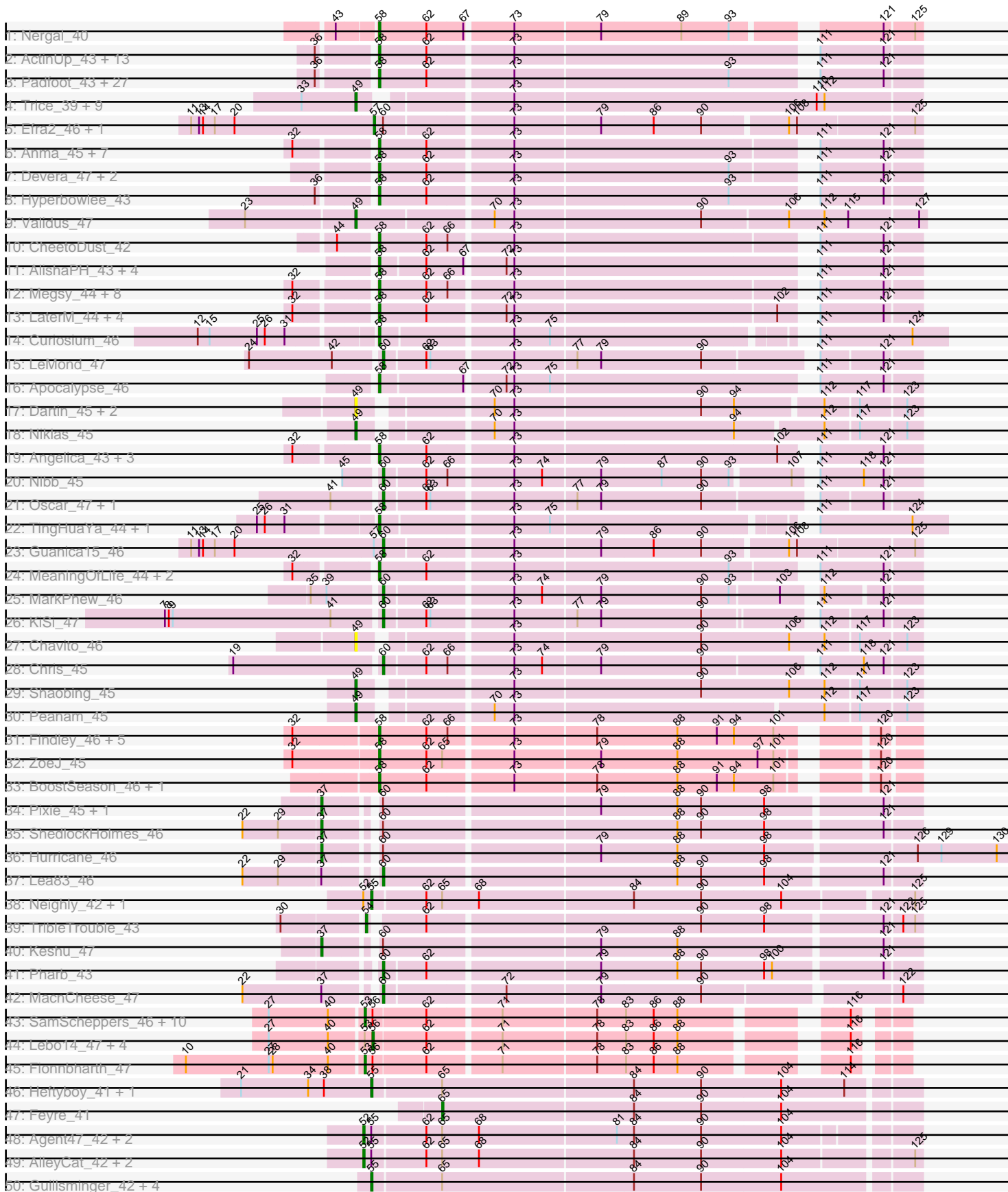
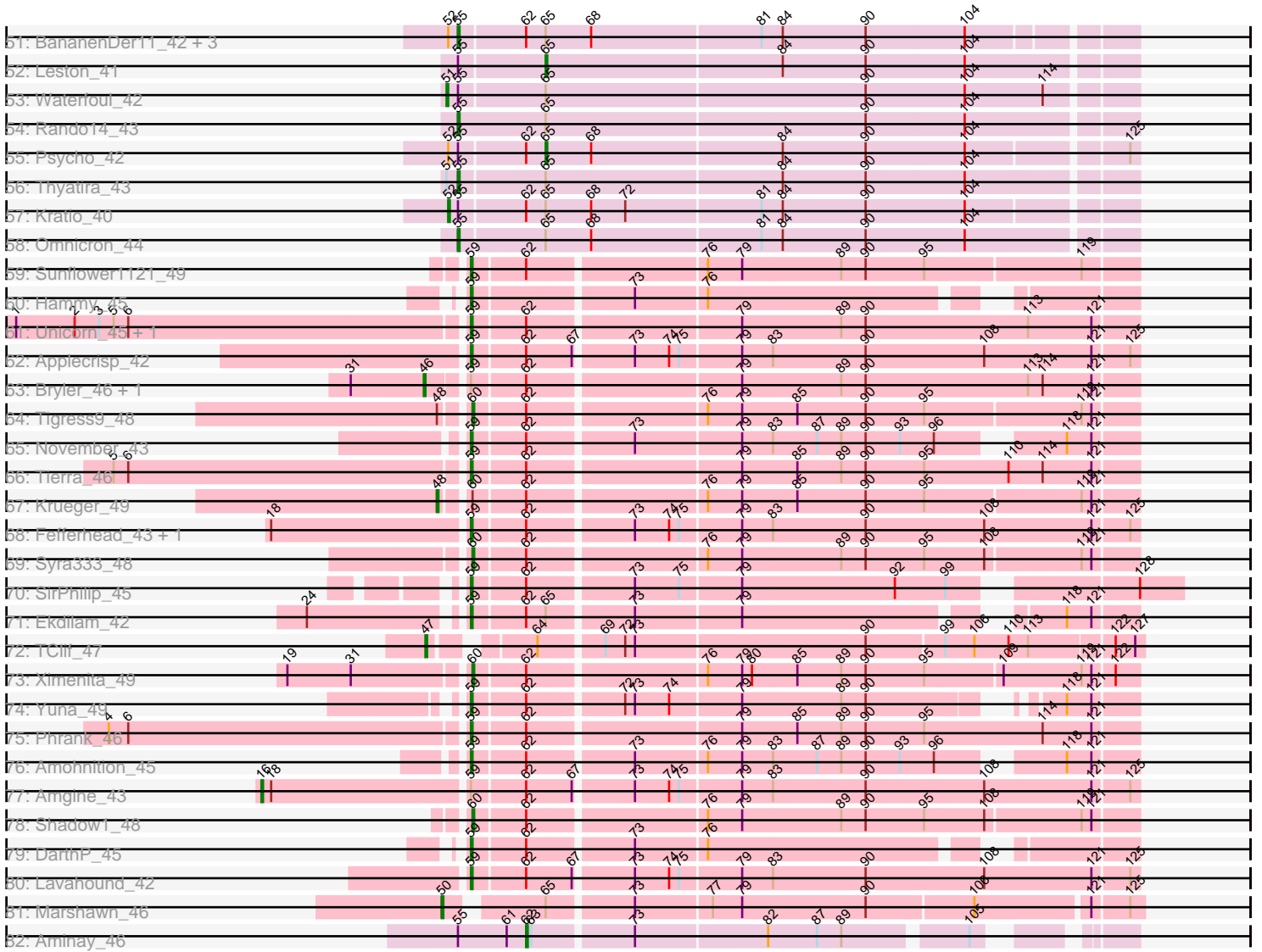


Pham 311242



Pham 311242



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 311242 Report

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

Pham number 311242 has 203 members, 12 are drafts.

Phages represented in each track:

- Track 1 : Nergal_40
- Track 2 : ActinUp_43, Jayhawk_44, BarrelRoll_43, Adephagia_43, TruffulaTree_43, Slimphazie_43, Atiba_43, Veliki_43, Ramen_43, Padpat_44, Rapunzel97_43, HedwigODU_43, Tachez_43, Emerson_44
- Track 3 : Padfoot_43, Topper_43, Llorens_43, BGIlluviae_43, Dalmuri_43, CaseJules_44, Jeckyll_43, Rosmarinus_43, CREW_43, Joy99_43, Asayake_43, BEEST_43, CallaLilly_43, Belladonna_43, Homura_43, Blizzard_43, Inky_43, Spock_43, Lunahalos_43, Capricorn_43, ShiaSurprise_44, Durfee_43, Piatt_43, JAWS_43, Boiiii_43, Jarvi_43, Peel_43, Twitch_43
- Track 4 : Trice_39, Amelie_38, Binglebops_38, Teejan_41, Torres_41, SgtBeansprout_38, Nikao_41, Nutello_38, Mdavu_39, Enkosi_41
- Track 5 : Efra2_46, Yunkel11_46
- Track 6 : Anma_45, DartGoblin_45, Bella96_44, Beezoo_45, Urkel_44, SamuelLPlaqson_44, TiniBug_44, DrHayes_44
- Track 7 : Devera_47, Illumine_46, Dole_46
- Track 8 : Hyperbowlee_43
- Track 9 : Validus_47
- Track 10 : CheetoDust_42
- Track 11 : AlishaPH_43, Geraldini_45, BaghaKamala_42, Pokerus_42, Clipper_46
- Track 12 : Megsy_44, LindNT_43, Zavala_44, Prithvi_44, Mynx_44, Pisa1_43, TreyKay_44, CrimD_43, TaiwanKao_45
- Track 13 : LaterM_44, Ageofdapage_45, Adonis_43, Stinson_44, Murucutumbu_44
- Track 14 : Curiosium_46
- Track 15 : LeMond_47
- Track 16 : Apocalypse_46
- Track 17 : Dartin_45, McMater_45, Richo_45
- Track 18 : Niklas_45
- Track 19 : Angelica_43, Anaya_45, Deby_43, Sulley_43
- Track 20 : Nibb_45
- Track 21 : Oscar_47, Scarlett_47
- Track 22 : TingHuaYa_44, LastHope_46
- Track 23 : Guanica15_46
- Track 24 : MeaningOfLife_44, Ganymede_44, QuincyRose_42
- Track 25 : MarkPhew_46
- Track 26 : KiSi_47
- Track 27 : Chavito_46
- Track 28 : Chris_45

- Track 29 : Shaobing_45
- Track 30 : Peanam_45
- Track 31 : Findley_46, Strobilo_46, DismalStressor_46, Milly_46, Marcoliusprime_46, DismalFunk_46
- Track 32 : ZoeJ_45
- Track 33 : BoostSeason_46, Mufasa_46
- Track 34 : Pixie_45, TBond007_45
- Track 35 : ShedlockHolmes_46
- Track 36 : Hurricane_46
- Track 37 : Lea83_46
- Track 38 : Neighly_42, Edugator_41
- Track 39 : TribbleTrouble_43
- Track 40 : Keshu_47
- Track 41 : Pharb_43
- Track 42 : MacnCheese_47
- Track 43 : SamScheppers_46, Chancellor_47, Juliette_49, Eponine_49, Slarp_47, Wintermute_47, Cheetobro_47, Malthus_48, Mitti_47, YasnayaPolyana_47, Ruthiejr_48
- Track 44 : Lebo14_47, OmniCritical_46, Taquito_47, Y10_46, Y2_46
- Track 45 : Fionnbharth_47
- Track 46 : Heftyboy_41, SoSeph_41
- Track 47 : Feyre_41
- Track 48 : Agent47_42, InvictusManeo_41, Collard_41
- Track 49 : AlleyCat_42, Dadosky_42, Larva_42
- Track 50 : Guillsminger_42, Gengar_41, OkiRoe_41, Paola_41, Miryou_43
- Track 51 : BananenDer11_42, LilDirt_41, ViviJ_41, DoubleChamp_41
- Track 52 : Leston_41
- Track 53 : Waterfoul_42
- Track 54 : Rando14_43
- Track 55 : Psycho_42
- Track 56 : Thyatira_43
- Track 57 : Kratio_40
- Track 58 : Omnicron_44
- Track 59 : Sunflower1121_49
- Track 60 : Hammy_45
- Track 61 : Unicorn_45, PhelpsODU_45
- Track 62 : Applecrisp_42
- Track 63 : Bryler_46, Cain_46
- Track 64 : Tigress9_48
- Track 65 : November_43
- Track 66 : Tierra_46
- Track 67 : Krueger_49
- Track 68 : Fefferhead_43, Ellie_41
- Track 69 : Syra333_48
- Track 70 : SirPhilip_45
- Track 71 : Ekdilam_42
- Track 72 : TClif_47
- Track 73 : Ximenita_49
- Track 74 : Yuna_49
- Track 75 : Phrank_46
- Track 76 : Amohnition_45
- Track 77 : Amgine_43
- Track 78 : Shadow1_48

- Track 79 : DarthP_45
- Track 80 : Lavahound_42
- Track 81 : Marshawn_46
- Track 82 : Aminay_46

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

The start number called the most often in the published annotations is 58, it was called in 91 of the 191 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ActinUp_43, Adephagia_43, Adonis_43, Ageofdapage_45, AlishaPH_43, Anaya_45, Angelica_43, Anma_45, Apocalypse_46, Asayake_43, Atiba_43, BEEST_43, BGIlluviae_43, BaghaKamala_42, BarrelRoll_43, Beezoo_45, Bella96_44, Belladonna_43, Blizzard_43, Boiiii_43, BoostSeason_46, CREW_43, CallaLilly_43, Capricorn_43, CaseJules_44, CheetoDust_42, Clipper_46, CrimD_43, Curiosium_46, Dalmuri_43, DartGoblin_45, Deby_43, Devera_47, DismalFunk_46, DismalStressor_46, Dole_46, DrHayes_44, Durfee_43, Emerson_44, Findley_46, Ganymede_44, Geraldini_45, HedwigODU_43, Homura_43, Hyperbowlee_43, Illumine_46, Inky_43, JAWS_43, Jarvi_43, Jayhawk_44, Jeckyll_43, Joy99_43, LastHope_46, LaterM_44, LindNT_43, Llorens_43, Lunahalos_43, Marcoliusprime_46, MeaningOfLife_44, Megsy_44, Milly_46, Mufasa_46, Murucutumbu_44, Mynx_44, Nergal_40, Padfoot_43, Padpat_44, Peel_43, Piatt_43, Pisa1_43, Pokerus_42, Prithvi_44, QuincyRose_42, Ramen_43, Rapunzel97_43, Rosmarinus_43, SamuelLPlaqson_44, ShiaSurprise_44, Slimphazie_43, Spock_43, Stinson_44, Strobilo_46, Sulley_43, Tachez_43, TaiwanKao_45, TingHuaYa_44, TiniBug_44, Topper_43, TreyKay_44, TruffulaTree_43, Twitch_43, Urkel_44, Veliki_43, Zavala_44, ZoeJ_45,

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

-

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

- Agent47_42, AlleyCat_42, Amelie_38, Amgine_43, Aminay_46, Amohnition_45, Applecrisp_42, BananenDer11_42, Biglebops_38, Bryler_46, Cain_46, Chancellor_47, Chavito_46, Cheetobro_47, Chris_45, Collard_41, Dadosky_42, DarthP_45, Dartin_45, DoubleChamp_41, Edugator_41, Efra2_46, Ekdilam_42, Ellie_41, Enkosi_41, Eponine_49, Fefferhead_43, Feyre_41, Fionnbharth_47, Gengar_41, Guanica15_46, Guillsminger_42, Hammy_45, Heftyboy_41, Hurricane_46, InvictusManeo_41, Juliette_49, Keshu_47, KiSi_47, Kratio_40, Krueger_49, Larva_42, Lavahound_42, LeMond_47, Lea83_46, Lebo14_47, Leston_41, LilDirt_41, MacnCheese_47, Malthus_48, MarkPhew_46, Marshawn_46, McMater_45, Mdavu_39, Miryou_43, Mitti_47, Neighly_42, Nibb_45, Nikao_41, Niklas_45, November_43, Nutello_38, OkiRoe_41, OmniCritical_46, Omnicron_44, Oscar_47, Paola_41, Peanam_45, Pharb_43, PhelpsODU_45, Phrank_46, Pixie_45, Psycho_42, Rando14_43, Richo_45, Ruthiejr_48, SamScheppers_46, Scarlett_47, SgtBeansprout_38, Shadow1_48, Shaobing_45, ShedlockHolmes_46, SirPhilip_45, Slarp_47, SoSeph_41, Sunflower1121_49, Syra333_48, TBond007_45, TClif_47, Taquito_47, Teejan_41, Thyatira_43, Tierra_46, Tigress9_48, Torres_41, TribbleTrouble_43, Trice_39, Unicorn_45, Validus_47, ViviJ_41, Waterfoul_42,

Wintermute_47, Ximenita_49, Y10_46, Y2_46, YasnayaPolyana_47, Yuna_49, Yunkel11_46,

Summary by start number:

Start 16:

- Found in 1 of 203 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 191
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amgine_43 (K6),

Start 37:

- Found in 7 of 203 (3.4%) of genes in pham
- Manual Annotations of this start: 5 of 191
- Called 71.4% of time when present
- Phage (with cluster) where this start called: Hurricane_46 (K3), Keshu_47 (K3), Pixie_45 (K3), ShedlockHolmes_46 (K3), TBond007_45 (K3),

Start 46:

- Found in 2 of 203 (1.0%) of genes in pham
- Manual Annotations of this start: 2 of 191
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bryler_46 (K6), Cain_46 (K6),

Start 47:

- Found in 1 of 203 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 191
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TClif_47 (K6),

Start 48:

- Found in 2 of 203 (1.0%) of genes in pham
- Manual Annotations of this start: 1 of 191
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Krueger_49 (K6),

Start 49:

- Found in 18 of 203 (8.9%) of genes in pham
- Manual Annotations of this start: 12 of 191
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amelie_38 (K1), Binglebops_38 (K1), Chavito_46 (K1), Dartin_45 (K1), Enkosi_41 (K1), McMater_45 (K1), Mdavu_39 (K1), Nikao_41 (K1), Niklas_45 (K1), Nutello_38 (K1), Peanam_45 (K1), Richo_45 (K1), SgtBeansprout_38 (K1), Shaobing_45 (K1), Teejan_41 (K1), Torres_41 (K1), Trice_39 (K1), Validus_47 (K1),

Start 50:

- Found in 1 of 203 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 191
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Marshawn_46 (K6),

Start 51:

- Found in 2 of 203 (1.0%) of genes in pham
- Manual Annotations of this start: 1 of 191
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Waterfoul_42 (K5),

Start 52:

- Found in 14 of 203 (6.9%) of genes in pham
- Manual Annotations of this start: 7 of 191
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Agent47_42 (K5), AlleyCat_42 (K5), Collard_41 (K5), Dadosky_42 (K5), InvictusManeo_41 (K5), Kratio_40 (K5), Larva_42 (K5),

Start 53:

- Found in 17 of 203 (8.4%) of genes in pham
- Manual Annotations of this start: 12 of 191
- Called 70.6% of time when present
- Phage (with cluster) where this start called: Chancellor_47 (K4), Cheetobro_47 (K4), Eponine_49 (K4), Fionnbharth_47 (K4), Juliette_49 (K4), Malthus_48 (K4), Mitti_47 (K4), Ruthiejr_48 (K4), SamScheppers_46 (K4), Slarp_47 (K4), Wintermute_47 (K4), YasnayaPolyana_47 (K4),

Start 54:

- Found in 1 of 203 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 191
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TripleTrouble_43 (K3),

Start 55:

- Found in 27 of 203 (13.3%) of genes in pham
- Manual Annotations of this start: 14 of 191
- Called 59.3% of time when present
- Phage (with cluster) where this start called: BananenDer11_42 (K5), DoubleChamp_41 (K5), Edugator_41 (K5), Gengar_41 (K5), Guillsminger_42 (K5), Heftyboy_41 (K5), LilDirt_41 (K5), Miryou_43 (K5), Neighly_42 (K3), OkiRoe_41 (K5), Omnicron_44 (K5), Paola_41 (K5), Rando14_43 (K5), SoSeph_41 (K5), Thyatira_43 (K5), ViviJ_41 (K5),

Start 56:

- Found in 17 of 203 (8.4%) of genes in pham
- Manual Annotations of this start: 5 of 191
- Called 29.4% of time when present
- Phage (with cluster) where this start called: Lebo14_47 (K4), OmniCritical_46 (K4), Taquito_47 (K4), Y10_46 (K4), Y2_46 (K4),

Start 57:

- Found in 3 of 203 (1.5%) of genes in pham
- Manual Annotations of this start: 2 of 191
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Efra2_46 (K1), Yunkel11_46 (K1),

Start 58:

- Found in 95 of 203 (46.8%) of genes in pham

- Manual Annotations of this start: 91 of 191
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ActinUp_43 (K1), Adephagia_43 (K1), Adonis_43 (K1), Ageofdapage_45 (K1), AlishaPH_43 (K1), Anaya_45 (K1), Angelica_43 (K1), Anma_45 (K1), Apocalypse_46 (K1), Asayake_43 (K1), Atiba_43 (K1), BEEST_43 (K1), BGlluviae_43 (K1), BaghaKamala_42 (K1), BarrelRoll_43 (K1), Beezoo_45 (K1), Bella96_44 (K1), Belladonna_43 (K1), Blizzard_43 (K1), Boiiii_43 (K1), BoostSeason_46 (K2), CREW_43 (K1), CallaLilly_43 (K1), Capricorn_43 (K1), CaseJules_44 (K1), CheetoDust_42 (K1), Clipper_46 (K1), CrimD_43 (K1), Curiosium_46 (K1), Dalmuri_43 (K1), DartGoblin_45 (K1), Deby_43 (K1), Devera_47 (K1), DismalFunk_46 (K2), DismalStressor_46 (K2), Dole_46 (K1), DrHayes_44 (K1), Durfee_43 (K1), Emerson_44 (K1), Findley_46 (K2), Ganymede_44 (K1), Geraldini_45 (K1), HedwigODU_43 (K1), Homura_43 (K1), Hyperbowlee_43 (K1), Illumine_46 (K1), Inky_43 (K1), JAWS_43 (K1), Jarvi_43 (K1), Jayhawk_44 (K1), Jeckyll_43 (K1), Joy99_43 (K1), LastHope_46 (K1), LaterM_44 (K1), LindNT_43 (K1), Llorens_43 (K1), Lunahalos_43 (K1), Marcoliusprime_46 (K2), MeaningOfLife_44 (K1), Megsy_44 (K1), Milly_46 (K2), Mufasa_46 (K2), Murucutumbu_44 (K1), Mynx_44 (K1), Nergal_40 (AG), Padfoot_43 (K1), Padpat_44 (K1), Peel_43 (K1), Piatt_43 (K1), Pisa1_43 (K1), Pokerus_42 (K1), Prithvi_44 (K1), QuincyRose_42 (K1), Ramen_43 (K1), Rapunzel97_43 (K1), Rosmarinus_43 (K1), SamuelLPlaqson_44 (K1), ShiaSurprise_44 (K1), Slimphazie_43 (K1), Spock_43 (K1), Stinson_44 (K1), Strobilo_46 (K2), Sulley_43 (K1), Tachez_43 (K1), TaiwanKao_45 (K1), TingHuaYa_44 (K1), TiniBug_44 (K1), Topper_43 (K1), TreyKay_44 (K1), TruffulaTree_43 (K1), Twitch_43 (K1), Urkel_44 (K1), Veliki_43 (K1), Zavala_44 (K1), ZoeJ_45 (K2),

Start 59:

- Found in 19 of 203 (9.4%) of genes in pham
- Manual Annotations of this start: 16 of 191
- Called 84.2% of time when present
- Phage (with cluster) where this start called: Amohnition_45 (K6), Applecrisp_42 (K6), DarthP_45 (K6), Ekdilam_42 (K6), Ellie_41 (K6), Fefferhead_43 (K6), Hammy_45 (K6), Lavahound_42 (K6), November_43 (K6), PhelpsODU_45 (K6), Phrank_46 (K6), SirPhilip_45 (K6), Sunflower1121_49 (K6), Tierra_46 (K6), Unicorn_45 (K6), Yuna_49 (K6),

Start 60:

- Found in 23 of 203 (11.3%) of genes in pham
- Manual Annotations of this start: 15 of 191
- Called 65.2% of time when present
- Phage (with cluster) where this start called: Chris_45 (K1), Guanica15_46 (K1), KiSi_47 (K1), LeMond_47 (K1), Lea83_46 (K3), MacnCheese_47 (K3), MarkPhew_46 (K1), Nibb_45 (K1), Oscar_47 (K1), Pharb_43 (K3), Scarlett_47 (K1), Shadow1_48 (K6), Syra333_48 (K6), Tigress9_48 (K6), Ximenita_49 (K6),

Start 62:

- Found in 154 of 203 (75.9%) of genes in pham
- Manual Annotations of this start: 1 of 191
- Called 0.6% of time when present
- Phage (with cluster) where this start called: Aminay_46 (K7),

Start 65:

- Found in 30 of 203 (14.8%) of genes in pham

- Manual Annotations of this start: 3 of 191
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Feyre_41 (K5), Leston_41 (K5), Psycho_42 (K5),

Summary by clusters:

There are 8 clusters represented in this pham: AG, K3, K2, K1, K7, K6, K5, K4,

Info for manual annotations of cluster AG:

- Start number 58 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster K1:

- Start number 49 was manually annotated 12 times for cluster K1.
- Start number 57 was manually annotated 2 times for cluster K1.
- Start number 58 was manually annotated 81 times for cluster K1.
- Start number 60 was manually annotated 8 times for cluster K1.

Info for manual annotations of cluster K2:

- Start number 58 was manually annotated 9 times for cluster K2.

Info for manual annotations of cluster K3:

- Start number 37 was manually annotated 5 times for cluster K3.
- Start number 54 was manually annotated 1 time for cluster K3.
- Start number 60 was manually annotated 3 times for cluster K3.

Info for manual annotations of cluster K4:

- Start number 53 was manually annotated 12 times for cluster K4.
- Start number 56 was manually annotated 5 times for cluster K4.

Info for manual annotations of cluster K5:

- Start number 51 was manually annotated 1 time for cluster K5.
- Start number 52 was manually annotated 7 times for cluster K5.
- Start number 55 was manually annotated 14 times for cluster K5.
- Start number 65 was manually annotated 3 times for cluster K5.

Info for manual annotations of cluster K6:

- Start number 16 was manually annotated 1 time for cluster K6.
- Start number 46 was manually annotated 2 times for cluster K6.
- Start number 47 was manually annotated 1 time for cluster K6.
- Start number 48 was manually annotated 1 time for cluster K6.
- Start number 50 was manually annotated 1 time for cluster K6.
- Start number 59 was manually annotated 16 times for cluster K6.
- Start number 60 was manually annotated 4 times for cluster K6.

Info for manual annotations of cluster K7:

- Start number 62 was manually annotated 1 time for cluster K7.

Gene Information:

Gene: ActinUp_43 Start: 34981, Stop: 34601, Start Num: 58

Candidate Starts for ActinUp_43:

(36, 35017), (Start: 58 @34981 has 91 MA's), (Start: 62 @34945 has 1 MA's), (73, 34885), (111, 34675), (121, 34627),

Gene: Adephagia_43 Start: 34978, Stop: 34598, Start Num: 58

Candidate Starts for Adephagia_43:

(36, 35014), (Start: 58 @34978 has 91 MA's), (Start: 62 @34942 has 1 MA's), (73, 34882), (111, 34672), (121, 34624),

Gene: Adonis_43 Start: 35277, Stop: 34897, Start Num: 58

Candidate Starts for Adonis_43:

(32, 35328), (Start: 58 @35277 has 91 MA's), (Start: 62 @35241 has 1 MA's), (72, 35187), (73, 35181), (102, 34986), (111, 34971), (121, 34923),

Gene: Agent47_42 Start: 34530, Stop: 34129, Start Num: 52

Candidate Starts for Agent47_42:

(Start: 52 @34530 has 7 MA's), (Start: 55 @34524 has 14 MA's), (Start: 62 @34485 has 1 MA's), (Start: 65 @34473 has 3 MA's), (68, 34446), (81, 34344), (84, 34332), (90, 34281), (104, 34221),

Gene: Ageofdapage_45 Start: 35950, Stop: 35573, Start Num: 58

Candidate Starts for Ageofdapage_45:

(32, 36001), (Start: 58 @35950 has 91 MA's), (Start: 62 @35914 has 1 MA's), (72, 35860), (73, 35854), (102, 35662), (111, 35647), (121, 35599),

Gene: AlishaPH_43 Start: 35250, Stop: 34873, Start Num: 58

Candidate Starts for AlishaPH_43:

(Start: 58 @35250 has 91 MA's), (Start: 62 @35217 has 1 MA's), (67, 35190), (72, 35163), (73, 35157), (111, 34947), (121, 34899),

Gene: AlleyCat_42 Start: 34384, Stop: 33980, Start Num: 52

Candidate Starts for AlleyCat_42:

(Start: 52 @34384 has 7 MA's), (Start: 55 @34378 has 14 MA's), (Start: 62 @34339 has 1 MA's), (Start: 65 @34327 has 3 MA's), (68, 34300), (84, 34186), (90, 34135), (104, 34075), (125, 33985),

Gene: Amelie_38 Start: 34527, Stop: 34129, Start Num: 49

Candidate Starts for Amelie_38:

(33, 34566), (Start: 49 @34527 has 12 MA's), (73, 34431), (110, 34206), (112, 34200),

Gene: Amgine_43 Start: 36096, Stop: 35581, Start Num: 16

Candidate Starts for Amgine_43:

(Start: 16 @36096 has 1 MA's), (18, 36090), (Start: 59 @35973 has 16 MA's), (Start: 62 @35943 has 1 MA's), (67, 35916), (73, 35883), (74, 35862), (75, 35856), (79, 35820), (83, 35802), (90, 35745), (108, 35673), (121, 35607), (125, 35586),

Gene: Aminay_46 Start: 36466, Stop: 36146, Start Num: 62

Candidate Starts for Aminay_46:

(Start: 55 @36508 has 14 MA's), (61, 36478), (Start: 62 @36466 has 1 MA's), (63, 36463), (73, 36406), (82, 36328), (87, 36298), (89, 36283), (105, 36214),

Gene: Amohndition_45 Start: 36010, Stop: 35639, Start Num: 59

Candidate Starts for Amohndition_45:

(Start: 59 @36010 has 16 MA's), (Start: 62 @35980 has 1 MA's), (73, 35920), (76, 35878), (79, 35857), (83, 35839), (87, 35812), (89, 35797), (90, 35782), (93, 35761), (96, 35740), (118, 35680), (121,

35665),

Gene: Anaya_45 Start: 35589, Stop: 35209, Start Num: 58

Candidate Starts for Anaya_45:

(32, 35640), (Start: 58 @35589 has 91 MA's), (Start: 62 @35553 has 1 MA's), (73, 35493), (102, 35298), (111, 35283), (121, 35235),

Gene: Angelica_43 Start: 35209, Stop: 34829, Start Num: 58

Candidate Starts for Angelica_43:

(32, 35260), (Start: 58 @35209 has 91 MA's), (Start: 62 @35173 has 1 MA's), (73, 35113), (102, 34918), (111, 34903), (121, 34855),

Gene: Anma_45 Start: 35877, Stop: 35500, Start Num: 58

Candidate Starts for Anma_45:

(32, 35928), (Start: 58 @35877 has 91 MA's), (Start: 62 @35841 has 1 MA's), (73, 35781), (111, 35574), (121, 35526),

Gene: Apocalypse_46 Start: 35992, Stop: 35615, Start Num: 58

Candidate Starts for Apocalypse_46:

(Start: 58 @35992 has 91 MA's), (67, 35932), (72, 35905), (73, 35899), (75, 35872), (111, 35689), (121, 35641),

Gene: Applecrisp_42 Start: 35470, Stop: 35078, Start Num: 59

Candidate Starts for Applecrisp_42:

(Start: 59 @35470 has 16 MA's), (Start: 62 @35440 has 1 MA's), (67, 35413), (73, 35380), (74, 35359), (75, 35353), (79, 35317), (83, 35299), (90, 35242), (108, 35170), (121, 35104), (125, 35083),

Gene: Asayake_43 Start: 35293, Stop: 34913, Start Num: 58

Candidate Starts for Asayake_43:

(36, 35329), (Start: 58 @35293 has 91 MA's), (Start: 62 @35257 has 1 MA's), (73, 35197), (93, 35038), (111, 34987), (121, 34939),

Gene: Atiba_43 Start: 34941, Stop: 34561, Start Num: 58

Candidate Starts for Atiba_43:

(36, 34977), (Start: 58 @34941 has 91 MA's), (Start: 62 @34905 has 1 MA's), (73, 34845), (111, 34635), (121, 34587),

Gene: BEEST_43 Start: 35293, Stop: 34913, Start Num: 58

Candidate Starts for BEEST_43:

(36, 35329), (Start: 58 @35293 has 91 MA's), (Start: 62 @35257 has 1 MA's), (73, 35197), (93, 35038), (111, 34987), (121, 34939),

Gene: BGlluviae_43 Start: 35096, Stop: 34716, Start Num: 58

Candidate Starts for BGlluviae_43:

(36, 35132), (Start: 58 @35096 has 91 MA's), (Start: 62 @35060 has 1 MA's), (73, 35000), (93, 34841), (111, 34790), (121, 34742),

Gene: BaghaKamala_42 Start: 34415, Stop: 34038, Start Num: 58

Candidate Starts for BaghaKamala_42:

(Start: 58 @34415 has 91 MA's), (Start: 62 @34382 has 1 MA's), (67, 34355), (72, 34328), (73, 34322), (111, 34112), (121, 34064),

Gene: BananenDer11_42 Start: 34485, Stop: 34090, Start Num: 55

Candidate Starts for BananenDer11_42:

(Start: 52 @34491 has 7 MA's), (Start: 55 @34485 has 14 MA's), (Start: 62 @34446 has 1 MA's),
(Start: 65 @34434 has 3 MA's), (68, 34407), (81, 34305), (84, 34293), (90, 34242), (104, 34182),

Gene: BarrelRoll_43 Start: 34964, Stop: 34584, Start Num: 58

Candidate Starts for BarrelRoll_43:

(36, 35000), (Start: 58 @34964 has 91 MA's), (Start: 62 @34928 has 1 MA's), (73, 34868), (111,
34658), (121, 34610),

Gene: Beezoo_45 Start: 35940, Stop: 35563, Start Num: 58

Candidate Starts for Beezoo_45:

(32, 35991), (Start: 58 @35940 has 91 MA's), (Start: 62 @35904 has 1 MA's), (73, 35844), (111,
35637), (121, 35589),

Gene: Bella96_44 Start: 35832, Stop: 35455, Start Num: 58

Candidate Starts for Bella96_44:

(32, 35883), (Start: 58 @35832 has 91 MA's), (Start: 62 @35796 has 1 MA's), (73, 35736), (111,
35529), (121, 35481),

Gene: Belladonna_43 Start: 35096, Stop: 34716, Start Num: 58

Candidate Starts for Belladonna_43:

(36, 35132), (Start: 58 @35096 has 91 MA's), (Start: 62 @35060 has 1 MA's), (73, 35000), (93, 34841),
(111, 34790), (121, 34742),

Gene: Biglebops_38 Start: 34527, Stop: 34129, Start Num: 49

Candidate Starts for Biglebops_38:

(33, 34566), (Start: 49 @34527 has 12 MA's), (73, 34431), (110, 34206), (112, 34200),

Gene: Blizzard_43 Start: 35293, Stop: 34913, Start Num: 58

Candidate Starts for Blizzard_43:

(36, 35329), (Start: 58 @35293 has 91 MA's), (Start: 62 @35257 has 1 MA's), (73, 35197), (93, 35038),
(111, 34987), (121, 34939),

Gene: Boiiii_43 Start: 35295, Stop: 34915, Start Num: 58

Candidate Starts for Boiiii_43:

(36, 35331), (Start: 58 @35295 has 91 MA's), (Start: 62 @35259 has 1 MA's), (73, 35199), (93, 35040),
(111, 34989), (121, 34941),

Gene: BoostSeason_46 Start: 36618, Stop: 36250, Start Num: 58

Candidate Starts for BoostSeason_46:

(Start: 58 @36618 has 91 MA's), (Start: 62 @36582 has 1 MA's), (73, 36522), (78, 36462), (88, 36402),
(91, 36372), (94, 36360), (101, 36330), (120, 36276),

Gene: Bryler_46 Start: 34876, Stop: 34463, Start Num: 46

Candidate Starts for Bryler_46:

(31, 34921), (Start: 46 @34876 has 2 MA's), (Start: 59 @34855 has 16 MA's), (Start: 62 @34825 has 1
MA's), (79, 34702), (89, 34642), (90, 34627), (113, 34528), (114, 34519), (121, 34489),

Gene: CREW_43 Start: 35096, Stop: 34716, Start Num: 58

Candidate Starts for CREW_43:

(36, 35132), (Start: 58 @35096 has 91 MA's), (Start: 62 @35060 has 1 MA's), (73, 35000), (93, 34841),
(111, 34790), (121, 34742),

Gene: Cain_46 Start: 34864, Stop: 34451, Start Num: 46

Candidate Starts for Cain_46:

(31, 34909), (Start: 46 @34864 has 2 MA's), (Start: 59 @34843 has 16 MA's), (Start: 62 @34813 has 1 MA's), (79, 34690), (89, 34630), (90, 34615), (113, 34516), (114, 34507), (121, 34477),

Gene: CallaLilly_43 Start: 35019, Stop: 34639, Start Num: 58

Candidate Starts for CallaLilly_43:

(36, 35055), (Start: 58 @35019 has 91 MA's), (Start: 62 @34983 has 1 MA's), (73, 34923), (93, 34764), (111, 34713), (121, 34665),

Gene: Capricorn_43 Start: 35096, Stop: 34716, Start Num: 58

Candidate Starts for Capricorn_43:

(36, 35132), (Start: 58 @35096 has 91 MA's), (Start: 62 @35060 has 1 MA's), (73, 35000), (93, 34841), (111, 34790), (121, 34742),

Gene: CaseJules_44 Start: 35293, Stop: 34913, Start Num: 58

Candidate Starts for CaseJules_44:

(36, 35329), (Start: 58 @35293 has 91 MA's), (Start: 62 @35257 has 1 MA's), (73, 35197), (93, 35038), (111, 34987), (121, 34939),

Gene: Chancellor_47 Start: 36038, Stop: 35679, Start Num: 53

Candidate Starts for Chancellor_47:

(27, 36107), (40, 36062), (Start: 53 @36038 has 12 MA's), (Start: 56 @36032 has 5 MA's), (Start: 62 @35993 has 1 MA's), (71, 35942), (78, 35873), (83, 35852), (86, 35831), (88, 35813), (116, 35711),

Gene: Chavito_46 Start: 36294, Stop: 35896, Start Num: 49

Candidate Starts for Chavito_46:

(Start: 49 @36294 has 12 MA's), (73, 36195), (90, 36057), (106, 35991), (112, 35964), (117, 35940), (123, 35907),

Gene: CheetoDust_42 Start: 34466, Stop: 34089, Start Num: 58

Candidate Starts for CheetoDust_42:

(44, 34490), (Start: 58 @34466 has 91 MA's), (Start: 62 @34430 has 1 MA's), (66, 34415), (73, 34370), (111, 34163), (121, 34115),

Gene: Cheetobro_47 Start: 36035, Stop: 35676, Start Num: 53

Candidate Starts for Cheetobro_47:

(27, 36104), (40, 36059), (Start: 53 @36035 has 12 MA's), (Start: 56 @36029 has 5 MA's), (Start: 62 @35990 has 1 MA's), (71, 35939), (78, 35870), (83, 35849), (86, 35828), (88, 35810), (116, 35708),

Gene: Chris_45 Start: 35677, Stop: 35300, Start Num: 60

Candidate Starts for Chris_45:

(19, 35785), (Start: 60 @35677 has 15 MA's), (Start: 62 @35647 has 1 MA's), (66, 35632), (73, 35587), (74, 35566), (79, 35524), (90, 35449), (111, 35374), (118, 35341), (121, 35326),

Gene: Clipper_46 Start: 35611, Stop: 35234, Start Num: 58

Candidate Starts for Clipper_46:

(Start: 58 @35611 has 91 MA's), (Start: 62 @35578 has 1 MA's), (67, 35551), (72, 35524), (73, 35518), (111, 35308), (121, 35260),

Gene: Collard_41 Start: 34491, Stop: 34090, Start Num: 52

Candidate Starts for Collard_41:

(Start: 52 @34491 has 7 MA's), (Start: 55 @34485 has 14 MA's), (Start: 62 @34446 has 1 MA's),
(Start: 65 @34434 has 3 MA's), (68, 34407), (81, 34305), (84, 34293), (90, 34242), (104, 34182),

Gene: CrimD_43 Start: 35221, Stop: 34844, Start Num: 58

Candidate Starts for CrimD_43:

(32, 35272), (Start: 58 @35221 has 91 MA's), (Start: 62 @35185 has 1 MA's), (66, 35170), (73, 35125),
(111, 34918), (121, 34870),

Gene: Curiosium_46 Start: 34128, Stop: 33742, Start Num: 58

Candidate Starts for Curiosium_46:

(12, 34254), (15, 34245), (25, 34209), (26, 34203), (31, 34188), (Start: 58 @34128 has 91 MA's), (73,
34035), (75, 34008), (111, 33837), (124, 33768),

Gene: Dadosky_42 Start: 34386, Stop: 33982, Start Num: 52

Candidate Starts for Dadosky_42:

(Start: 52 @34386 has 7 MA's), (Start: 55 @34380 has 14 MA's), (Start: 62 @34341 has 1 MA's),
(Start: 65 @34329 has 3 MA's), (68, 34302), (84, 34188), (90, 34137), (104, 34077), (125, 33987),

Gene: Dalmuri_43 Start: 35096, Stop: 34716, Start Num: 58

Candidate Starts for Dalmuri_43:

(36, 35132), (Start: 58 @35096 has 91 MA's), (Start: 62 @35060 has 1 MA's), (73, 35000), (93, 34841),
(111, 34790), (121, 34742),

Gene: DartGoblin_45 Start: 35826, Stop: 35449, Start Num: 58

Candidate Starts for DartGoblin_45:

(32, 35877), (Start: 58 @35826 has 91 MA's), (Start: 62 @35790 has 1 MA's), (73, 35730), (111,
35523), (121, 35475),

Gene: DarthP_45 Start: 35904, Stop: 35545, Start Num: 59

Candidate Starts for DarthP_45:

(Start: 59 @35904 has 16 MA's), (Start: 62 @35874 has 1 MA's), (73, 35814), (76, 35772),

Gene: Dartin_45 Start: 35648, Stop: 35256, Start Num: 49

Candidate Starts for Dartin_45:

(Start: 49 @35648 has 12 MA's), (70, 35564), (73, 35549), (90, 35411), (94, 35387), (112, 35324),
(117, 35300), (123, 35267),

Gene: Deby_43 Start: 35225, Stop: 34845, Start Num: 58

Candidate Starts for Deby_43:

(32, 35276), (Start: 58 @35225 has 91 MA's), (Start: 62 @35189 has 1 MA's), (73, 35129), (102,
34934), (111, 34919), (121, 34871),

Gene: Devera_47 Start: 35759, Stop: 35382, Start Num: 58

Candidate Starts for Devera_47:

(Start: 58 @35759 has 91 MA's), (Start: 62 @35723 has 1 MA's), (73, 35663), (93, 35504), (111,
35456), (121, 35408),

Gene: DismalFunk_46 Start: 37051, Stop: 36680, Start Num: 58

Candidate Starts for DismalFunk_46:

(32, 37105), (Start: 58 @37051 has 91 MA's), (Start: 62 @37015 has 1 MA's), (66, 37000), (73, 36955),
(78, 36895), (88, 36835), (91, 36805), (94, 36793), (101, 36763), (120, 36706),

Gene: DismalStressor_46 Start: 37051, Stop: 36680, Start Num: 58

Candidate Starts for DismalStressor_46:

(32, 37105), (Start: 58 @37051 has 91 MA's), (Start: 62 @37015 has 1 MA's), (66, 37000), (73, 36955), (78, 36895), (88, 36835), (91, 36805), (94, 36793), (101, 36763), (120, 36706),

Gene: Dole_46 Start: 35761, Stop: 35384, Start Num: 58

Candidate Starts for Dole_46:

(Start: 58 @35761 has 91 MA's), (Start: 62 @35725 has 1 MA's), (73, 35665), (93, 35506), (111, 35458), (121, 35410),

Gene: DoubleChamp_41 Start: 34485, Stop: 34090, Start Num: 55

Candidate Starts for DoubleChamp_41:

(Start: 52 @34491 has 7 MA's), (Start: 55 @34485 has 14 MA's), (Start: 62 @34446 has 1 MA's), (Start: 65 @34434 has 3 MA's), (68, 34407), (81, 34305), (84, 34293), (90, 34242), (104, 34182),

Gene: DrHayes_44 Start: 35877, Stop: 35500, Start Num: 58

Candidate Starts for DrHayes_44:

(32, 35928), (Start: 58 @35877 has 91 MA's), (Start: 62 @35841 has 1 MA's), (73, 35781), (111, 35574), (121, 35526),

Gene: Durfee_43 Start: 35293, Stop: 34913, Start Num: 58

Candidate Starts for Durfee_43:

(36, 35329), (Start: 58 @35293 has 91 MA's), (Start: 62 @35257 has 1 MA's), (73, 35197), (93, 35038), (111, 34987), (121, 34939),

Gene: Edugator_41 Start: 34805, Stop: 34407, Start Num: 55

Candidate Starts for Edugator_41:

(Start: 52 @34811 has 7 MA's), (Start: 55 @34805 has 14 MA's), (Start: 62 @34766 has 1 MA's), (Start: 65 @34754 has 3 MA's), (68, 34727), (84, 34613), (90, 34562), (104, 34502), (125, 34412),

Gene: Efra2_46 Start: 35018, Stop: 34629, Start Num: 57

Candidate Starts for Efra2_46:

(11, 35156), (13, 35150), (14, 35147), (17, 35138), (20, 35123), (Start: 57 @35018 has 2 MA's), (Start: 60 @35012 has 15 MA's), (73, 34922), (79, 34859), (86, 34820), (90, 34784), (106, 34724), (108, 34718), (125, 34634),

Gene: Ekdilam_42 Start: 35465, Stop: 35106, Start Num: 59

Candidate Starts for Ekdilam_42:

(24, 35549), (Start: 59 @35465 has 16 MA's), (Start: 62 @35435 has 1 MA's), (Start: 65 @35423 has 3 MA's), (73, 35375), (79, 35312), (118, 35147), (121, 35132),

Gene: Ellie_41 Start: 35161, Stop: 34769, Start Num: 59

Candidate Starts for Ellie_41:

(18, 35278), (Start: 59 @35161 has 16 MA's), (Start: 62 @35131 has 1 MA's), (73, 35071), (74, 35050), (75, 35044), (79, 35008), (83, 34990), (90, 34933), (108, 34861), (121, 34795), (125, 34774),

Gene: Emerson_44 Start: 34972, Stop: 34592, Start Num: 58

Candidate Starts for Emerson_44:

(36, 35008), (Start: 58 @34972 has 91 MA's), (Start: 62 @34936 has 1 MA's), (73, 34876), (111, 34666), (121, 34618),

Gene: Enkosi_41 Start: 37140, Stop: 36742, Start Num: 49

Candidate Starts for Enkosi_41:

(33, 37179), (Start: 49 @37140 has 12 MA's), (73, 37044), (110, 36819), (112, 36813),

Gene: Eponine_49 Start: 36791, Stop: 36432, Start Num: 53

Candidate Starts for Eponine_49:

(27, 36860), (40, 36815), (Start: 53 @36791 has 12 MA's), (Start: 56 @36785 has 5 MA's), (Start: 62 @36746 has 1 MA's), (71, 36695), (78, 36626), (83, 36605), (86, 36584), (88, 36566), (116, 36464),

Gene: Fefferhead_43 Start: 35112, Stop: 34720, Start Num: 59

Candidate Starts for Fefferhead_43:

(18, 35229), (Start: 59 @35112 has 16 MA's), (Start: 62 @35082 has 1 MA's), (73, 35022), (74, 35001), (75, 34995), (79, 34959), (83, 34941), (90, 34884), (108, 34812), (121, 34746), (125, 34725),

Gene: Feyre_41 Start: 34186, Stop: 33836, Start Num: 65

Candidate Starts for Feyre_41:

(Start: 65 @34186 has 3 MA's), (84, 34045), (90, 33994), (104, 33934),

Gene: Findley_46 Start: 37044, Stop: 36673, Start Num: 58

Candidate Starts for Findley_46:

(32, 37098), (Start: 58 @37044 has 91 MA's), (Start: 62 @37008 has 1 MA's), (66, 36993), (73, 36948), (78, 36888), (88, 36828), (91, 36798), (94, 36786), (101, 36756), (120, 36699),

Gene: Fionnbharth_47 Start: 36189, Stop: 35830, Start Num: 53

Candidate Starts for Fionnbharth_47:

(10, 36321), (27, 36258), (28, 36255), (40, 36213), (Start: 53 @36189 has 12 MA's), (Start: 56 @36183 has 5 MA's), (Start: 62 @36144 has 1 MA's), (71, 36093), (78, 36024), (83, 36003), (86, 35982), (88, 35964), (116, 35862),

Gene: Ganymede_44 Start: 35413, Stop: 35036, Start Num: 58

Candidate Starts for Ganymede_44:

(32, 35464), (Start: 58 @35413 has 91 MA's), (Start: 62 @35377 has 1 MA's), (73, 35317), (93, 35158), (111, 35110), (121, 35062),

Gene: Gengar_41 Start: 34347, Stop: 33946, Start Num: 55

Candidate Starts for Gengar_41:

(Start: 55 @34347 has 14 MA's), (Start: 65 @34296 has 3 MA's), (84, 34155), (90, 34104), (104, 34044),

Gene: Geraldini_45 Start: 36027, Stop: 35650, Start Num: 58

Candidate Starts for Geraldini_45:

(Start: 58 @36027 has 91 MA's), (Start: 62 @35994 has 1 MA's), (67, 35967), (72, 35940), (73, 35934), (111, 35724), (121, 35676),

Gene: Guanica15_46 Start: 34969, Stop: 34586, Start Num: 60

Candidate Starts for Guanica15_46:

(11, 35113), (13, 35107), (14, 35104), (17, 35095), (20, 35080), (Start: 57 @34975 has 2 MA's), (Start: 60 @34969 has 15 MA's), (73, 34879), (79, 34816), (86, 34777), (90, 34741), (106, 34681), (108, 34675), (125, 34591),

Gene: Guillsminger_42 Start: 34318, Stop: 33917, Start Num: 55

Candidate Starts for Guillsminger_42:

(Start: 55 @34318 has 14 MA's), (Start: 65 @34267 has 3 MA's), (84, 34126), (90, 34075), (104, 34015),

Gene: Hammy_45 Start: 35892, Stop: 35533, Start Num: 59

Candidate Starts for Hammy_45:

(Start: 59 @35892 has 16 MA's), (73, 35802), (76, 35760),

Gene: HedwigODU_43 Start: 34981, Stop: 34601, Start Num: 58

Candidate Starts for HedwigODU_43:

(36, 35017), (Start: 58 @34981 has 91 MA's), (Start: 62 @34945 has 1 MA's), (73, 34885), (111, 34675), (121, 34627),

Gene: Heftyboy_41 Start: 34467, Stop: 34066, Start Num: 55

Candidate Starts for Heftyboy_41:

(21, 34566), (34, 34515), (38, 34503), (Start: 55 @34467 has 14 MA's), (Start: 65 @34416 has 3 MA's), (84, 34275), (90, 34224), (104, 34164), (114, 34116),

Gene: Homura_43 Start: 35096, Stop: 34716, Start Num: 58

Candidate Starts for Homura_43:

(36, 35132), (Start: 58 @35096 has 91 MA's), (Start: 62 @35060 has 1 MA's), (73, 35000), (93, 34841), (111, 34790), (121, 34742),

Gene: Hurricane_46 Start: 35646, Stop: 35155, Start Num: 37

Candidate Starts for Hurricane_46:

(Start: 37 @35646 has 5 MA's), (Start: 60 @35613 has 15 MA's), (79, 35457), (88, 35400), (98, 35334), (126, 35226), (129, 35208), (130, 35166),

Gene: Hyperbowlee_43 Start: 35293, Stop: 34913, Start Num: 58

Candidate Starts for Hyperbowlee_43:

(36, 35329), (Start: 58 @35293 has 91 MA's), (Start: 62 @35257 has 1 MA's), (73, 35197), (93, 35038), (111, 34987), (121, 34939),

Gene: Illumine_46 Start: 35761, Stop: 35384, Start Num: 58

Candidate Starts for Illumine_46:

(Start: 58 @35761 has 91 MA's), (Start: 62 @35725 has 1 MA's), (73, 35665), (93, 35506), (111, 35458), (121, 35410),

Gene: Inky_43 Start: 35096, Stop: 34716, Start Num: 58

Candidate Starts for Inky_43:

(36, 35132), (Start: 58 @35096 has 91 MA's), (Start: 62 @35060 has 1 MA's), (73, 35000), (93, 34841), (111, 34790), (121, 34742),

Gene: InvictusManeo_41 Start: 34534, Stop: 34133, Start Num: 52

Candidate Starts for InvictusManeo_41:

(Start: 52 @34534 has 7 MA's), (Start: 55 @34528 has 14 MA's), (Start: 62 @34489 has 1 MA's), (Start: 65 @34477 has 3 MA's), (68, 34450), (81, 34348), (84, 34336), (90, 34285), (104, 34225),

Gene: JAWS_43 Start: 34970, Stop: 34590, Start Num: 58

Candidate Starts for JAWS_43:

(36, 35006), (Start: 58 @34970 has 91 MA's), (Start: 62 @34934 has 1 MA's), (73, 34874), (93, 34715), (111, 34664), (121, 34616),

Gene: Jarvi_43 Start: 35096, Stop: 34716, Start Num: 58

Candidate Starts for Jarvi_43:

(36, 35132), (Start: 58 @35096 has 91 MA's), (Start: 62 @35060 has 1 MA's), (73, 35000), (93, 34841), (111, 34790), (121, 34742),

Gene: Jayhawk_44 Start: 34979, Stop: 34599, Start Num: 58

Candidate Starts for Jayhawk_44:

(36, 35015), (Start: 58 @34979 has 91 MA's), (Start: 62 @34943 has 1 MA's), (73, 34883), (111, 34673), (121, 34625),

Gene: Jeckyll_43 Start: 35096, Stop: 34716, Start Num: 58

Candidate Starts for Jeckyll_43:

(36, 35132), (Start: 58 @35096 has 91 MA's), (Start: 62 @35060 has 1 MA's), (73, 35000), (93, 34841), (111, 34790), (121, 34742),

Gene: Joy99_43 Start: 35025, Stop: 34645, Start Num: 58

Candidate Starts for Joy99_43:

(36, 35061), (Start: 58 @35025 has 91 MA's), (Start: 62 @34989 has 1 MA's), (73, 34929), (93, 34770), (111, 34719), (121, 34671),

Gene: Juliette_49 Start: 36262, Stop: 35903, Start Num: 53

Candidate Starts for Juliette_49:

(27, 36331), (40, 36286), (Start: 53 @36262 has 12 MA's), (Start: 56 @36256 has 5 MA's), (Start: 62 @36217 has 1 MA's), (71, 36166), (78, 36097), (83, 36076), (86, 36055), (88, 36037), (116, 35935),

Gene: Keshu_47 Start: 35704, Stop: 35282, Start Num: 37

Candidate Starts for Keshu_47:

(Start: 37 @35704 has 5 MA's), (Start: 60 @35671 has 15 MA's), (79, 35515), (88, 35458), (121, 35308),

Gene: KiSi_47 Start: 36100, Stop: 35729, Start Num: 60

Candidate Starts for KiSi_47:

(7, 36259), (8, 36256), (9, 36253), (41, 36133), (Start: 60 @36100 has 15 MA's), (Start: 62 @36070 has 1 MA's), (63, 36067), (73, 36010), (77, 35965), (79, 35947), (90, 35872), (111, 35800), (121, 35755),

Gene: Kratio_40 Start: 34085, Stop: 33681, Start Num: 52

Candidate Starts for Kratio_40:

(Start: 52 @34085 has 7 MA's), (Start: 55 @34079 has 14 MA's), (Start: 62 @34040 has 1 MA's), (Start: 65 @34028 has 3 MA's), (68, 34001), (72, 33980), (81, 33899), (84, 33887), (90, 33836), (104, 33776),

Gene: Krueger_49 Start: 35862, Stop: 35461, Start Num: 48

Candidate Starts for Krueger_49:

(Start: 48 @35862 has 1 MA's), (Start: 60 @35850 has 15 MA's), (Start: 62 @35820 has 1 MA's), (76, 35718), (79, 35697), (85, 35664), (90, 35622), (95, 35586), (119, 35493), (121, 35487),

Gene: Larva_42 Start: 34253, Stop: 33849, Start Num: 52

Candidate Starts for Larva_42:

(Start: 52 @34253 has 7 MA's), (Start: 55 @34247 has 14 MA's), (Start: 62 @34208 has 1 MA's), (Start: 65 @34196 has 3 MA's), (68, 34169), (84, 34055), (90, 34004), (104, 33944), (125, 33854),

Gene: LastHope_46 Start: 34433, Stop: 34047, Start Num: 58

Candidate Starts for LastHope_46:

(25, 34514), (26, 34508), (31, 34493), (Start: 58 @34433 has 91 MA's), (73, 34340), (75, 34313), (111, 34142), (124, 34073),

Gene: LaterM_44 Start: 35874, Stop: 35497, Start Num: 58

Candidate Starts for LaterM_44:

(32, 35925), (Start: 58 @35874 has 91 MA's), (Start: 62 @35838 has 1 MA's), (72, 35784), (73, 35778), (102, 35586), (111, 35571), (121, 35523),

Gene: Lavahound_42 Start: 36094, Stop: 35702, Start Num: 59

Candidate Starts for Lavahound_42:

(Start: 59 @36094 has 16 MA's), (Start: 62 @36064 has 1 MA's), (67, 36037), (73, 36004), (74, 35983), (75, 35977), (79, 35941), (83, 35923), (90, 35866), (108, 35794), (121, 35728), (125, 35707),

Gene: LeMond_47 Start: 36084, Stop: 35710, Start Num: 60

Candidate Starts for LeMond_47:

(24, 36180), (42, 36117), (Start: 60 @36084 has 15 MA's), (Start: 62 @36054 has 1 MA's), (63, 36051), (73, 35994), (77, 35949), (79, 35931), (90, 35856), (111, 35781), (121, 35736),

Gene: Lea83_46 Start: 35646, Stop: 35257, Start Num: 60

Candidate Starts for Lea83_46:

(22, 35736), (29, 35709), (Start: 37 @35679 has 5 MA's), (Start: 60 @35646 has 15 MA's), (88, 35433), (90, 35415), (98, 35367), (121, 35283),

Gene: Lebo14_47 Start: 36210, Stop: 35857, Start Num: 56

Candidate Starts for Lebo14_47:

(27, 36285), (40, 36240), (Start: 53 @36216 has 12 MA's), (Start: 56 @36210 has 5 MA's), (Start: 62 @36171 has 1 MA's), (71, 36120), (78, 36051), (83, 36030), (86, 36009), (88, 35991), (116, 35889),

Gene: Leston_41 Start: 34396, Stop: 34046, Start Num: 65

Candidate Starts for Leston_41:

(Start: 55 @34447 has 14 MA's), (Start: 65 @34396 has 3 MA's), (84, 34255), (90, 34204), (104, 34144),

Gene: LilDirt_41 Start: 34286, Stop: 33891, Start Num: 55

Candidate Starts for LilDirt_41:

(Start: 52 @34292 has 7 MA's), (Start: 55 @34286 has 14 MA's), (Start: 62 @34247 has 1 MA's), (Start: 65 @34235 has 3 MA's), (68, 34208), (81, 34106), (84, 34094), (90, 34043), (104, 33983),

Gene: LindNT_43 Start: 35164, Stop: 34787, Start Num: 58

Candidate Starts for LindNT_43:

(32, 35215), (Start: 58 @35164 has 91 MA's), (Start: 62 @35128 has 1 MA's), (66, 35113), (73, 35068), (111, 34861), (121, 34813),

Gene: Llorens_43 Start: 35096, Stop: 34716, Start Num: 58

Candidate Starts for Llorens_43:

(36, 35132), (Start: 58 @35096 has 91 MA's), (Start: 62 @35060 has 1 MA's), (73, 35000), (93, 34841), (111, 34790), (121, 34742),

Gene: Lunahalos_43 Start: 35096, Stop: 34716, Start Num: 58

Candidate Starts for Lunahalos_43:

(36, 35132), (Start: 58 @35096 has 91 MA's), (Start: 62 @35060 has 1 MA's), (73, 35000), (93, 34841), (111, 34790), (121, 34742),

Gene: MacnCheese_47 Start: 36557, Stop: 36177, Start Num: 60

Candidate Starts for MacnCheese_47:

(22, 36650), (Start: 37 @36590 has 5 MA's), (Start: 60 @36557 has 15 MA's), (72, 36473), (79, 36404), (90, 36329), (122, 36191),

Gene: Malthus_48 Start: 35950, Stop: 35591, Start Num: 53

Candidate Starts for Malthus_48:

(27, 36019), (40, 35974), (Start: 53 @35950 has 12 MA's), (Start: 56 @35944 has 5 MA's), (Start: 62 @35905 has 1 MA's), (71, 35854), (78, 35785), (83, 35764), (86, 35743), (88, 35725), (116, 35623),

Gene: Marcoliusprime_46 Start: 37051, Stop: 36680, Start Num: 58

Candidate Starts for Marcoliusprime_46:

(32, 37105), (Start: 58 @37051 has 91 MA's), (Start: 62 @37015 has 1 MA's), (66, 37000), (73, 36955), (78, 36895), (88, 36835), (91, 36805), (94, 36793), (101, 36763), (120, 36706),

Gene: MarkPhew_46 Start: 35518, Stop: 35147, Start Num: 60

Candidate Starts for MarkPhew_46:

(35, 35566), (39, 35554), (Start: 60 @35518 has 15 MA's), (73, 35428), (74, 35407), (79, 35365), (90, 35290), (93, 35269), (103, 35233), (112, 35212), (121, 35173),

Gene: Marshawn_46 Start: 35965, Stop: 35570, Start Num: 50

Candidate Starts for Marshawn_46:

(Start: 50 @35965 has 1 MA's), (Start: 65 @35914 has 3 MA's), (73, 35866), (77, 35821), (79, 35803), (90, 35728), (106, 35665), (121, 35599), (125, 35578),

Gene: McMater_45 Start: 35648, Stop: 35256, Start Num: 49

Candidate Starts for McMater_45:

(Start: 49 @35648 has 12 MA's), (70, 35564), (73, 35549), (90, 35411), (94, 35387), (112, 35324), (117, 35300), (123, 35267),

Gene: Mdavu_39 Start: 34516, Stop: 34118, Start Num: 49

Candidate Starts for Mdavu_39:

(33, 34555), (Start: 49 @34516 has 12 MA's), (73, 34420), (110, 34195), (112, 34189),

Gene: MeaningOfLife_44 Start: 35907, Stop: 35530, Start Num: 58

Candidate Starts for MeaningOfLife_44:

(32, 35958), (Start: 58 @35907 has 91 MA's), (Start: 62 @35871 has 1 MA's), (73, 35811), (93, 35652), (111, 35604), (121, 35556),

Gene: Megsy_44 Start: 35223, Stop: 34846, Start Num: 58

Candidate Starts for Megsy_44:

(32, 35274), (Start: 58 @35223 has 91 MA's), (Start: 62 @35187 has 1 MA's), (66, 35172), (73, 35127), (111, 34920), (121, 34872),

Gene: Milly_46 Start: 37024, Stop: 36653, Start Num: 58

Candidate Starts for Milly_46:

(32, 37078), (Start: 58 @37024 has 91 MA's), (Start: 62 @36988 has 1 MA's), (66, 36973), (73, 36928), (78, 36868), (88, 36808), (91, 36778), (94, 36766), (101, 36736), (120, 36679),

Gene: Miryou_43 Start: 36650, Stop: 36249, Start Num: 55

Candidate Starts for Miryou_43:

(Start: 55 @36650 has 14 MA's), (Start: 65 @36599 has 3 MA's), (84, 36458), (90, 36407), (104, 36347),

Gene: Mitti_47 Start: 36126, Stop: 35767, Start Num: 53

Candidate Starts for Mitti_47:

(27, 36195), (40, 36150), (Start: 53 @36126 has 12 MA's), (Start: 56 @36120 has 5 MA's), (Start: 62 @36081 has 1 MA's), (71, 36030), (78, 35961), (83, 35940), (86, 35919), (88, 35901), (116, 35799),

Gene: Mufasa_46 Start: 36609, Stop: 36241, Start Num: 58

Candidate Starts for Mufasa_46:

(Start: 58 @36609 has 91 MA's), (Start: 62 @36573 has 1 MA's), (73, 36513), (78, 36453), (88, 36393), (91, 36363), (94, 36351), (101, 36321), (120, 36267),

Gene: Murucutumbu_44 Start: 35967, Stop: 35590, Start Num: 58

Candidate Starts for Murucutumbu_44:

(32, 36018), (Start: 58 @35967 has 91 MA's), (Start: 62 @35931 has 1 MA's), (72, 35877), (73, 35871), (102, 35679), (111, 35664), (121, 35616),

Gene: Mynx_44 Start: 35298, Stop: 34921, Start Num: 58

Candidate Starts for Mynx_44:

(32, 35349), (Start: 58 @35298 has 91 MA's), (Start: 62 @35262 has 1 MA's), (66, 35247), (73, 35202), (111, 34995), (121, 34947),

Gene: Neighly_42 Start: 34246, Stop: 33848, Start Num: 55

Candidate Starts for Neighly_42:

(Start: 52 @34252 has 7 MA's), (Start: 55 @34246 has 14 MA's), (Start: 62 @34207 has 1 MA's), (Start: 65 @34195 has 3 MA's), (68, 34168), (84, 34054), (90, 34003), (104, 33943), (125, 33853),

Gene: Nergal_40 Start: 33595, Stop: 33221, Start Num: 58

Candidate Starts for Nergal_40:

(43, 33622), (Start: 58 @33595 has 91 MA's), (Start: 62 @33559 has 1 MA's), (67, 33532), (73, 33499), (79, 33436), (89, 33376), (93, 33340), (121, 33247), (125, 33226),

Gene: Nibb_45 Start: 35241, Stop: 34867, Start Num: 60

Candidate Starts for Nibb_45:

(45, 35265), (Start: 60 @35241 has 15 MA's), (Start: 62 @35211 has 1 MA's), (66, 35196), (73, 35151), (74, 35130), (79, 35088), (87, 35043), (90, 35013), (93, 34992), (107, 34950), (111, 34941), (118, 34908), (121, 34893),

Gene: Nikao_41 Start: 37140, Stop: 36742, Start Num: 49

Candidate Starts for Nikao_41:

(33, 37179), (Start: 49 @37140 has 12 MA's), (73, 37044), (110, 36819), (112, 36813),

Gene: Niklas_45 Start: 35707, Stop: 35315, Start Num: 49

Candidate Starts for Niklas_45:

(Start: 49 @35707 has 12 MA's), (70, 35623), (73, 35608), (94, 35446), (112, 35383), (117, 35359), (123, 35326),

Gene: November_43 Start: 35619, Stop: 35248, Start Num: 59

Candidate Starts for November_43:

(Start: 59 @35619 has 16 MA's), (Start: 62 @35589 has 1 MA's), (73, 35529), (79, 35466), (83, 35448), (87, 35421), (89, 35406), (90, 35391), (93, 35370), (96, 35349), (118, 35289), (121, 35274),

Gene: Nutello_38 Start: 34527, Stop: 34129, Start Num: 49

Candidate Starts for Nutello_38:

(33, 34566), (Start: 49 @34527 has 12 MA's), (73, 34431), (110, 34206), (112, 34200),

Gene: OkiRoe_41 Start: 34320, Stop: 33919, Start Num: 55

Candidate Starts for OkiRoe_41:

(Start: 55 @34320 has 14 MA's), (Start: 65 @34269 has 3 MA's), (84, 34128), (90, 34077), (104, 34017),

Gene: OmniCritical_46 Start: 35929, Stop: 35576, Start Num: 56

Candidate Starts for OmniCritical_46:

(27, 36004), (40, 35959), (Start: 53 @35935 has 12 MA's), (Start: 56 @35929 has 5 MA's), (Start: 62 @35890 has 1 MA's), (71, 35839), (78, 35770), (83, 35749), (86, 35728), (88, 35710), (116, 35608),

Gene: Omnicron_44 Start: 33930, Stop: 33529, Start Num: 55

Candidate Starts for Omnicron_44:

(Start: 55 @33930 has 14 MA's), (Start: 65 @33879 has 3 MA's), (68, 33852), (81, 33750), (84, 33738), (90, 33687), (104, 33627),

Gene: Oscar_47 Start: 35987, Stop: 35613, Start Num: 60

Candidate Starts for Oscar_47:

(41, 36020), (Start: 60 @35987 has 15 MA's), (Start: 62 @35957 has 1 MA's), (63, 35954), (73, 35897), (77, 35852), (79, 35834), (90, 35759), (111, 35684), (121, 35639),

Gene: Padfoot_43 Start: 35293, Stop: 34913, Start Num: 58

Candidate Starts for Padfoot_43:

(36, 35329), (Start: 58 @35293 has 91 MA's), (Start: 62 @35257 has 1 MA's), (73, 35197), (93, 35038), (111, 34987), (121, 34939),

Gene: Padpat_44 Start: 34972, Stop: 34592, Start Num: 58

Candidate Starts for Padpat_44:

(36, 35008), (Start: 58 @34972 has 91 MA's), (Start: 62 @34936 has 1 MA's), (73, 34876), (111, 34666), (121, 34618),

Gene: Paola_41 Start: 34318, Stop: 33917, Start Num: 55

Candidate Starts for Paola_41:

(Start: 55 @34318 has 14 MA's), (Start: 65 @34267 has 3 MA's), (84, 34126), (90, 34075), (104, 34015),

Gene: Peanam_45 Start: 35664, Stop: 35272, Start Num: 49

Candidate Starts for Peanam_45:

(Start: 49 @35664 has 12 MA's), (70, 35580), (73, 35565), (112, 35340), (117, 35316), (123, 35283),

Gene: Peel_43 Start: 35098, Stop: 34718, Start Num: 58

Candidate Starts for Peel_43:

(36, 35134), (Start: 58 @35098 has 91 MA's), (Start: 62 @35062 has 1 MA's), (73, 35002), (93, 34843), (111, 34792), (121, 34744),

Gene: Pharb_43 Start: 34363, Stop: 33977, Start Num: 60

Candidate Starts for Pharb_43:

(Start: 60 @34363 has 15 MA's), (Start: 62 @34333 has 1 MA's), (79, 34210), (88, 34153), (90, 34135), (98, 34087), (100, 34081), (121, 34003),

Gene: PhelpsODU_45 Start: 34877, Stop: 34485, Start Num: 59

Candidate Starts for PhelpsODU_45:

(1, 35147), (2, 35111), (3, 35096), (5, 35087), (6, 35078), (Start: 59 @34877 has 16 MA's), (Start: 62 @34847 has 1 MA's), (79, 34724), (89, 34664), (90, 34649), (113, 34550), (121, 34511),

Gene: Phrank_46 Start: 34834, Stop: 34442, Start Num: 59

Candidate Starts for Phrank_46:

(4, 35047), (6, 35035), (Start: 59 @34834 has 16 MA's), (Start: 62 @34804 has 1 MA's), (79, 34681), (85, 34648), (89, 34621), (90, 34606), (95, 34570), (114, 34498), (121, 34468),

Gene: Piatt_43 Start: 35293, Stop: 34913, Start Num: 58

Candidate Starts for Piatt_43:

(36, 35329), (Start: 58 @35293 has 91 MA's), (Start: 62 @35257 has 1 MA's), (73, 35197), (93, 35038), (111, 34987), (121, 34939),

Gene: Pisa1_43 Start: 36268, Stop: 35891, Start Num: 58

Candidate Starts for Pisa1_43:

(32, 36319), (Start: 58 @36268 has 91 MA's), (Start: 62 @36232 has 1 MA's), (66, 36217), (73, 36172), (111, 35965), (121, 35917),

Gene: Pixie_45 Start: 35157, Stop: 34735, Start Num: 37

Candidate Starts for Pixie_45:

(Start: 37 @35157 has 5 MA's), (Start: 60 @35124 has 15 MA's), (79, 34968), (88, 34911), (90, 34893), (98, 34845), (121, 34761),

Gene: Pokerus_42 Start: 35018, Stop: 34638, Start Num: 58

Candidate Starts for Pokerus_42:

(Start: 58 @35018 has 91 MA's), (Start: 62 @34985 has 1 MA's), (67, 34958), (72, 34931), (73, 34925), (111, 34712), (121, 34664),

Gene: Prithvi_44 Start: 35164, Stop: 34787, Start Num: 58

Candidate Starts for Prithvi_44:

(32, 35215), (Start: 58 @35164 has 91 MA's), (Start: 62 @35128 has 1 MA's), (66, 35113), (73, 35068), (111, 34861), (121, 34813),

Gene: Psycho_42 Start: 34326, Stop: 33979, Start Num: 65

Candidate Starts for Psycho_42:

(Start: 52 @34383 has 7 MA's), (Start: 55 @34377 has 14 MA's), (Start: 62 @34338 has 1 MA's), (Start: 65 @34326 has 3 MA's), (68, 34299), (84, 34185), (90, 34134), (104, 34074), (125, 33984),

Gene: QuincyRose_42 Start: 35413, Stop: 35036, Start Num: 58

Candidate Starts for QuincyRose_42:

(32, 35464), (Start: 58 @35413 has 91 MA's), (Start: 62 @35377 has 1 MA's), (73, 35317), (93, 35158), (111, 35110), (121, 35062),

Gene: Ramen_43 Start: 34983, Stop: 34603, Start Num: 58

Candidate Starts for Ramen_43:

(36, 35019), (Start: 58 @34983 has 91 MA's), (Start: 62 @34947 has 1 MA's), (73, 34887), (111, 34677), (121, 34629),

Gene: Rando14_43 Start: 33501, Stop: 33097, Start Num: 55

Candidate Starts for Rando14_43:

(Start: 55 @33501 has 14 MA's), (Start: 65 @33447 has 3 MA's), (90, 33255), (104, 33195),

Gene: Rapunzel97_43 Start: 34979, Stop: 34599, Start Num: 58

Candidate Starts for Rapunzel97_43:

(36, 35015), (Start: 58 @34979 has 91 MA's), (Start: 62 @34943 has 1 MA's), (73, 34883), (111, 34673), (121, 34625),

Gene: Richo_45 Start: 35648, Stop: 35256, Start Num: 49

Candidate Starts for Richo_45:

(Start: 49 @35648 has 12 MA's), (70, 35564), (73, 35549), (90, 35411), (94, 35387), (112, 35324), (117, 35300), (123, 35267),

Gene: Rosmarinus_43 Start: 35084, Stop: 34704, Start Num: 58

Candidate Starts for Rosmarinus_43:

(36, 35120), (Start: 58 @35084 has 91 MA's), (Start: 62 @35048 has 1 MA's), (73, 34988), (93, 34829), (111, 34778), (121, 34730),

Gene: Ruthiejr_48 Start: 36000, Stop: 35641, Start Num: 53

Candidate Starts for Ruthiejr_48:

(27, 36069), (40, 36024), (Start: 53 @36000 has 12 MA's), (Start: 56 @35994 has 5 MA's), (Start: 62 @35955 has 1 MA's), (71, 35904), (78, 35835), (83, 35814), (86, 35793), (88, 35775), (116, 35673),

Gene: SamScheppers_46 Start: 36429, Stop: 36070, Start Num: 53

Candidate Starts for SamScheppers_46:

(27, 36498), (40, 36453), (Start: 53 @36429 has 12 MA's), (Start: 56 @36423 has 5 MA's), (Start: 62 @36384 has 1 MA's), (71, 36333), (78, 36264), (83, 36243), (86, 36222), (88, 36204), (116, 36102),

Gene: SamuelLPlaqson_44 Start: 35877, Stop: 35500, Start Num: 58

Candidate Starts for SamuelLPlaqson_44:

(32, 35928), (Start: 58 @35877 has 91 MA's), (Start: 62 @35841 has 1 MA's), (73, 35781), (111, 35574), (121, 35526),

Gene: Scarlett_47 Start: 35979, Stop: 35605, Start Num: 60

Candidate Starts for Scarlett_47:

(41, 36012), (Start: 60 @35979 has 15 MA's), (Start: 62 @35949 has 1 MA's), (63, 35946), (73, 35889), (77, 35844), (79, 35826), (90, 35751), (111, 35676), (121, 35631),

Gene: SgtBeansprout_38 Start: 34527, Stop: 34063, Start Num: 49

Candidate Starts for SgtBeansprout_38:

(33, 34566), (Start: 49 @34527 has 12 MA's), (73, 34431), (110, 34206), (112, 34200),

Gene: Shadow1_48 Start: 35996, Stop: 35607, Start Num: 60

Candidate Starts for Shadow1_48:

(Start: 60 @35996 has 15 MA's), (Start: 62 @35966 has 1 MA's), (76, 35864), (79, 35843), (89, 35783), (90, 35768), (95, 35732), (108, 35696), (119, 35639), (121, 35633),

Gene: Shaobing_45 Start: 35682, Stop: 35284, Start Num: 49

Candidate Starts for Shaobing_45:

(Start: 49 @35682 has 12 MA's), (73, 35583), (90, 35445), (106, 35379), (112, 35352), (117, 35328), (123, 35295),

Gene: ShedlockHolmes_46 Start: 35683, Stop: 35261, Start Num: 37

Candidate Starts for ShedlockHolmes_46:

(22, 35740), (29, 35713), (Start: 37 @35683 has 5 MA's), (Start: 60 @35650 has 15 MA's), (88, 35437), (90, 35419), (98, 35371), (121, 35287),

Gene: ShiaSurprise_44 Start: 35293, Stop: 34913, Start Num: 58

Candidate Starts for ShiaSurprise_44:

(36, 35329), (Start: 58 @35293 has 91 MA's), (Start: 62 @35257 has 1 MA's), (73, 35197), (93, 35038), (111, 34987), (121, 34939),

Gene: SirPhilip_45 Start: 36219, Stop: 35824, Start Num: 59

Candidate Starts for SirPhilip_45:

(Start: 59 @36219 has 16 MA's), (Start: 62 @36189 has 1 MA's), (73, 36129), (75, 36102), (79, 36066), (92, 35973), (99, 35943), (128, 35850),

Gene: Slarp_47 Start: 36038, Stop: 35679, Start Num: 53

Candidate Starts for Slarp_47:

(27, 36107), (40, 36062), (Start: 53 @36038 has 12 MA's), (Start: 56 @36032 has 5 MA's), (Start: 62 @35993 has 1 MA's), (71, 35942), (78, 35873), (83, 35852), (86, 35831), (88, 35813), (116, 35711),

Gene: Slimphazie_43 Start: 34979, Stop: 34599, Start Num: 58

Candidate Starts for Slimphazie_43:

(36, 35015), (Start: 58 @34979 has 91 MA's), (Start: 62 @34943 has 1 MA's), (73, 34883), (111, 34673), (121, 34625),

Gene: SoSeph_41 Start: 34467, Stop: 34066, Start Num: 55

Candidate Starts for SoSeph_41:

(21, 34566), (34, 34515), (38, 34503), (Start: 55 @34467 has 14 MA's), (Start: 65 @34416 has 3 MA's), (84, 34275), (90, 34224), (104, 34164), (114, 34116),

Gene: Spock_43 Start: 35097, Stop: 34717, Start Num: 58

Candidate Starts for Spock_43:

(36, 35133), (Start: 58 @35097 has 91 MA's), (Start: 62 @35061 has 1 MA's), (73, 35001), (93, 34842), (111, 34791), (121, 34743),

Gene: Stinson_44 Start: 35487, Stop: 35110, Start Num: 58

Candidate Starts for Stinson_44:

(32, 35538), (Start: 58 @35487 has 91 MA's), (Start: 62 @35451 has 1 MA's), (72, 35397), (73, 35391), (102, 35199), (111, 35184), (121, 35136),

Gene: Strobilo_46 Start: 37026, Stop: 36655, Start Num: 58

Candidate Starts for Strobilo_46:

(32, 37080), (Start: 58 @37026 has 91 MA's), (Start: 62 @36990 has 1 MA's), (66, 36975), (73, 36930), (78, 36870), (88, 36810), (91, 36780), (94, 36768), (101, 36738), (120, 36681),

Gene: Sulley_43 Start: 35224, Stop: 34844, Start Num: 58

Candidate Starts for Sulley_43:

(32, 35275), (Start: 58 @35224 has 91 MA's), (Start: 62 @35188 has 1 MA's), (73, 35128), (102, 34933), (111, 34918), (121, 34870),

Gene: Sunflower1121_49 Start: 36097, Stop: 35708, Start Num: 59

Candidate Starts for Sunflower1121_49:

(Start: 59 @36097 has 16 MA's), (Start: 62 @36067 has 1 MA's), (76, 35965), (79, 35944), (89, 35884), (90, 35869), (95, 35833), (119, 35740),

Gene: Syra333_48 Start: 35764, Stop: 35375, Start Num: 60

Candidate Starts for Syra333_48:

(Start: 60 @35764 has 15 MA's), (Start: 62 @35734 has 1 MA's), (76, 35632), (79, 35611), (89, 35551), (90, 35536), (95, 35500), (108, 35464), (119, 35407), (121, 35401),

Gene: TBond007_45 Start: 35156, Stop: 34734, Start Num: 37

Candidate Starts for TBond007_45:

(Start: 37 @35156 has 5 MA's), (Start: 60 @35123 has 15 MA's), (79, 34967), (88, 34910), (90, 34892), (98, 34844), (121, 34760),

Gene: TClif_47 Start: 36099, Stop: 35698, Start Num: 47

Candidate Starts for TClif_47:

(Start: 47 @36099 has 1 MA's), (64, 36051), (69, 36015), (72, 36003), (73, 35997), (90, 35859), (99, 35814), (106, 35796), (110, 35775), (113, 35763), (122, 35715), (127, 35703),

Gene: Tachez_43 Start: 34941, Stop: 34561, Start Num: 58

Candidate Starts for Tachez_43:

(36, 34977), (Start: 58 @34941 has 91 MA's), (Start: 62 @34905 has 1 MA's), (73, 34845), (111, 34635), (121, 34587),

Gene: TaiwanKao_45 Start: 35220, Stop: 34843, Start Num: 58

Candidate Starts for TaiwanKao_45:

(32, 35271), (Start: 58 @35220 has 91 MA's), (Start: 62 @35184 has 1 MA's), (66, 35169), (73, 35124), (111, 34917), (121, 34869),

Gene: Taquito_47 Start: 36279, Stop: 35926, Start Num: 56

Candidate Starts for Taquito_47:

(27, 36354), (40, 36309), (Start: 53 @36285 has 12 MA's), (Start: 56 @36279 has 5 MA's), (Start: 62 @36240 has 1 MA's), (71, 36189), (78, 36120), (83, 36099), (86, 36078), (88, 36060), (116, 35958),

Gene: Teejan_41 Start: 37140, Stop: 36742, Start Num: 49

Candidate Starts for Teejan_41:

(33, 37179), (Start: 49 @37140 has 12 MA's), (73, 37044), (110, 36819), (112, 36813),

Gene: Thyatira_43 Start: 36667, Stop: 36266, Start Num: 55

Candidate Starts for Thyatira_43:

(Start: 51 @36673 has 1 MA's), (Start: 55 @36667 has 14 MA's), (Start: 65 @36616 has 3 MA's), (84, 36475), (90, 36424), (104, 36364),

Gene: Tierra_46 Start: 35645, Stop: 35253, Start Num: 59

Candidate Starts for Tierra_46:

(5, 35855), (6, 35846), (Start: 59 @35645 has 16 MA's), (Start: 62 @35615 has 1 MA's), (79, 35492), (85, 35459), (89, 35432), (90, 35417), (95, 35381), (110, 35330), (114, 35309), (121, 35279),

Gene: Tigress9_48 Start: 35850, Stop: 35461, Start Num: 60

Candidate Starts for Tigress9_48:

(Start: 48 @35862 has 1 MA's), (Start: 60 @35850 has 15 MA's), (Start: 62 @35820 has 1 MA's), (76, 35718), (79, 35697), (85, 35664), (90, 35622), (95, 35586), (119, 35493), (121, 35487),

Gene: TingHuaYa_44 Start: 34216, Stop: 33830, Start Num: 58

Candidate Starts for TingHuaYa_44:

(25, 34297), (26, 34291), (31, 34276), (Start: 58 @34216 has 91 MA's), (73, 34123), (75, 34096), (111, 33925), (124, 33856),

Gene: TiniBug_44 Start: 35873, Stop: 35496, Start Num: 58

Candidate Starts for TiniBug_44:

(32, 35924), (Start: 58 @35873 has 91 MA's), (Start: 62 @35837 has 1 MA's), (73, 35777), (111, 35570), (121, 35522),

Gene: Topper_43 Start: 35096, Stop: 34716, Start Num: 58

Candidate Starts for Topper_43:

(36, 35132), (Start: 58 @35096 has 91 MA's), (Start: 62 @35060 has 1 MA's), (73, 35000), (93, 34841), (111, 34790), (121, 34742),

Gene: Torres_41 Start: 37141, Stop: 36743, Start Num: 49

Candidate Starts for Torres_41:

(33, 37180), (Start: 49 @37141 has 12 MA's), (73, 37045), (110, 36820), (112, 36814),

Gene: TreyKay_44 Start: 35164, Stop: 34787, Start Num: 58

Candidate Starts for TreyKay_44:

(32, 35215), (Start: 58 @35164 has 91 MA's), (Start: 62 @35128 has 1 MA's), (66, 35113), (73, 35068), (111, 34861), (121, 34813),

Gene: TribelTrouble_43 Start: 35018, Stop: 34626, Start Num: 54

Candidate Starts for TribelTrouble_43:

(30, 35075), (Start: 54 @35018 has 1 MA's), (Start: 62 @34982 has 1 MA's), (90, 34784), (98, 34736), (121, 34652), (122, 34640), (125, 34631),

Gene: Trice_39 Start: 34528, Stop: 34130, Start Num: 49

Candidate Starts for Trice_39:

(33, 34567), (Start: 49 @34528 has 12 MA's), (73, 34432), (110, 34207), (112, 34201),

Gene: TruffulaTree_43 Start: 34975, Stop: 34595, Start Num: 58

Candidate Starts for TruffulaTree_43:

(36, 35011), (Start: 58 @34975 has 91 MA's), (Start: 62 @34939 has 1 MA's), (73, 34879), (111, 34669), (121, 34621),

Gene: Twitch_43 Start: 35098, Stop: 34718, Start Num: 58

Candidate Starts for Twitch_43:

(36, 35134), (Start: 58 @35098 has 91 MA's), (Start: 62 @35062 has 1 MA's), (73, 35002), (93, 34843), (111, 34792), (121, 34744),

Gene: Unicorn_45 Start: 34877, Stop: 34485, Start Num: 59

Candidate Starts for Unicorn_45:

(1, 35147), (2, 35111), (3, 35096), (5, 35087), (6, 35078), (Start: 59 @34877 has 16 MA's), (Start: 62 @34847 has 1 MA's), (79, 34724), (89, 34664), (90, 34649), (113, 34550), (121, 34511),

Gene: Urkel_44 Start: 35877, Stop: 35500, Start Num: 58

Candidate Starts for Urkel_44:

(32, 35928), (Start: 58 @35877 has 91 MA's), (Start: 62 @35841 has 1 MA's), (73, 35781), (111, 35574), (121, 35526),

Gene: Validus_47 Start: 35733, Stop: 35320, Start Num: 49

Candidate Starts for Validus_47:

(23, 35814), (Start: 49 @35733 has 12 MA's), (70, 35637), (73, 35622), (90, 35484), (106, 35421), (112, 35394), (115, 35376), (127, 35325),

Gene: Veliki_43 Start: 35015, Stop: 34635, Start Num: 58

Candidate Starts for Veliki_43:

(36, 35051), (Start: 58 @35015 has 91 MA's), (Start: 62 @34979 has 1 MA's), (73, 34919), (111, 34709), (121, 34661),

Gene: ViviJ_41 Start: 34285, Stop: 33890, Start Num: 55

Candidate Starts for ViviJ_41:

(Start: 52 @34291 has 7 MA's), (Start: 55 @34285 has 14 MA's), (Start: 62 @34246 has 1 MA's), (Start: 65 @34234 has 3 MA's), (68, 34207), (81, 34105), (84, 34093), (90, 34042), (104, 33982),

Gene: Waterfoul_42 Start: 34567, Stop: 34160, Start Num: 51

Candidate Starts for Waterfoul_42:

(Start: 51 @34567 has 1 MA's), (Start: 55 @34561 has 14 MA's), (Start: 65 @34510 has 3 MA's), (90, 34318), (104, 34258), (114, 34210),

Gene: Wintermute_47 Start: 36187, Stop: 35828, Start Num: 53

Candidate Starts for Wintermute_47:

(27, 36256), (40, 36211), (Start: 53 @36187 has 12 MA's), (Start: 56 @36181 has 5 MA's), (Start: 62 @36142 has 1 MA's), (71, 36091), (78, 36022), (83, 36001), (86, 35980), (88, 35962), (116, 35860),

Gene: Ximenita_49 Start: 35950, Stop: 35561, Start Num: 60

Candidate Starts for Ximenita_49:

(19, 36055), (31, 36016), (Start: 60 @35950 has 15 MA's), (Start: 62 @35920 has 1 MA's), (76, 35818), (79, 35797), (80, 35791), (85, 35764), (89, 35737), (90, 35722), (95, 35686), (109, 35641), (119, 35593), (121, 35587), (122, 35575),

Gene: Y10_46 Start: 36100, Stop: 35747, Start Num: 56

Candidate Starts for Y10_46:

(27, 36175), (40, 36130), (Start: 53 @36106 has 12 MA's), (Start: 56 @36100 has 5 MA's), (Start: 62 @36061 has 1 MA's), (71, 36010), (78, 35941), (83, 35920), (86, 35899), (88, 35881), (116, 35779),

Gene: Y2_46 Start: 36100, Stop: 35747, Start Num: 56

Candidate Starts for Y2_46:

(27, 36175), (40, 36130), (Start: 53 @36106 has 12 MA's), (Start: 56 @36100 has 5 MA's), (Start: 62 @36061 has 1 MA's), (71, 36010), (78, 35941), (83, 35920), (86, 35899), (88, 35881), (116, 35779),

Gene: YasnayaPolyana_47 Start: 36037, Stop: 35678, Start Num: 53

Candidate Starts for YasnayaPolyana_47:

(27, 36106), (40, 36061), (Start: 53 @36037 has 12 MA's), (Start: 56 @36031 has 5 MA's), (Start: 62 @35992 has 1 MA's), (71, 35941), (78, 35872), (83, 35851), (86, 35830), (88, 35812), (116, 35710),

Gene: Yuna_49 Start: 36719, Stop: 36363, Start Num: 59

Candidate Starts for Yuna_49:

(Start: 59 @36719 has 16 MA's), (Start: 62 @36689 has 1 MA's), (72, 36635), (73, 36629), (74, 36608), (79, 36566), (89, 36506), (90, 36491), (118, 36404), (121, 36389),

Gene: Yunkel11_46 Start: 34974, Stop: 34585, Start Num: 57

Candidate Starts for Yunkel11_46:

(11, 35112), (13, 35106), (14, 35103), (17, 35094), (20, 35079), (Start: 57 @34974 has 2 MA's), (Start: 60 @34968 has 15 MA's), (73, 34878), (79, 34815), (86, 34776), (90, 34740), (106, 34680), (108, 34674), (125, 34590),

Gene: Zavala_44 Start: 35258, Stop: 34881, Start Num: 58

Candidate Starts for Zavala_44:

(32, 35309), (Start: 58 @35258 has 91 MA's), (Start: 62 @35222 has 1 MA's), (66, 35207), (73, 35162), (111, 34955), (121, 34907),

Gene: ZoeJ_45 Start: 36489, Stop: 36121, Start Num: 58

Candidate Starts for ZoeJ_45:

(32, 36546), (Start: 58 @36489 has 91 MA's), (Start: 62 @36453 has 1 MA's), (Start: 65 @36441 has 3 MA's), (73, 36393), (79, 36330), (88, 36273), (97, 36213), (101, 36201), (120, 36147),