypse_47, Atiba_44, BGlluviae_44, BaghaKamala_43, BarrelRoll_44, Beezoo_46, Belladonna_44, Blizzard_44, Boiiii_44, CREW_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, Jayhawk_45, Jeckyll_44, Joy99_44, KiSi_48, LastHope_47, LeMond_48, Llorens_44, Lunahalos_44, MarkPhew_47, Murucutumbu_45, Nibb_46, Nikao_42, Omnicron_45, Oscar_48, Peanam_46, Peel_44, Piatt_44, Pokerus_43, Ramen_44, Rapunzel97_44, Rosmarinus_44, Scarlett_48, SgtBeansprout_39, Slimphazie_44, Spock_44, Sulley_44, TM4_42, Tachez_44, Topper_44, TripleTrouble_44, TruffulaTree_44, Twitch_44, Validus_48, Veliki_44, Ximenita_50, YoureAdopted_43, Zabiza_40, ZoeJ_46,

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

- Acquire49_39, Agent47_43, Appletree2_38, AvadaKedavra_39, Bellis_39, Boilgate_43, Breezona_41, Bromden_40, Calm_39, Chancellor_48, Chaser_38, Cheetobro_48, CicholasNage_39, Clautastrophe_39, DirkDirk_38, Douge_38, DrSeegs_41, DuncansLeg_39, DyoEdafos_40, Ellson_39, Enceladus_38, Eponine_50, Faith1_41, Finnry_39, Fionnbharth_48, Halena_38, JF1_48, JoeDirt_38, Jubie_39, Juliette_50, Kahlid_41, Kingsolomon_39, Krypton555_39, LeBron_39, Lewan_41, LilDestine_41, Loadrie_41, Lumos_39, MAckerman_38,

MalagasyRose_45, Malthus_49, MiniLon_39, MiniMac_39, MissDaisy_46, Mitti_48, MkaliMitinis3_41, Moostard_39, MsGreen_39, Nergal_41, Nicholas_39, Nicholasp3_41, OhShagHennessy_38, OmniCritical_47, Patt_45, Reptar3000_46, Rose5_38, Rumpelstiltskin_41, Silverleaf_38, Slarp_48, Snenia_39, Taquito_48, Tourach_41, Tyson_38, UPIE_39, Vatrix_41, Wamburgexpress_39, Whirlwind_40, Wigglewiggles_41, Winky_41, Wintermute_48, Wyatt2_39, Y10_47, Y2_47, Zaria_39,

Summary by start number:

Start 22:

- Found in 6 of 203 (3.0%) of genes in pham
- Manual Annotations of this start: 2 of 195
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Agent47_43 (K5), Omnicron_45 (K5),

Start 23:

- Found in 9 of 203 (4.4%) of genes in pham
- Manual Annotations of this start: 4 of 195
- Called 44.4% of time when present
- Phage (with cluster) where this start called: DuncansLeg_39 (L3), MiniLon_39 (L3), MiniMac_39 (L3), Whirlwind_40 (L3),

Start 26:

- Found in 28 of 203 (13.8%) of genes in pham
- Manual Annotations of this start: 5 of 195
- Called 17.9% of time when present
- Phage (with cluster) where this start called: JoeDirt_38 (L1), LeBron_39 (L1), Peanam_46 (K1), UPIE_39 (L1), Validus_48 (K1),

Start 27:

- Found in 64 of 203 (31.5%) of genes in pham
- Manual Annotations of this start: 15 of 195
- Called 25.0% of time when present
- Phage (with cluster) where this start called: ActinUp_44 (K1), Ageofdapage_46 (K1), Apocalypse_47 (K1), Atiba_44 (K1), Beezoo_46 (K1), Blizzard_44 (K1), CaseJules_45 (K1), Devera_48 (K1), Durfee_44 (K1), Hyperbowlee_44 (K1), Joy99_44 (K1), Murucutumbu_45 (K1), Piatt_44 (K1), Ramen_44 (K1), TM4_42 (K2), Zabiza_40 (K1),

Start 30:

- Found in 16 of 203 (7.9%) of genes in pham
- Manual Annotations of this start: 9 of 195
- Called 56.2% of time when present
- Phage (with cluster) where this start called: Breezona_41 (L2), Bromden_40 (L4), Faith1_41 (L2), Kahlid_41 (L2), Loadrie_41 (L2), Nicholasp3_41 (L2), Rumpelstiltskin_41 (L2), Wigglewiggles_41 (L2), Winky_41 (L2),

Start 32:

- Found in 17 of 203 (8.4%) of genes in pham
- Manual Annotations of this start: 3 of 195
- Called 23.5% of time when present
- Phage (with cluster) where this start called: Douge_38 (L4), Lewan_41 (L2), LilDestine_41 (L2), MkaliMitinis3_41 (L2),

Start 34:

- Found in 52 of 203 (25.6%) of genes in pham
- Manual Annotations of this start: 7 of 195
- Called 13.5% 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 35:

- Found in 66 of 203 (32.5%) of genes in pham
- Manual Annotations of this start: 28 of 195
- Called 43.9% 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), 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 36:

- Found in 53 of 203 (26.1%) of genes in pham
- Manual Annotations of this start: 30 of 195
- Called 62.3% of time when present
- Phage (with cluster) where this start called: Acquire49_39 (L1), Appletree2_38 (L1), AvadaKedavra_39 (L1), Bellis_39 (L3), Calm_39 (L1), Chaser_38 (L4), CicholasNage_39 (L1), Clautastrophe_39 (L3), DirkDirk_38 (L1), DrSeegs_41 (L2), DyoEdafos_40 (L4), Ellson_39 (L3), Enceladus_38 (L1), Finnry_39 (L3), Halena_38 (L1), Jubie_39 (L3), Kingsolomon_39 (L3), Krypton555_39 (L3), Lumos_39 (L3), MAckerman_38 (L1), Moostard_39 (L3), MsGreen_39 (L3), Nicholas_39 (L3), OhShagHennessy_38 (L1), Rose5_38 (L1), Silverleaf_38 (L1), Snenia_39 (L3), Tourach_41 (L2), Tyson_38 (L1), Vetric_41 (L2), Wamburgxpress_39 (L1), Wyatt2_39 (L1), Zaria_39 (L1),

Start 38:

- Found in 3 of 203 (1.5%) of genes in pham
- Manual Annotations of this start: 2 of 195
- Called 66.7% of time when present
- Phage (with cluster) where this start called: MalagasyRose_45 (AG), ZoeJ_46 (K2),

Start 40:

- Found in 18 of 203 (8.9%) of genes in pham
- Manual Annotations of this start: 18 of 195
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Boilgate_43 (K8), Chancellor_48 (K4), Cheetobro_48 (K4), Eponine_50 (K4), Fionnbharth_48 (K4), JF1_48 (K4), Juliette_50 (K4), Malthus_49 (K4), MissDaisy_46 (K4), Mitti_48 (K4), OmniCritical_47 (K4), Patt_45 (K4), Reptar3000_46 (K4), Slarp_48 (K4), Taquito_48 (K4), Wintermute_48 (K4), Y10_47 (K4), Y2_47 (K4),

Start 42:

- Found in 129 of 203 (63.5%) of genes in pham

- Manual Annotations of this start: 57 of 195
- Called 45.0% of time when present
- Phage (with cluster) where this start called: Amelie_39 (K1), Amgine_44 (K6), Amohntion_46 (K6), Angelica_44 (K1), Asayake_44 (K1), BEEEST_44 (K1), Bella96_45 (K1), Binglebops_39 (K1), Bryler_47 (K6), Cain_47 (K6), CrimD_44 (K1), Curiosium_47 (K1), DarthP_46 (K6), Deby_44 (K1), Dole_47 (K1), DrHayes_45 (K1), Ekdilam_43 (K6), Ellie_42 (K6), Fefferhead_44 (K6), Gaia_69 (X), Ganymede_45 (K1), Hurricane_47 (K3), Illumine_47 (K1), Keshu_48 (K3), Krueger_50 (K6), LaterM_45 (K1), LilPharaoh_39 (K1), LindNT_44 (K1), Marshawn_47 (K6), Mdavu_40 (K1), MeaningOfLife_45 (K1), Megsy_45 (K1), Mynx_45 (K1), Nebkiss_69 (X), Niklas_46 (K1), Nutello_39 (K1), Padfoot_44 (K1), Padpat_45 (K1), PhelpsODU_46 (K6), Phrank_47 (K6), Prithvi_45 (K1), QuincyRose_43 (K1), SamuelLPlaqsom_45 (K1), Shadow1_49 (K6), Shaobing_46 (K1), ShiaSurprise_45 (K1), SirPhilip_46 (K6), Stinson_45 (K1), Sunflower1121_50 (K6), Syra333_49 (K6), TClif_49 (K6), Tierra_47 (K6), TiniBug_45 (K1), Tiri_45 (K1), TreyKay_45 (K1), Urkel_45 (K1), Yuna_50 (K6), Zavala_45 (K1),

Start 47:

- Found in 24 of 203 (11.8%) of genes in pham
- Manual Annotations of this start: 8 of 195
- Called 33.3% 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),

Start 48:

- Found in 107 of 203 (52.7%) of genes in pham
- Manual Annotations of this start: 7 of 195
- Called 7.5% of time when present
- Phage (with cluster) where this start called: AlishaPH_44 (K1), CheetoDust_43 (K1), Chris_46 (K1), Hammy_46 (K6), Jayhawk_45 (K1), LastHope_47 (K1), MarkPheW_47 (K1), TripleTrouble_44 (K3),

Summary by clusters:

There are 13 clusters represented in this pham: AG, K4, L4, K3, K2, K1, L2, L3, K5, L1, X, K8, K6,

Info for manual annotations of cluster AG:

- Start number 35 was manually annotated 1 time for cluster AG.
- Start number 38 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster K1:

- Start number 26 was manually annotated 2 times for cluster K1.
- Start number 27 was manually annotated 14 times for cluster K1.
- Start number 34 was manually annotated 7 times for cluster K1.
- Start number 35 was manually annotated 26 times for cluster K1.
- Start number 42 was manually annotated 35 times for cluster K1.
- Start number 47 was manually annotated 8 times for cluster K1.
- Start number 48 was manually annotated 5 times for cluster K1.

Info for manual annotations of cluster K2:

- Start number 27 was manually annotated 1 time for cluster K2.

- Start number 38 was manually annotated 1 time for cluster K2.

Info for manual annotations of cluster K3:

- Start number 42 was manually annotated 2 times for cluster K3.
- Start number 48 was manually annotated 1 time for cluster K3.

Info for manual annotations of cluster K4:

- Start number 40 was manually annotated 17 times for cluster K4.

Info for manual annotations of cluster K5:

- Start number 22 was manually annotated 2 times for cluster K5.

Info for manual annotations of cluster K6:

- Start number 35 was manually annotated 1 time for cluster K6.
- Start number 42 was manually annotated 18 times for cluster K6.
- Start number 48 was manually annotated 1 time for cluster K6.

Info for manual annotations of cluster K8:

- Start number 40 was manually annotated 1 time for cluster K8.

Info for manual annotations of cluster L1:

- Start number 26 was manually annotated 3 times for cluster L1.
- Start number 36 was manually annotated 15 times for cluster L1.

Info for manual annotations of cluster L2:

- Start number 30 was manually annotated 8 times for cluster L2.
- Start number 32 was manually annotated 3 times for cluster L2.
- Start number 36 was manually annotated 3 times for cluster L2.

Info for manual annotations of cluster L3:

- Start number 23 was manually annotated 4 times for cluster L3.
- Start number 36 was manually annotated 10 times for cluster L3.

Info for manual annotations of cluster L4:

- Start number 30 was manually annotated 1 time for cluster L4.
- Start number 36 was manually annotated 2 times for cluster L4.

Info for manual annotations of cluster X:

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

Gene Information:

Gene: Acquire49_39 Start: 33043, Stop: 33345, Start Num: 36

Candidate Starts for Acquire49_39:

(Start: 26 @33007 has 5 MA's), (Start: 36 @33043 has 30 MA's), (54, 33178), (58, 33226), (60, 33235), (61, 33238), (62, 33256), (63, 33262), (70, 33307),

Gene: ActinUp_44 Start: 35120, Stop: 35401, Start Num: 27

Candidate Starts for ActinUp_44:

(Start: 27 @35120 has 15 MA's), (Start: 34 @35141 has 7 MA's), (Start: 35 @35144 has 28 MA's), (Start: 42 @35162 has 57 MA's), (44, 35183), (46, 35204), (Start: 48 @35216 has 7 MA's), (50,

35249), (56, 35315), (58, 35330), (65, 35378),

Gene: Adephagia_44 Start: 35138, Stop: 35398, Start Num: 34

Candidate Starts for Adephagia_44:

(Start: 27 @35117 has 15 MA's), (Start: 34 @35138 has 7 MA's), (Start: 35 @35141 has 28 MA's), (Start: 42 @35159 has 57 MA's), (44, 35180), (46, 35201), (Start: 48 @35213 has 7 MA's), (50, 35246), (56, 35312), (58, 35327), (65, 35375),

Gene: Adonis_44 Start: 35436, Stop: 35696, Start Num: 34

Candidate Starts for Adonis_44:

(Start: 27 @35415 has 15 MA's), (Start: 34 @35436 has 7 MA's), (Start: 35 @35439 has 28 MA's), (Start: 42 @35457 has 57 MA's), (44, 35478), (46, 35499), (Start: 48 @35511 has 7 MA's), (50, 35544), (56, 35610), (58, 35625), (69, 35685),

Gene: Agent47_43 Start: 34663, Stop: 35010, Start Num: 22

Candidate Starts for Agent47_43:

(12, 34624), (Start: 22 @34663 has 2 MA's), (43, 34729), (53, 34822), (57, 34879), (58, 34885), (61, 34897), (64, 34930), (74, 34990),

Gene: Ageofdapage_46 Start: 36088, Stop: 36369, Start Num: 27

Candidate Starts for Ageofdapage_46:

(Start: 27 @36088 has 15 MA's), (Start: 35 @36112 has 28 MA's), (Start: 42 @36130 has 57 MA's), (44, 36151), (46, 36172), (Start: 48 @36184 has 7 MA's), (50, 36217), (56, 36283), (58, 36298),

Gene: AlishaPH_44 Start: 35486, Stop: 35671, Start Num: 48

Candidate Starts for AlishaPH_44:

(Start: 27 @35390 has 15 MA's), (Start: 35 @35414 has 28 MA's), (Start: 42 @35432 has 57 MA's), (Start: 48 @35486 has 7 MA's), (50, 35519), (56, 35585), (58, 35600), (65, 35648),

Gene: Amelie_39 Start: 34739, Stop: 34984, Start Num: 42

Candidate Starts for Amelie_39:

(Start: 42 @34739 has 57 MA's), (Start: 47 @34790 has 8 MA's), (50, 34826), (58, 34907), (62, 34937), (63, 34943),

Gene: Amgine_44 Start: 36236, Stop: 36478, Start Num: 42

Candidate Starts for Amgine_44:

(Start: 42 @36236 has 57 MA's), (56, 36389),

Gene: Amohnition_46 Start: 36255, Stop: 36491, Start Num: 42

Candidate Starts for Amohnition_46:

(10, 36156), (Start: 42 @36255 has 57 MA's), (56, 36408), (62, 36453), (69, 36480),

Gene: Anaya_46 Start: 35748, Stop: 36008, Start Num: 34

Candidate Starts for Anaya_46:

(Start: 27 @35727 has 15 MA's), (Start: 34 @35748 has 7 MA's), (Start: 35 @35751 has 28 MA's), (Start: 42 @35769 has 57 MA's), (44, 35790), (46, 35811), (Start: 48 @35823 has 7 MA's), (50, 35856), (56, 35922), (58, 35937), (69, 35997),

Gene: Angelica_44 Start: 35389, Stop: 35628, Start Num: 42

Candidate Starts for Angelica_44:

(Start: 27 @35347 has 15 MA's), (Start: 34 @35368 has 7 MA's), (Start: 35 @35371 has 28 MA's), (Start: 42 @35389 has 57 MA's), (46, 35431), (Start: 48 @35443 has 7 MA's), (50, 35476), (56, 35542), (58, 35557), (65, 35605),

Gene: Apocalypse_47 Start: 36132, Stop: 36413, Start Num: 27

Candidate Starts for Apocalypse_47:

(Start: 27 @36132 has 15 MA's), (Start: 35 @36156 has 28 MA's), (Start: 42 @36174 has 57 MA's), (46, 36216), (Start: 48 @36228 has 7 MA's), (50, 36261), (56, 36327), (58, 36342), (65, 36390),

Gene: Appletree2_38 Start: 32985, Stop: 33272, Start Num: 36

Candidate Starts for Appletree2_38:

(Start: 26 @32949 has 5 MA's), (Start: 36 @32985 has 30 MA's), (53, 33105), (54, 33120), (57, 33162), (58, 33168), (61, 33180), (62, 33198), (63, 33204), (77, 33267),

Gene: Asayake_44 Start: 35474, Stop: 35713, Start Num: 42

Candidate Starts for Asayake_44:

(Start: 27 @35432 has 15 MA's), (Start: 34 @35453 has 7 MA's), (Start: 35 @35456 has 28 MA's), (Start: 42 @35474 has 57 MA's), (44, 35495), (46, 35516), (Start: 48 @35528 has 7 MA's), (50, 35561), (56, 35627), (58, 35642), (65, 35690),

Gene: Atiba_44 Start: 35080, Stop: 35361, Start Num: 27

Candidate Starts for Atiba_44:

(Start: 27 @35080 has 15 MA's), (Start: 34 @35101 has 7 MA's), (Start: 35 @35104 has 28 MA's), (Start: 42 @35122 has 57 MA's), (44, 35143), (46, 35164), (Start: 48 @35176 has 7 MA's), (50, 35209), (56, 35275), (58, 35290), (65, 35338),

Gene: AvadaKedavra_39 Start: 33052, Stop: 33354, Start Num: 36

Candidate Starts for AvadaKedavra_39:

(Start: 26 @33016 has 5 MA's), (Start: 36 @33052 has 30 MA's), (54, 33187), (58, 33235), (60, 33244), (61, 33247), (62, 33265), (63, 33271), (70, 33316),

Gene: BEEST_44 Start: 35474, Stop: 35713, Start Num: 42

Candidate Starts for BEEST_44:

(Start: 27 @35432 has 15 MA's), (Start: 34 @35453 has 7 MA's), (Start: 35 @35456 has 28 MA's), (Start: 42 @35474 has 57 MA's), (44, 35495), (46, 35516), (Start: 48 @35528 has 7 MA's), (50, 35561), (56, 35627), (58, 35642), (65, 35690),

Gene: BGlluviae_44 Start: 35259, Stop: 35516, Start Num: 35

Candidate Starts for BGlluviae_44:

(Start: 27 @35235 has 15 MA's), (Start: 34 @35256 has 7 MA's), (Start: 35 @35259 has 28 MA's), (Start: 42 @35277 has 57 MA's), (44, 35298), (46, 35319), (Start: 48 @35331 has 7 MA's), (50, 35364), (56, 35430), (58, 35445), (65, 35493),

Gene: BaghaKamala_43 Start: 34579, Stop: 34836, Start Num: 35

Candidate Starts for BaghaKamala_43:

(Start: 27 @34555 has 15 MA's), (Start: 35 @34579 has 28 MA's), (Start: 42 @34597 has 57 MA's), (46, 34639), (Start: 48 @34651 has 7 MA's), (50, 34684), (56, 34750), (58, 34765), (65, 34813),

Gene: BarrelRoll_44 Start: 35124, Stop: 35384, Start Num: 34

Candidate Starts for BarrelRoll_44:

(Start: 27 @35103 has 15 MA's), (Start: 34 @35124 has 7 MA's), (Start: 35 @35127 has 28 MA's), (Start: 42 @35145 has 57 MA's), (44, 35166), (46, 35187), (Start: 48 @35199 has 7 MA's), (50, 35232), (56, 35298), (58, 35313), (65, 35361),

Gene: Beezoo_46 Start: 36078, Stop: 36359, Start Num: 27

Candidate Starts for Beezoo_46:

(Start: 27 @36078 has 15 MA's), (Start: 35 @36102 has 28 MA's), (Start: 42 @36120 has 57 MA's), (44, 36141), (46, 36162), (Start: 48 @36174 has 7 MA's), (50, 36207), (56, 36273), (58, 36288), (65, 36336),

Gene: Bella96_45 Start: 36011, Stop: 36250, Start Num: 42

Candidate Starts for Bella96_45:

(3, 35810), (4, 35816), (5, 35831), (11, 35915), (17, 35939), (Start: 42 @36011 has 57 MA's), (46, 36053), (Start: 48 @36065 has 7 MA's), (50, 36098), (56, 36164),

Gene: Belladonna_44 Start: 35259, Stop: 35516, Start Num: 35

Candidate Starts for Belladonna_44:

(Start: 27 @35235 has 15 MA's), (Start: 34 @35256 has 7 MA's), (Start: 35 @35259 has 28 MA's), (Start: 42 @35277 has 57 MA's), (44, 35298), (46, 35319), (Start: 48 @35331 has 7 MA's), (50, 35364), (56, 35430), (58, 35445), (65, 35493),

Gene: Bellis_39 Start: 34657, Stop: 34956, Start Num: 36

Candidate Starts for Bellis_39:

(Start: 36 @34657 has 30 MA's), (49, 34744), (51, 34768), (58, 34840), (61, 34852),

Gene: Biglebops_39 Start: 34739, Stop: 34984, Start Num: 42

Candidate Starts for Biglebops_39:

(Start: 42 @34739 has 57 MA's), (Start: 47 @34790 has 8 MA's), (50, 34826), (58, 34907), (62, 34937), (63, 34943),

Gene: Blizzard_44 Start: 35432, Stop: 35713, Start Num: 27

Candidate Starts for Blizzard_44:

(Start: 27 @35432 has 15 MA's), (Start: 34 @35453 has 7 MA's), (Start: 35 @35456 has 28 MA's), (Start: 42 @35474 has 57 MA's), (44, 35495), (46, 35516), (Start: 48 @35528 has 7 MA's), (50, 35561), (56, 35627), (58, 35642), (65, 35690),

Gene: Boiiii_44 Start: 35458, Stop: 35715, Start Num: 35

Candidate Starts for Boiiii_44:

(Start: 27 @35434 has 15 MA's), (Start: 34 @35455 has 7 MA's), (Start: 35 @35458 has 28 MA's), (Start: 42 @35476 has 57 MA's), (44, 35497), (46, 35518), (Start: 48 @35530 has 7 MA's), (50, 35563), (56, 35629), (58, 35644), (65, 35692),

Gene: Boilgate_43 Start: 36328, Stop: 36564, Start Num: 40

Candidate Starts for Boilgate_43:

(Start: 40 @36328 has 18 MA's), (66, 36550),

Gene: Breezona_41 Start: 34392, Stop: 34697, Start Num: 30

Candidate Starts for Breezona_41:

(Start: 30 @34392 has 9 MA's), (Start: 32 @34398 has 3 MA's), (Start: 36 @34410 has 30 MA's), (46, 34467), (57, 34587), (58, 34593), (61, 34605), (75, 34686),

Gene: Bromden_40 Start: 33855, Stop: 34172, Start Num: 30

Candidate Starts for Bromden_40:

(Start: 30 @33855 has 9 MA's), (Start: 32 @33861 has 3 MA's), (Start: 36 @33873 has 30 MA's), (57, 34050), (61, 34068), (73, 34140), (77, 34167),

Gene: Bryler_47 Start: 35116, Stop: 35352, Start Num: 42

Candidate Starts for Bryler_47:

(Start: 42 @35116 has 57 MA's), (Start: 47 @35167 has 8 MA's), (Start: 48 @35170 has 7 MA's), (54, 35236),

Gene: CREW_44 Start: 35259, Stop: 35516, Start Num: 35

Candidate Starts for CREW_44:

(Start: 27 @35235 has 15 MA's), (Start: 34 @35256 has 7 MA's), (Start: 35 @35259 has 28 MA's), (Start: 42 @35277 has 57 MA's), (44, 35298), (46, 35319), (Start: 48 @35331 has 7 MA's), (50, 35364), (56, 35430), (58, 35445), (65, 35493),

Gene: Cain_47 Start: 35104, Stop: 35340, Start Num: 42

Candidate Starts for Cain_47:

(Start: 42 @35104 has 57 MA's), (Start: 47 @35155 has 8 MA's), (Start: 48 @35158 has 7 MA's), (54, 35224),

Gene: Calm_39 Start: 33058, Stop: 33360, Start Num: 36

Candidate Starts for Calm_39:

(Start: 26 @33022 has 5 MA's), (Start: 36 @33058 has 30 MA's), (54, 33193), (58, 33241), (60, 33250), (61, 33253), (62, 33271), (63, 33277), (70, 33322),

Gene: Capricorn_44 Start: 35259, Stop: 35516, Start Num: 35

Candidate Starts for Capricorn_44:

(Start: 27 @35235 has 15 MA's), (Start: 34 @35256 has 7 MA's), (Start: 35 @35259 has 28 MA's), (Start: 42 @35277 has 57 MA's), (44, 35298), (46, 35319), (Start: 48 @35331 has 7 MA's), (50, 35364), (56, 35430), (58, 35445), (65, 35493),

Gene: CaseJules_45 Start: 35432, Stop: 35713, Start Num: 27

Candidate Starts for CaseJules_45:

(Start: 27 @35432 has 15 MA's), (Start: 34 @35453 has 7 MA's), (Start: 35 @35456 has 28 MA's), (Start: 42 @35474 has 57 MA's), (44, 35495), (46, 35516), (Start: 48 @35528 has 7 MA's), (50, 35561), (56, 35627), (58, 35642), (65, 35690),

Gene: Chancellor_48 Start: 36169, Stop: 36417, Start Num: 40

Candidate Starts for Chancellor_48:

(11, 36073), (Start: 40 @36169 has 18 MA's), (58, 36340), (59, 36343),

Gene: Chaser_38 Start: 33136, Stop: 33435, Start Num: 36

Candidate Starts for Chaser_38:

(16, 33076), (Start: 23 @33097 has 4 MA's), (29, 33115), (Start: 30 @33118 has 9 MA's), (Start: 32 @33124 has 3 MA's), (Start: 36 @33136 has 30 MA's), (46, 33193), (53, 33256), (57, 33313), (61, 33331), (65, 33367),

Gene: CheetoDust_43 Start: 34700, Stop: 34885, Start Num: 48

Candidate Starts for CheetoDust_43:

(2, 34433), (11, 34550), (Start: 26 @34598 has 5 MA's), (Start: 42 @34646 has 57 MA's), (46, 34688), (Start: 48 @34700 has 7 MA's), (50, 34733), (56, 34799), (58, 34814), (65, 34862),

Gene: Cheetobro_48 Start: 36166, Stop: 36414, Start Num: 40

Candidate Starts for Cheetobro_48:

(11, 36070), (Start: 40 @36166 has 18 MA's), (58, 36337), (59, 36340),

Gene: Chris_46 Start: 35995, Stop: 36195, Start Num: 48

Candidate Starts for Chris_46:

(Start: 42 @35941 has 57 MA's), (Start: 48 @35995 has 7 MA's), (54, 36061), (56, 36094), (58, 36109), (59, 36112), (62, 36139),

Gene: CicholasNage_39 Start: 33079, Stop: 33381, Start Num: 36

Candidate Starts for CicholasNage_39:

(Start: 26 @33043 has 5 MA's), (Start: 36 @33079 has 30 MA's), (54, 33214), (58, 33262), (60, 33271), (61, 33274), (62, 33292), (63, 33298), (70, 33343),

Gene: Clautastrophe_39 Start: 34655, Stop: 34954, Start Num: 36

Candidate Starts for Clautastrophe_39:

(Start: 36 @34655 has 30 MA's), (49, 34742), (58, 34838), (61, 34850),

Gene: CrimD_44 Start: 35400, Stop: 35639, Start Num: 42

Candidate Starts for CrimD_44:

(3, 35199), (4, 35205), (5, 35220), (11, 35304), (17, 35328), (Start: 26 @35352 has 5 MA's), (Start: 42 @35400 has 57 MA's), (46, 35442), (Start: 48 @35454 has 7 MA's), (50, 35487), (56, 35553), (58, 35568), (65, 35616),

Gene: Curiosium_47 Start: 34347, Stop: 34634, Start Num: 42

Candidate Starts for Curiosium_47:

(Start: 42 @34347 has 57 MA's), (Start: 48 @34401 has 7 MA's), (51, 34443), (53, 34452), (78, 34623), (79, 34626),

Gene: Dalmuri_44 Start: 35259, Stop: 35516, Start Num: 35

Candidate Starts for Dalmuri_44:

(Start: 27 @35235 has 15 MA's), (Start: 34 @35256 has 7 MA's), (Start: 35 @35259 has 28 MA's), (Start: 42 @35277 has 57 MA's), (44, 35298), (46, 35319), (Start: 48 @35331 has 7 MA's), (50, 35364), (56, 35430), (58, 35445), (65, 35493),

Gene: DarthP_46 Start: 36145, Stop: 36378, Start Num: 42

Candidate Starts for DarthP_46:

(Start: 42 @36145 has 57 MA's), (Start: 48 @36199 has 7 MA's), (58, 36313), (62, 36343),

Gene: Deby_44 Start: 35405, Stop: 35644, Start Num: 42

Candidate Starts for Deby_44:

(Start: 27 @35363 has 15 MA's), (Start: 34 @35384 has 7 MA's), (Start: 35 @35387 has 28 MA's), (Start: 42 @35405 has 57 MA's), (46, 35447), (Start: 48 @35459 has 7 MA's), (50, 35492), (56, 35558), (58, 35573), (65, 35621),

Gene: Devera_48 Start: 35896, Stop: 36177, Start Num: 27

Candidate Starts for Devera_48:

(Start: 27 @35896 has 15 MA's), (Start: 35 @35920 has 28 MA's), (Start: 42 @35938 has 57 MA's), (44, 35959), (46, 35980), (Start: 48 @35992 has 7 MA's), (50, 36025), (56, 36091), (58, 36106),

Gene: DirkDirk_38 Start: 33045, Stop: 33332, Start Num: 36

Candidate Starts for DirkDirk_38:

(Start: 26 @33009 has 5 MA's), (Start: 36 @33045 has 30 MA's), (53, 33165), (54, 33180), (57, 33222), (58, 33228), (61, 33240), (62, 33258), (63, 33264), (77, 33327),

Gene: Dole_47 Start: 35940, Stop: 36179, Start Num: 42

Candidate Starts for Dole_47:

(Start: 27 @35898 has 15 MA's), (Start: 35 @35922 has 28 MA's), (Start: 42 @35940 has 57 MA's), (44, 35961), (46, 35982), (Start: 48 @35994 has 7 MA's), (50, 36027), (56, 36093), (58, 36108),

Gene: Douge_38 Start: 33062, Stop: 33373, Start Num: 32

Candidate Starts for Douge_38:

(16, 33014), (Start: 23 @33035 has 4 MA's), (29, 33053), (Start: 30 @33056 has 9 MA's), (Start: 32 @33062 has 3 MA's), (Start: 36 @33074 has 30 MA's), (46, 33131), (57, 33251), (61, 33269), (65, 33305),

Gene: DrHayes_45 Start: 36056, Stop: 36295, Start Num: 42

Candidate Starts for DrHayes_45:

(3, 35855), (4, 35861), (5, 35876), (11, 35960), (17, 35984), (Start: 42 @36056 has 57 MA's), (46, 36098), (Start: 48 @36110 has 7 MA's), (50, 36143), (56, 36209),

Gene: DrSeegs_41 Start: 34410, Stop: 34697, Start Num: 36

Candidate Starts for DrSeegs_41:

(Start: 30 @34392 has 9 MA's), (Start: 32 @34398 has 3 MA's), (Start: 36 @34410 has 30 MA's), (46, 34467), (57, 34587), (58, 34593), (61, 34605), (75, 34686),

Gene: DuncansLeg_39 Start: 34634, Stop: 34972, Start Num: 23

Candidate Starts for DuncansLeg_39:

(Start: 23 @34634 has 4 MA's), (Start: 36 @34673 has 30 MA's), (49, 34760), (51, 34784), (58, 34856), (61, 34868), (62, 34886),

Gene: Durfee_44 Start: 35432, Stop: 35713, Start Num: 27

Candidate Starts for Durfee_44:

(Start: 27 @35432 has 15 MA's), (Start: 34 @35453 has 7 MA's), (Start: 35 @35456 has 28 MA's), (Start: 42 @35474 has 57 MA's), (44, 35495), (46, 35516), (Start: 48 @35528 has 7 MA's), (50, 35561), (56, 35627), (58, 35642), (65, 35690),

Gene: DyoEdafos_40 Start: 33408, Stop: 33707, Start Num: 36

Candidate Starts for DyoEdafos_40:

(16, 33348), (Start: 23 @33369 has 4 MA's), (29, 33387), (Start: 30 @33390 has 9 MA's), (Start: 32 @33396 has 3 MA's), (Start: 36 @33408 has 30 MA's), (57, 33585), (61, 33603),

Gene: Ekdilam_43 Start: 35707, Stop: 35940, Start Num: 42

Candidate Starts for Ekdilam_43:

(7, 35590), (10, 35608), (Start: 42 @35707 has 57 MA's),

Gene: Ellie_42 Start: 35424, Stop: 35666, Start Num: 42

Candidate Starts for Ellie_42:

(Start: 42 @35424 has 57 MA's), (56, 35577),

Gene: Ellson_39 Start: 34649, Stop: 34948, Start Num: 36

Candidate Starts for Ellson_39:

(Start: 23 @34610 has 4 MA's), (Start: 36 @34649 has 30 MA's), (49, 34736), (51, 34760), (58, 34832), (61, 34844), (62, 34862),

Gene: Emerson_45 Start: 35135, Stop: 35392, Start Num: 35

Candidate Starts for Emerson_45:

(Start: 27 @35111 has 15 MA's), (Start: 34 @35132 has 7 MA's), (Start: 35 @35135 has 28 MA's), (Start: 42 @35153 has 57 MA's), (44, 35174), (46, 35195), (Start: 48 @35207 has 7 MA's), (50, 35240), (56, 35306), (58, 35321), (65, 35369),

Gene: Enceladus_38 Start: 33028, Stop: 33315, Start Num: 36

Candidate Starts for Enceladus_38:

(Start: 26 @32992 has 5 MA's), (Start: 36 @33028 has 30 MA's), (53, 33148), (54, 33163), (57, 33205), (58, 33211), (61, 33223), (62, 33241), (63, 33247), (77, 33310),

Gene: Enkosi_42 Start: 37403, Stop: 37597, Start Num: 47

Candidate Starts for Enkosi_42:

(Start: 42 @37352 has 57 MA's), (Start: 47 @37403 has 8 MA's), (50, 37439), (58, 37520), (62, 37550), (63, 37556),

Gene: Eponine_50 Start: 36922, Stop: 37167, Start Num: 40

Candidate Starts for Eponine_50:

(11, 36826), (Start: 40 @36922 has 18 MA's), (59, 37096),

Gene: Faith1_41 Start: 34392, Stop: 34697, Start Num: 30

Candidate Starts for Faith1_41:

(Start: 30 @34392 has 9 MA's), (Start: 32 @34398 has 3 MA's), (Start: 36 @34410 has 30 MA's), (46, 34467), (57, 34587), (58, 34593), (61, 34605), (75, 34686),

Gene: Fefferhead_44 Start: 35375, Stop: 35617, Start Num: 42

Candidate Starts for Fefferhead_44:

(Start: 42 @35375 has 57 MA's), (56, 35528),

Gene: Finnry_39 Start: 34658, Stop: 34957, Start Num: 36

Candidate Starts for Finnry_39:

(Start: 36 @34658 has 30 MA's), (49, 34745), (51, 34769), (58, 34841), (61, 34853),

Gene: Fionnbharth_48 Start: 36320, Stop: 36565, Start Num: 40

Candidate Starts for Fionnbharth_48:

(Start: 40 @36320 has 18 MA's), (59, 36494), (68, 36554),

Gene: Gaia_69 Start: 45400, Stop: 45705, Start Num: 42

Candidate Starts for Gaia_69:

(Start: 42 @45400 has 57 MA's), (Start: 48 @45454 has 7 MA's), (50, 45487), (58, 45568), (65, 45616),

Gene: Ganymede_45 Start: 35592, Stop: 35831, Start Num: 42

Candidate Starts for Ganymede_45:

(3, 35391), (4, 35397), (5, 35412), (11, 35496), (17, 35520), (Start: 26 @35544 has 5 MA's), (Start: 42 @35592 has 57 MA's), (46, 35634), (Start: 48 @35646 has 7 MA's), (50, 35679), (56, 35745), (58, 35760), (65, 35808),

Gene: Geraldini_46 Start: 36191, Stop: 36448, Start Num: 35

Candidate Starts for Geraldini_46:

(Start: 27 @36167 has 15 MA's), (Start: 35 @36191 has 28 MA's), (Start: 42 @36209 has 57 MA's), (46, 36251), (Start: 48 @36263 has 7 MA's), (50, 36296), (56, 36362), (58, 36377), (65, 36425),

Gene: Halena_38 Start: 33054, Stop: 33356, Start Num: 36

Candidate Starts for Halena_38:

(Start: 26 @33018 has 5 MA's), (Start: 36 @33054 has 30 MA's), (54, 33189), (58, 33237), (60, 33246), (61, 33249), (62, 33267), (63, 33273), (70, 33318),

Gene: Hammy_46 Start: 36187, Stop: 36366, Start Num: 48

Candidate Starts for Hammy_46:

(Start: 42 @36133 has 57 MA's), (Start: 48 @36187 has 7 MA's), (58, 36301), (62, 36331),

Gene: HedwigODU_44 Start: 35144, Stop: 35401, Start Num: 35

Candidate Starts for HedwigODU_44:

(Start: 27 @35120 has 15 MA's), (Start: 34 @35141 has 7 MA's), (Start: 35 @35144 has 28 MA's), (Start: 42 @35162 has 57 MA's), (44, 35183), (46, 35204), (Start: 48 @35216 has 7 MA's), (50, 35249), (56, 35315), (58, 35330), (65, 35378),

Gene: Homura_44 Start: 35259, Stop: 35516, Start Num: 35

Candidate Starts for Homura_44:

(Start: 27 @35235 has 15 MA's), (Start: 34 @35256 has 7 MA's), (Start: 35 @35259 has 28 MA's), (Start: 42 @35277 has 57 MA's), (44, 35298), (46, 35319), (Start: 48 @35331 has 7 MA's), (50, 35364), (56, 35430), (58, 35445), (65, 35493),

Gene: Hurricane_47 Start: 35860, Stop: 36099, Start Num: 42

Candidate Starts for Hurricane_47:

(Start: 42 @35860 has 57 MA's), (54, 35980), (62, 36058), (67, 36085),

Gene: Hyperbowlee_44 Start: 35432, Stop: 35713, Start Num: 27

Candidate Starts for Hyperbowlee_44:

(Start: 27 @35432 has 15 MA's), (Start: 34 @35453 has 7 MA's), (Start: 35 @35456 has 28 MA's), (Start: 42 @35474 has 57 MA's), (44, 35495), (46, 35516), (Start: 48 @35528 has 7 MA's), (50, 35561), (56, 35627), (58, 35642), (65, 35690),

Gene: Illumine_47 Start: 35940, Stop: 36179, Start Num: 42

Candidate Starts for Illumine_47:

(Start: 27 @35898 has 15 MA's), (Start: 35 @35922 has 28 MA's), (Start: 42 @35940 has 57 MA's), (44, 35961), (46, 35982), (Start: 48 @35994 has 7 MA's), (50, 36027), (56, 36093), (58, 36108),

Gene: Inky_44 Start: 35259, Stop: 35516, Start Num: 35

Candidate Starts for Inky_44:

(Start: 27 @35235 has 15 MA's), (Start: 34 @35256 has 7 MA's), (Start: 35 @35259 has 28 MA's), (Start: 42 @35277 has 57 MA's), (44, 35298), (46, 35319), (Start: 48 @35331 has 7 MA's), (50, 35364), (56, 35430), (58, 35445), (65, 35493),

Gene: JAWS_44 Start: 35130, Stop: 35390, Start Num: 34

Candidate Starts for JAWS_44:

(Start: 27 @35109 has 15 MA's), (Start: 34 @35130 has 7 MA's), (Start: 35 @35133 has 28 MA's), (Start: 42 @35151 has 57 MA's), (44, 35172), (46, 35193), (Start: 48 @35205 has 7 MA's), (50, 35238), (56, 35304), (58, 35319), (65, 35367),

Gene: JF1_48 Start: 36237, Stop: 36485, Start Num: 40

Candidate Starts for JF1_48:

(Start: 40 @36237 has 18 MA's), (58, 36408), (59, 36411),

Gene: Jarvi_44 Start: 35259, Stop: 35516, Start Num: 35

Candidate Starts for Jarvi_44:

(Start: 27 @35235 has 15 MA's), (Start: 34 @35256 has 7 MA's), (Start: 35 @35259 has 28 MA's), (Start: 42 @35277 has 57 MA's), (44, 35298), (46, 35319), (Start: 48 @35331 has 7 MA's), (50, 35364), (56, 35430), (58, 35445), (65, 35493),

Gene: Jayhawk_45 Start: 35214, Stop: 35399, Start Num: 48

Candidate Starts for Jayhawk_45:

(Start: 27 @35118 has 15 MA's), (Start: 34 @35139 has 7 MA's), (Start: 35 @35142 has 28 MA's), (Start: 42 @35160 has 57 MA's), (44, 35181), (46, 35202), (Start: 48 @35214 has 7 MA's), (50, 35247), (56, 35313), (58, 35328), (65, 35376),

Gene: Jeckyll_44 Start: 35259, Stop: 35516, Start Num: 35

Candidate Starts for Jeckyll_44:

(Start: 27 @35235 has 15 MA's), (Start: 34 @35256 has 7 MA's), (Start: 35 @35259 has 28 MA's), (Start: 42 @35277 has 57 MA's), (44, 35298), (46, 35319), (Start: 48 @35331 has 7 MA's), (50, 35364), (56, 35430), (58, 35445), (65, 35493),

Gene: JoeDirt_38 Start: 32990, Stop: 33313, Start Num: 26

Candidate Starts for JoeDirt_38:

(Start: 26 @32990 has 5 MA's), (Start: 36 @33026 has 30 MA's), (53, 33146), (54, 33161), (57, 33203), (58, 33209), (61, 33221), (62, 33239), (63, 33245), (77, 33308),

Gene: Joy99_44 Start: 35164, Stop: 35445, Start Num: 27

Candidate Starts for Joy99_44:

(Start: 27 @35164 has 15 MA's), (Start: 34 @35185 has 7 MA's), (Start: 35 @35188 has 28 MA's), (Start: 42 @35206 has 57 MA's), (44, 35227), (46, 35248), (Start: 48 @35260 has 7 MA's), (50, 35293), (56, 35359), (58, 35374), (65, 35422),

Gene: Jubie_39 Start: 34656, Stop: 34955, Start Num: 36

Candidate Starts for Jubie_39:

(Start: 36 @34656 has 30 MA's), (49, 34743), (58, 34839), (61, 34851),

Gene: Juliette_50 Start: 36393, Stop: 36641, Start Num: 40

Candidate Starts for Juliette_50:

(11, 36297), (Start: 22 @36339 has 2 MA's), (Start: 40 @36393 has 18 MA's), (58, 36564), (59, 36567),

Gene: Kahlid_41 Start: 34398, Stop: 34703, Start Num: 30

Candidate Starts for Kahlid_41:

(Start: 30 @34398 has 9 MA's), (Start: 32 @34404 has 3 MA's), (Start: 36 @34416 has 30 MA's), (46, 34473), (57, 34593), (58, 34599), (61, 34611), (70, 34665), (75, 34692),

Gene: Keshu_48 Start: 35918, Stop: 36157, Start Num: 42

Candidate Starts for Keshu_48:

(Start: 42 @35918 has 57 MA's), (54, 36038), (62, 36116), (67, 36143),

Gene: KiSi_48 Start: 36394, Stop: 36600, Start Num: 47

Candidate Starts for KiSi_48:

(1, 36079), (6, 36205), (9, 36235), (Start: 42 @36343 has 57 MA's), (Start: 47 @36394 has 8 MA's), (Start: 48 @36397 has 7 MA's), (53, 36448), (54, 36463), (58, 36511),

Gene: Kingsolomon_39 Start: 34655, Stop: 34954, Start Num: 36

Candidate Starts for Kingsolomon_39:

(Start: 36 @34655 has 30 MA's), (49, 34742), (58, 34838), (61, 34850),

Gene: Krueger_50 Start: 36110, Stop: 36346, Start Num: 42

Candidate Starts for Krueger_50:

(Start: 42 @36110 has 57 MA's), (Start: 47 @36161 has 8 MA's), (54, 36230), (56, 36263), (58, 36278), (61, 36290),

Gene: Krypton555_39 Start: 34572, Stop: 34871, Start Num: 36

Candidate Starts for Krypton555_39:

(Start: 23 @34533 has 4 MA's), (Start: 36 @34572 has 30 MA's), (49, 34659), (51, 34683), (58, 34755), (61, 34767), (72, 34836),

Gene: LastHope_47 Start: 34715, Stop: 34948, Start Num: 48

Candidate Starts for LastHope_47:

(Start: 42 @34661 has 57 MA's), (Start: 48 @34715 has 7 MA's), (53, 34766),

Gene: LaterM_45 Start: 36054, Stop: 36293, Start Num: 42

Candidate Starts for LaterM_45:

(Start: 27 @36012 has 15 MA's), (Start: 35 @36036 has 28 MA's), (Start: 42 @36054 has 57 MA's), (44, 36075), (46, 36096), (Start: 48 @36108 has 7 MA's), (50, 36141), (56, 36207), (58, 36222),

Gene: LeBron_39 Start: 33034, Stop: 33357, Start Num: 26

Candidate Starts for LeBron_39:

(Start: 26 @33034 has 5 MA's), (Start: 36 @33070 has 30 MA's), (53, 33190), (54, 33205), (57, 33247), (58, 33253), (61, 33265), (62, 33283), (63, 33289), (77, 33352),

Gene: LeMond_48 Start: 36378, Stop: 36584, Start Num: 47

Candidate Starts for LeMond_48:

(Start: 42 @36327 has 57 MA's), (Start: 47 @36378 has 8 MA's), (Start: 48 @36381 has 7 MA's), (54, 36447), (58, 36495), (61, 36507),

Gene: Lewan_41 Start: 34391, Stop: 34690, Start Num: 32

Candidate Starts for Lewan_41:

(Start: 32 @34391 has 3 MA's), (Start: 36 @34403 has 30 MA's), (46, 34460), (57, 34580), (58, 34586), (61, 34598), (75, 34679),

Gene: LilDestine_41 Start: 34396, Stop: 34695, Start Num: 32

Candidate Starts for LilDestine_41:

(Start: 30 @34390 has 9 MA's), (Start: 32 @34396 has 3 MA's), (Start: 36 @34408 has 30 MA's), (46, 34465), (57, 34585), (58, 34591), (61, 34603), (75, 34684),

Gene: LilPharaoh_39 Start: 34467, Stop: 34712, Start Num: 42

Candidate Starts for LilPharaoh_39:

(Start: 42 @34467 has 57 MA's), (Start: 47 @34518 has 8 MA's), (50, 34554), (58, 34635), (62, 34665), (63, 34671),

Gene: LindNT_44 Start: 35343, Stop: 35582, Start Num: 42

Candidate Starts for LindNT_44:

(3, 35142), (4, 35148), (5, 35163), (11, 35247), (17, 35271), (Start: 42 @35343 has 57 MA's), (44, 35364), (46, 35385), (Start: 48 @35397 has 7 MA's), (50, 35430), (56, 35496), (58, 35511),

Gene: Llorens_44 Start: 35259, Stop: 35516, Start Num: 35

Candidate Starts for Llorens_44:

(Start: 27 @35235 has 15 MA's), (Start: 34 @35256 has 7 MA's), (Start: 35 @35259 has 28 MA's), (Start: 42 @35277 has 57 MA's), (44, 35298), (46, 35319), (Start: 48 @35331 has 7 MA's), (50, 35364), (56, 35430), (58, 35445), (65, 35493),

Gene: Loadrie_41 Start: 34424, Stop: 34729, Start Num: 30

Candidate Starts for Loadrie_41:

(Start: 30 @34424 has 9 MA's), (Start: 32 @34430 has 3 MA's), (Start: 36 @34442 has 30 MA's), (46, 34499), (57, 34619), (58, 34625), (61, 34637), (70, 34691), (75, 34718),

Gene: Lumos_39 Start: 34652, Stop: 34951, Start Num: 36

Candidate Starts for Lumos_39:

(Start: 36 @34652 has 30 MA's), (49, 34739), (58, 34835), (61, 34847),

Gene: Lunahalos_44 Start: 35259, Stop: 35516, Start Num: 35

Candidate Starts for Lunahalos_44:

(Start: 27 @35235 has 15 MA's), (Start: 34 @35256 has 7 MA's), (Start: 35 @35259 has 28 MA's), (Start: 42 @35277 has 57 MA's), (44, 35298), (46, 35319), (Start: 48 @35331 has 7 MA's), (50, 35364), (56, 35430), (58, 35445), (65, 35493),

Gene: MAckerman_38 Start: 33048, Stop: 33350, Start Num: 36

Candidate Starts for MAckerman_38:

(Start: 26 @33012 has 5 MA's), (Start: 36 @33048 has 30 MA's), (54, 33183), (58, 33231), (60, 33240), (61, 33243), (62, 33261), (63, 33267), (70, 33312),

Gene: MalagasyRose_45 Start: 33899, Stop: 34168, Start Num: 38

Candidate Starts for MalagasyRose_45:

(Start: 38 @33899 has 2 MA's), (41, 33908), (45, 33947), (Start: 48 @33962 has 7 MA's), (51, 34004), (55, 34040), (62, 34106),

Gene: Malthus_49 Start: 36081, Stop: 36329, Start Num: 40

Candidate Starts for Malthus_49:

(11, 35985), (Start: 22 @36027 has 2 MA's), (Start: 40 @36081 has 18 MA's), (58, 36252), (59, 36255),

Gene: MarkPhew_47 Start: 35823, Stop: 36026, Start Num: 48

Candidate Starts for MarkPhew_47:

(Start: 42 @35769 has 57 MA's), (Start: 48 @35823 has 7 MA's), (51, 35865), (58, 35937), (59, 35940), (62, 35967), (66, 35991),

Gene: Marshawn_47 Start: 36184, Stop: 36432, Start Num: 42

Candidate Starts for Marshawn_47:

(Start: 42 @36184 has 57 MA's), (44, 36205), (Start: 48 @36238 has 7 MA's), (58, 36352), (62, 36382), (66, 36406),

Gene: Mdavu_40 Start: 34728, Stop: 34973, Start Num: 42

Candidate Starts for Mdavu_40:

(Start: 42 @34728 has 57 MA's), (Start: 47 @34779 has 8 MA's), (50, 34815), (58, 34896), (62, 34926), (63, 34932),

Gene: MeaningOfLife_45 Start: 36086, Stop: 36325, Start Num: 42

Candidate Starts for MeaningOfLife_45:

(3, 35885), (4, 35891), (5, 35906), (11, 35990), (17, 36014), (Start: 26 @36038 has 5 MA's), (Start: 42 @36086 has 57 MA's), (46, 36128), (Start: 48 @36140 has 7 MA's), (50, 36173), (56, 36239), (58, 36254), (65, 36302),

Gene: Megsy_45 Start: 35402, Stop: 35641, Start Num: 42

Candidate Starts for Megsy_45:

(3, 35201), (4, 35207), (5, 35222), (11, 35306), (17, 35330), (Start: 26 @35354 has 5 MA's), (Start: 42 @35402 has 57 MA's), (46, 35444), (Start: 48 @35456 has 7 MA's), (50, 35489), (56, 35555), (58,

35570), (65, 35618),

Gene: MiniLon_39 Start: 34425, Stop: 34763, Start Num: 23

Candidate Starts for MiniLon_39:

(Start: 23 @34425 has 4 MA's), (Start: 36 @34464 has 30 MA's), (49, 34551), (51, 34575), (58, 34647), (61, 34659), (62, 34677),

Gene: MiniMac_39 Start: 34422, Stop: 34760, Start Num: 23

Candidate Starts for MiniMac_39:

(13, 34392), (Start: 23 @34422 has 4 MA's), (Start: 36 @34461 has 30 MA's), (49, 34548), (51, 34572), (58, 34644), (61, 34656), (62, 34674),

Gene: MissDaisy_46 Start: 35556, Stop: 35804, Start Num: 40

Candidate Starts for MissDaisy_46:

(19, 35493), (31, 35529), (33, 35535), (Start: 40 @35556 has 18 MA's), (58, 35727), (59, 35730),

Gene: Mitti_48 Start: 36257, Stop: 36505, Start Num: 40

Candidate Starts for Mitti_48:

(11, 36161), (Start: 40 @36257 has 18 MA's), (58, 36428), (59, 36431),

Gene: MkaliMitinis3_41 Start: 34400, Stop: 34699, Start Num: 32

Candidate Starts for MkaliMitinis3_41:

(Start: 30 @34394 has 9 MA's), (Start: 32 @34400 has 3 MA's), (Start: 36 @34412 has 30 MA's), (46, 34469), (57, 34589), (58, 34595), (61, 34607), (75, 34688),

Gene: Moostard_39 Start: 34657, Stop: 34956, Start Num: 36

Candidate Starts for Moostard_39:

(Start: 36 @34657 has 30 MA's), (49, 34744), (51, 34768), (58, 34840), (61, 34852),

Gene: MsGreen_39 Start: 34655, Stop: 34954, Start Num: 36

Candidate Starts for MsGreen_39:

(Start: 36 @34655 has 30 MA's), (49, 34742), (58, 34838), (61, 34850),

Gene: Murucutumbu_45 Start: 36105, Stop: 36386, Start Num: 27

Candidate Starts for Murucutumbu_45:

(Start: 27 @36105 has 15 MA's), (Start: 35 @36129 has 28 MA's), (Start: 42 @36147 has 57 MA's), (44, 36168), (46, 36189), (Start: 48 @36201 has 7 MA's), (50, 36234), (56, 36300), (58, 36315),

Gene: Mynx_45 Start: 35478, Stop: 35717, Start Num: 42

Candidate Starts for Mynx_45:

(Start: 27 @35436 has 15 MA's), (Start: 34 @35457 has 7 MA's), (Start: 35 @35460 has 28 MA's), (Start: 42 @35478 has 57 MA's), (44, 35499), (46, 35520), (Start: 48 @35532 has 7 MA's), (50, 35565), (56, 35631), (58, 35646), (65, 35694),

Gene: Nebkiss_69 Start: 44011, Stop: 44316, Start Num: 42

Candidate Starts for Nebkiss_69:

(Start: 42 @44011 has 57 MA's), (Start: 48 @44065 has 7 MA's), (50, 44098), (58, 44179), (65, 44227),

Gene: Nergal_41 Start: 33794, Stop: 34084, Start Num: 35

Candidate Starts for Nergal_41:

(Start: 35 @33794 has 28 MA's), (39, 33809), (Start: 48 @33866 has 7 MA's), (50, 33899), (52, 33911), (53, 33917), (54, 33932), (59, 33983), (62, 34010), (65, 34028),

Gene: Nibb_46 Start: 35544, Stop: 35738, Start Num: 47

Candidate Starts for Nibb_46:

(Start: 42 @35493 has 57 MA's), (Start: 47 @35544 has 8 MA's), (Start: 48 @35547 has 7 MA's), (54, 35613), (58, 35661),

Gene: Nicholas_39 Start: 34655, Stop: 34954, Start Num: 36

Candidate Starts for Nicholas_39:

(Start: 36 @34655 has 30 MA's), (49, 34742), (58, 34838), (61, 34850),

Gene: Nicholasp3_41 Start: 34393, Stop: 34698, Start Num: 30

Candidate Starts for Nicholasp3_41:

(Start: 30 @34393 has 9 MA's), (Start: 32 @34399 has 3 MA's), (Start: 36 @34411 has 30 MA's), (46, 34468), (57, 34588), (58, 34594), (61, 34606), (75, 34687),

Gene: Nikao_42 Start: 37403, Stop: 37597, Start Num: 47

Candidate Starts for Nikao_42:

(Start: 42 @37352 has 57 MA's), (Start: 47 @37403 has 8 MA's), (50, 37439), (58, 37520), (62, 37550), (63, 37556),

Gene: Niklas_46 Start: 35918, Stop: 36166, Start Num: 42

Candidate Starts for Niklas_46:

(Start: 42 @35918 has 57 MA's), (Start: 48 @35972 has 7 MA's), (58, 36086), (62, 36116), (65, 36134),

Gene: Nutello_39 Start: 34739, Stop: 34984, Start Num: 42

Candidate Starts for Nutello_39:

(Start: 42 @34739 has 57 MA's), (Start: 47 @34790 has 8 MA's), (50, 34826), (58, 34907), (62, 34937), (63, 34943),

Gene: OhShagHennessy_38 Start: 33016, Stop: 33303, Start Num: 36

Candidate Starts for OhShagHennessy_38:

(Start: 26 @32980 has 5 MA's), (Start: 36 @33016 has 30 MA's), (53, 33136), (54, 33151), (57, 33193), (58, 33199), (61, 33211), (62, 33229), (63, 33235), (77, 33298),

Gene: OmniCritical_47 Start: 36066, Stop: 36314, Start Num: 40

Candidate Starts for OmniCritical_47:

(11, 35970), (Start: 22 @36012 has 2 MA's), (Start: 40 @36066 has 18 MA's), (58, 36237), (59, 36240),

Gene: Omnicron_45 Start: 34067, Stop: 34414, Start Num: 22

Candidate Starts for Omnicron_45:

(15, 34046), (Start: 22 @34067 has 2 MA's), (Start: 42 @34124 has 57 MA's), (58, 34289), (61, 34301), (65, 34337), (74, 34394),

Gene: Oscar_48 Start: 36280, Stop: 36486, Start Num: 47

Candidate Starts for Oscar_48:

(Start: 42 @36229 has 57 MA's), (Start: 47 @36280 has 8 MA's), (Start: 48 @36283 has 7 MA's), (58, 36397), (61, 36409),

Gene: Padfoot_44 Start: 35474, Stop: 35713, Start Num: 42

Candidate Starts for Padfoot_44:

(Start: 27 @35432 has 15 MA's), (Start: 34 @35453 has 7 MA's), (Start: 35 @35456 has 28 MA's), (Start: 42 @35474 has 57 MA's), (44, 35495), (46, 35516), (Start: 48 @35528 has 7 MA's), (50, 35561), (56, 35627), (58, 35642), (65, 35690),

Gene: Padpat_45 Start: 35153, Stop: 35392, Start Num: 42

Candidate Starts for Padpat_45:

(Start: 27 @35111 has 15 MA's), (Start: 34 @35132 has 7 MA's), (Start: 35 @35135 has 28 MA's), (Start: 42 @35153 has 57 MA's), (44, 35174), (46, 35195), (Start: 48 @35207 has 7 MA's), (50, 35240), (56, 35306), (58, 35321), (65, 35369),

Gene: Patt_45 Start: 35280, Stop: 35528, Start Num: 40

Candidate Starts for Patt_45:

(19, 35217), (31, 35253), (33, 35259), (Start: 40 @35280 has 18 MA's), (58, 35451), (59, 35454),

Gene: Peanam_46 Start: 35828, Stop: 36124, Start Num: 26

Candidate Starts for Peanam_46:

(14, 35798), (Start: 26 @35828 has 5 MA's), (Start: 42 @35876 has 57 MA's), (Start: 48 @35930 has 7 MA's), (58, 36044), (62, 36074), (65, 36092),

Gene: Peel_44 Start: 35261, Stop: 35518, Start Num: 35

Candidate Starts for Peel_44:

(Start: 27 @35237 has 15 MA's), (Start: 34 @35258 has 7 MA's), (Start: 35 @35261 has 28 MA's), (Start: 42 @35279 has 57 MA's), (44, 35300), (46, 35321), (Start: 48 @35333 has 7 MA's), (50, 35366), (56, 35432), (58, 35447), (65, 35495),

Gene: PhelpsODU_46 Start: 35137, Stop: 35373, Start Num: 42

Candidate Starts for PhelpsODU_46:

(8, 35029), (Start: 42 @35137 has 57 MA's), (Start: 47 @35188 has 8 MA's), (Start: 48 @35191 has 7 MA's), (54, 35257), (56, 35290),

Gene: Phrank_47 Start: 35094, Stop: 35330, Start Num: 42

Candidate Starts for Phrank_47:

(25, 35046), (Start: 42 @35094 has 57 MA's), (Start: 47 @35145 has 8 MA's), (Start: 48 @35148 has 7 MA's), (54, 35214),

Gene: Piatt_44 Start: 35432, Stop: 35713, Start Num: 27

Candidate Starts for Piatt_44:

(Start: 27 @35432 has 15 MA's), (Start: 34 @35453 has 7 MA's), (Start: 35 @35456 has 28 MA's), (Start: 42 @35474 has 57 MA's), (44, 35495), (46, 35516), (Start: 48 @35528 has 7 MA's), (50, 35561), (56, 35627), (58, 35642), (65, 35690),

Gene: Pokerus_43 Start: 35182, Stop: 35439, Start Num: 35

Candidate Starts for Pokerus_43:

(Start: 27 @35158 has 15 MA's), (Start: 35 @35182 has 28 MA's), (Start: 42 @35200 has 57 MA's), (46, 35242), (Start: 48 @35254 has 7 MA's), (50, 35287), (56, 35353), (58, 35368), (65, 35416),

Gene: Prithvi_45 Start: 35343, Stop: 35582, Start Num: 42

Candidate Starts for Prithvi_45:

(3, 35142), (4, 35148), (5, 35163), (11, 35247), (17, 35271), (Start: 42 @35343 has 57 MA's), (44, 35364), (46, 35385), (Start: 48 @35397 has 7 MA's), (50, 35430), (56, 35496), (58, 35511),

Gene: QuincyRose_43 Start: 35592, Stop: 35831, Start Num: 42

Candidate Starts for QuincyRose_43:

(3, 35391), (4, 35397), (5, 35412), (11, 35496), (17, 35520), (Start: 26 @35544 has 5 MA's), (Start: 42 @35592 has 57 MA's), (46, 35634), (Start: 48 @35646 has 7 MA's), (50, 35679), (56, 35745), (58, 35760), (65, 35808),

Gene: Ramen_44 Start: 35122, Stop: 35403, Start Num: 27

Candidate Starts for Ramen_44:

(Start: 27 @35122 has 15 MA's), (Start: 34 @35143 has 7 MA's), (Start: 35 @35146 has 28 MA's), (Start: 42 @35164 has 57 MA's), (44, 35185), (46, 35206), (Start: 48 @35218 has 7 MA's), (50, 35251), (56, 35317), (58, 35332), (65, 35380),

Gene: Rapunzel97_44 Start: 35142, Stop: 35399, Start Num: 35

Candidate Starts for Rapunzel97_44:

(Start: 27 @35118 has 15 MA's), (Start: 34 @35139 has 7 MA's), (Start: 35 @35142 has 28 MA's), (Start: 42 @35160 has 57 MA's), (44, 35181), (46, 35202), (Start: 48 @35214 has 7 MA's), (50, 35247), (56, 35313), (58, 35328), (65, 35376),

Gene: Reptar3000_46 Start: 35271, Stop: 35519, Start Num: 40

Candidate Starts for Reptar3000_46:

(11, 35175), (Start: 22 @35217 has 2 MA's), (Start: 40 @35271 has 18 MA's), (58, 35442), (59, 35445),

Gene: Rose5_38 Start: 33043, Stop: 33345, Start Num: 36

Candidate Starts for Rose5_38:

(Start: 26 @33007 has 5 MA's), (Start: 36 @33043 has 30 MA's), (54, 33178), (58, 33226), (60, 33235), (61, 33238), (62, 33256), (63, 33262), (70, 33307),

Gene: Rosmarinus_44 Start: 35247, Stop: 35504, Start Num: 35

Candidate Starts for Rosmarinus_44:

(Start: 27 @35223 has 15 MA's), (Start: 34 @35244 has 7 MA's), (Start: 35 @35247 has 28 MA's), (Start: 42 @35265 has 57 MA's), (44, 35286), (46, 35307), (Start: 48 @35319 has 7 MA's), (50, 35352), (56, 35418), (58, 35433), (65, 35481),

Gene: Rumpelstiltskin_41 Start: 34659, Stop: 34964, Start Num: 30

Candidate Starts for Rumpelstiltskin_41:

(Start: 30 @34659 has 9 MA's), (Start: 32 @34665 has 3 MA's), (Start: 36 @34677 has 30 MA's), (46, 34734), (57, 34854), (58, 34860), (61, 34872), (75, 34953),

Gene: SamuelLPlaqson_45 Start: 36056, Stop: 36295, Start Num: 42

Candidate Starts for SamuelLPlaqson_45:

(3, 35855), (4, 35861), (5, 35876), (11, 35960), (17, 35984), (Start: 42 @36056 has 57 MA's), (46, 36098), (Start: 48 @36110 has 7 MA's), (50, 36143), (56, 36209),

Gene: Scarlett_48 Start: 36272, Stop: 36478, Start Num: 47

Candidate Starts for Scarlett_48:

(Start: 42 @36221 has 57 MA's), (Start: 47 @36272 has 8 MA's), (Start: 48 @36275 has 7 MA's), (54, 36341), (58, 36389), (61, 36401),

Gene: SgtBeansprout_39 Start: 34790, Stop: 34984, Start Num: 47

Candidate Starts for SgtBeansprout_39:

(Start: 42 @34739 has 57 MA's), (Start: 47 @34790 has 8 MA's), (50, 34826), (58, 34907), (62, 34937), (63, 34943),

Gene: Shadow1_49 Start: 36255, Stop: 36491, Start Num: 42

Candidate Starts for Shadow1_49:

(Start: 42 @36255 has 57 MA's), (Start: 47 @36306 has 8 MA's), (54, 36375), (61, 36435),

Gene: Shaobing_46 Start: 35893, Stop: 36141, Start Num: 42

Candidate Starts for Shaobing_46:

(Start: 42 @35893 has 57 MA's), (Start: 48 @35947 has 7 MA's), (58, 36061), (62, 36091), (65, 36109),

Gene: ShiaSurprise_45 Start: 35474, Stop: 35713, Start Num: 42

Candidate Starts for ShiaSurprise_45:

(Start: 27 @35432 has 15 MA's), (Start: 34 @35453 has 7 MA's), (Start: 35 @35456 has 28 MA's), (Start: 42 @35474 has 57 MA's), (44, 35495), (46, 35516), (Start: 48 @35528 has 7 MA's), (50, 35561), (56, 35627), (58, 35642), (65, 35690),

Gene: Silverleaf_38 Start: 33043, Stop: 33345, Start Num: 36

Candidate Starts for Silverleaf_38:

(Start: 26 @33007 has 5 MA's), (Start: 36 @33043 has 30 MA's), (54, 33178), (58, 33226), (60, 33235), (61, 33238), (62, 33256), (63, 33262), (70, 33307),

Gene: SirPhilip_46 Start: 36474, Stop: 36710, Start Num: 42

Candidate Starts for SirPhilip_46:

(18, 36405), (25, 36426), (Start: 42 @36474 has 57 MA's), (Start: 47 @36525 has 8 MA's), (Start: 48 @36528 has 7 MA's), (56, 36627), (62, 36672),

Gene: Slarp_48 Start: 36169, Stop: 36417, Start Num: 40

Candidate Starts for Slarp_48:

(11, 36073), (Start: 40 @36169 has 18 MA's), (58, 36340), (59, 36343),

Gene: Slimphazie_44 Start: 35142, Stop: 35399, Start Num: 35

Candidate Starts for Slimphazie_44:

(Start: 27 @35118 has 15 MA's), (Start: 34 @35139 has 7 MA's), (Start: 35 @35142 has 28 MA's), (Start: 42 @35160 has 57 MA's), (44, 35181), (46, 35202), (Start: 48 @35214 has 7 MA's), (50, 35247), (56, 35313), (58, 35328), (65, 35376),

Gene: Snenia_39 Start: 34656, Stop: 34955, Start Num: 36

Candidate Starts for Snenia_39:

(Start: 36 @34656 has 30 MA's), (49, 34743), (58, 34839), (61, 34851),

Gene: Spock_44 Start: 35260, Stop: 35517, Start Num: 35

Candidate Starts for Spock_44:

(Start: 27 @35236 has 15 MA's), (Start: 34 @35257 has 7 MA's), (Start: 35 @35260 has 28 MA's), (Start: 42 @35278 has 57 MA's), (44, 35299), (46, 35320), (Start: 48 @35332 has 7 MA's), (50, 35365), (56, 35431), (58, 35446), (65, 35494),

Gene: Stinson_45 Start: 35667, Stop: 35906, Start Num: 42

Candidate Starts for Stinson_45:

(Start: 27 @35625 has 15 MA's), (Start: 35 @35649 has 28 MA's), (Start: 42 @35667 has 57 MA's), (44, 35688), (46, 35709), (Start: 48 @35721 has 7 MA's), (50, 35754), (56, 35820), (58, 35835),

Gene: Sulley_44 Start: 35383, Stop: 35643, Start Num: 34

Candidate Starts for Sulley_44:

(Start: 27 @35362 has 15 MA's), (Start: 34 @35383 has 7 MA's), (Start: 35 @35386 has 28 MA's), (Start: 42 @35404 has 57 MA's), (46, 35446), (Start: 48 @35458 has 7 MA's), (50, 35491), (56,

35557), (58, 35572), (65, 35620),

Gene: Sunflower1121_50 Start: 36356, Stop: 36592, Start Num: 42

Candidate Starts for Sunflower1121_50:

(Start: 42 @36356 has 57 MA's), (Start: 47 @36407 has 8 MA's), (54, 36476), (58, 36524), (61, 36536),

Gene: Syra333_49 Start: 36023, Stop: 36259, Start Num: 42

Candidate Starts for Syra333_49:

(Start: 42 @36023 has 57 MA's), (Start: 47 @36074 has 8 MA's), (54, 36143), (61, 36203),

Gene: TClif_49 Start: 36322, Stop: 36570, Start Num: 42

Candidate Starts for TClif_49:

(Start: 42 @36322 has 57 MA's), (50, 36409), (56, 36475), (58, 36490), (62, 36520),

Gene: TM4_42 Start: 31544, Stop: 31900, Start Num: 27

Candidate Starts for TM4_42:

(Start: 27 @31544 has 15 MA's), (28, 31547), (37, 31571), (Start: 38 @31574 has 2 MA's), (Start: 42 @31583 has 57 MA's), (53, 31688), (58, 31751), (62, 31781), (71, 31832), (76, 31859), (80, 31889),

Gene: Tachez_44 Start: 35101, Stop: 35361, Start Num: 34

Candidate Starts for Tachez_44:

(Start: 27 @35080 has 15 MA's), (Start: 34 @35101 has 7 MA's), (Start: 35 @35104 has 28 MA's), (Start: 42 @35122 has 57 MA's), (44, 35143), (46, 35164), (Start: 48 @35176 has 7 MA's), (50, 35209), (56, 35275), (58, 35290), (65, 35338),

Gene: Taquito_48 Start: 36416, Stop: 36664, Start Num: 40

Candidate Starts for Taquito_48:

(11, 36320), (Start: 40 @36416 has 18 MA's), (58, 36587), (59, 36590),

Gene: Tierra_47 Start: 35905, Stop: 36141, Start Num: 42

Candidate Starts for Tierra_47:

(Start: 42 @35905 has 57 MA's), (Start: 47 @35956 has 8 MA's), (Start: 48 @35959 has 7 MA's), (54, 36025),

Gene: TiniBug_45 Start: 36052, Stop: 36291, Start Num: 42

Candidate Starts for TiniBug_45:

(3, 35851), (4, 35857), (5, 35872), (11, 35956), (17, 35980), (Start: 42 @36052 has 57 MA's), (46, 36094), (Start: 48 @36106 has 7 MA's), (56, 36205), (58, 36220),

Gene: Tiri_45 Start: 35452, Stop: 35691, Start Num: 42

Candidate Starts for Tiri_45:

(3, 35251), (4, 35257), (5, 35272), (11, 35356), (17, 35380), (Start: 26 @35404 has 5 MA's), (Start: 42 @35452 has 57 MA's), (46, 35494), (Start: 48 @35506 has 7 MA's), (50, 35539), (56, 35605), (58, 35620), (65, 35668),

Gene: Topper_44 Start: 35259, Stop: 35516, Start Num: 35

Candidate Starts for Topper_44:

(Start: 27 @35235 has 15 MA's), (Start: 34 @35256 has 7 MA's), (Start: 35 @35259 has 28 MA's), (Start: 42 @35277 has 57 MA's), (44, 35298), (46, 35319), (Start: 48 @35331 has 7 MA's), (50, 35364), (56, 35430), (58, 35445), (65, 35493),

Gene: Tourach_41 Start: 34425, Stop: 34712, Start Num: 36

Candidate Starts for Tourach_41:

(16, 34365), (Start: 36 @34425 has 30 MA's), (46, 34482), (54, 34560), (57, 34602), (58, 34608), (61, 34620),

Gene: TreyKay_45 Start: 35343, Stop: 35582, Start Num: 42

Candidate Starts for TreyKay_45:

(3, 35142), (4, 35148), (5, 35163), (11, 35247), (17, 35271), (Start: 42 @35343 has 57 MA's), (44, 35364), (46, 35385), (Start: 48 @35397 has 7 MA's), (50, 35430), (56, 35496), (58, 35511),

Gene: TribelTrouble_44 Start: 35315, Stop: 35500, Start Num: 48

Candidate Starts for TribelTrouble_44:

(Start: 42 @35261 has 57 MA's), (Start: 48 @35315 has 7 MA's), (54, 35381),

Gene: TruffulaTree_44 Start: 35138, Stop: 35395, Start Num: 35

Candidate Starts for TruffulaTree_44:

(Start: 27 @35114 has 15 MA's), (Start: 34 @35135 has 7 MA's), (Start: 35 @35138 has 28 MA's), (Start: 42 @35156 has 57 MA's), (44, 35177), (46, 35198), (Start: 48 @35210 has 7 MA's), (50, 35243), (56, 35309), (58, 35324), (65, 35372),

Gene: Twitch_44 Start: 35261, Stop: 35518, Start Num: 35

Candidate Starts for Twitch_44:

(Start: 27 @35237 has 15 MA's), (Start: 34 @35258 has 7 MA's), (Start: 35 @35261 has 28 MA's), (Start: 42 @35279 has 57 MA's), (44, 35300), (46, 35321), (Start: 48 @35333 has 7 MA's), (50, 35366), (56, 35432), (58, 35447), (65, 35495),

Gene: Tyson_38 Start: 33044, Stop: 33346, Start Num: 36

Candidate Starts for Tyson_38:

(Start: 26 @33008 has 5 MA's), (Start: 36 @33044 has 30 MA's), (54, 33179), (58, 33227), (60, 33236), (61, 33239), (62, 33257), (63, 33263), (70, 33308),

Gene: UPIE_39 Start: 33006, Stop: 33329, Start Num: 26

Candidate Starts for UPIE_39:

(Start: 26 @33006 has 5 MA's), (Start: 36 @33042 has 30 MA's), (53, 33162), (54, 33177), (57, 33219), (58, 33225), (61, 33237), (62, 33255), (63, 33261), (77, 33324),

Gene: Urkel_45 Start: 36056, Stop: 36295, Start Num: 42

Candidate Starts for Urkel_45:

(3, 35855), (4, 35861), (5, 35876), (11, 35960), (17, 35984), (Start: 42 @36056 has 57 MA's), (46, 36098), (Start: 48 @36110 has 7 MA's), (50, 36143), (56, 36209),

Gene: Validus_48 Start: 35897, Stop: 36190, Start Num: 26

Candidate Starts for Validus_48:

(Start: 26 @35897 has 5 MA's), (Start: 42 @35945 has 57 MA's), (Start: 47 @35996 has 8 MA's), (Start: 48 @35999 has 7 MA's), (58, 36113), (62, 36143), (66, 36167),

Gene: Veliki_44 Start: 35178, Stop: 35435, Start Num: 35

Candidate Starts for Veliki_44:

(Start: 27 @35154 has 15 MA's), (Start: 34 @35175 has 7 MA's), (Start: 35 @35178 has 28 MA's), (Start: 42 @35196 has 57 MA's), (44, 35217), (46, 35238), (Start: 48 @35250 has 7 MA's), (50, 35283), (56, 35349), (58, 35364), (65, 35412),

Gene: Vetric_41 Start: 34417, Stop: 34704, Start Num: 36

Candidate Starts for Vetric_41:

(Start: 30 @34399 has 9 MA's), (Start: 32 @34405 has 3 MA's), (Start: 36 @34417 has 30 MA's), (46, 34474), (57, 34594), (58, 34600), (61, 34612), (75, 34693),

Gene: Wamburgexpress_39 Start: 33057, Stop: 33344, Start Num: 36

Candidate Starts for Wamburgexpress_39:

(Start: 26 @33021 has 5 MA's), (Start: 36 @33057 has 30 MA's), (53, 33177), (54, 33192), (57, 33234), (58, 33240), (61, 33252), (62, 33270), (63, 33276), (77, 33339),

Gene: Whirlwind_40 Start: 34375, Stop: 34713, Start Num: 23

Candidate Starts for Whirlwind_40:

(Start: 23 @34375 has 4 MA's), (Start: 36 @34414 has 30 MA's), (49, 34501), (51, 34525), (58, 34597), (61, 34609), (72, 34678),

Gene: Wigglewobble_41 Start: 34425, Stop: 34730, Start Num: 30

Candidate Starts for Wigglewobble_41:

(Start: 30 @34425 has 9 MA's), (Start: 32 @34431 has 3 MA's), (Start: 36 @34443 has 30 MA's), (46, 34500), (57, 34620), (58, 34626), (61, 34638), (70, 34692), (75, 34719),

Gene: Winky_41 Start: 34392, Stop: 34697, Start Num: 30

Candidate Starts for Winky_41:

(Start: 30 @34392 has 9 MA's), (Start: 32 @34398 has 3 MA's), (Start: 36 @34410 has 30 MA's), (46, 34467), (57, 34587), (58, 34593), (61, 34605), (75, 34686),

Gene: Wintermute_48 Start: 36318, Stop: 36566, Start Num: 40

Candidate Starts for Wintermute_48:

(11, 36222), (21, 36258), (Start: 40 @36318 has 18 MA's), (58, 36489), (59, 36492),

Gene: Wyatt2_39 Start: 33043, Stop: 33345, Start Num: 36

Candidate Starts for Wyatt2_39:

(Start: 26 @33007 has 5 MA's), (Start: 36 @33043 has 30 MA's), (54, 33178), (58, 33226), (60, 33235), (61, 33238), (62, 33256), (63, 33262), (70, 33307),

Gene: Ximenita_50 Start: 36194, Stop: 36445, Start Num: 35

Candidate Starts for Ximenita_50:

(24, 36161), (Start: 34 @36191 has 7 MA's), (Start: 35 @36194 has 28 MA's), (Start: 42 @36209 has 57 MA's), (Start: 48 @36263 has 7 MA's), (54, 36329), (58, 36377), (61, 36389),

Gene: Y10_47 Start: 36237, Stop: 36485, Start Num: 40

Candidate Starts for Y10_47:

(Start: 40 @36237 has 18 MA's), (58, 36408), (59, 36411),

Gene: Y2_47 Start: 36237, Stop: 36485, Start Num: 40

Candidate Starts for Y2_47:

(Start: 40 @36237 has 18 MA's), (58, 36408), (59, 36411),

Gene: YoureAdopted_43 Start: 35343, Stop: 35600, Start Num: 35

Candidate Starts for YoureAdopted_43:

(Start: 27 @35319 has 15 MA's), (Start: 34 @35340 has 7 MA's), (Start: 35 @35343 has 28 MA's), (Start: 42 @35361 has 57 MA's), (44, 35382), (46, 35403), (Start: 48 @35415 has 7 MA's), (50, 35448), (56, 35514), (58, 35529), (65, 35577),

Gene: Yuna_50 Start: 36971, Stop: 37204, Start Num: 42

Candidate Starts for Yuna_50:

(Start: 42 @36971 has 57 MA's), (54, 37091), (58, 37139), (61, 37151),

Gene: Zabiza_40 Start: 31425, Stop: 31706, Start Num: 27

Candidate Starts for Zabiza_40:

(Start: 27 @31425 has 15 MA's), (Start: 34 @31446 has 7 MA's), (Start: 35 @31449 has 28 MA's),
(Start: 42 @31467 has 57 MA's), (44, 31488), (46, 31509), (Start: 48 @31521 has 7 MA's), (50,
31554), (56, 31620), (58, 31635), (65, 31683),

Gene: Zaria_39 Start: 33058, Stop: 33360, Start Num: 36

Candidate Starts for Zaria_39:

(Start: 26 @33022 has 5 MA's), (Start: 36 @33058 has 30 MA's), (54, 33193), (58, 33241), (60,
33250), (61, 33253), (62, 33271), (63, 33277), (70, 33322),

Gene: Zavala_45 Start: 35438, Stop: 35677, Start Num: 42

Candidate Starts for Zavala_45:

(Start: 34 @35417 has 7 MA's), (Start: 35 @35420 has 28 MA's), (Start: 42 @35438 has 57 MA's),
(44, 35459), (46, 35480), (Start: 48 @35492 has 7 MA's), (50, 35525), (56, 35591), (58, 35606), (65,
35654),

Gene: ZoeJ_46 Start: 36666, Stop: 36992, Start Num: 38

Candidate Starts for ZoeJ_46:

(20, 36615), (37, 36663), (Start: 38 @36666 has 2 MA's), (Start: 42 @36675 has 57 MA's), (53,
36780), (58, 36843), (62, 36873), (76, 36951), (80, 36981),