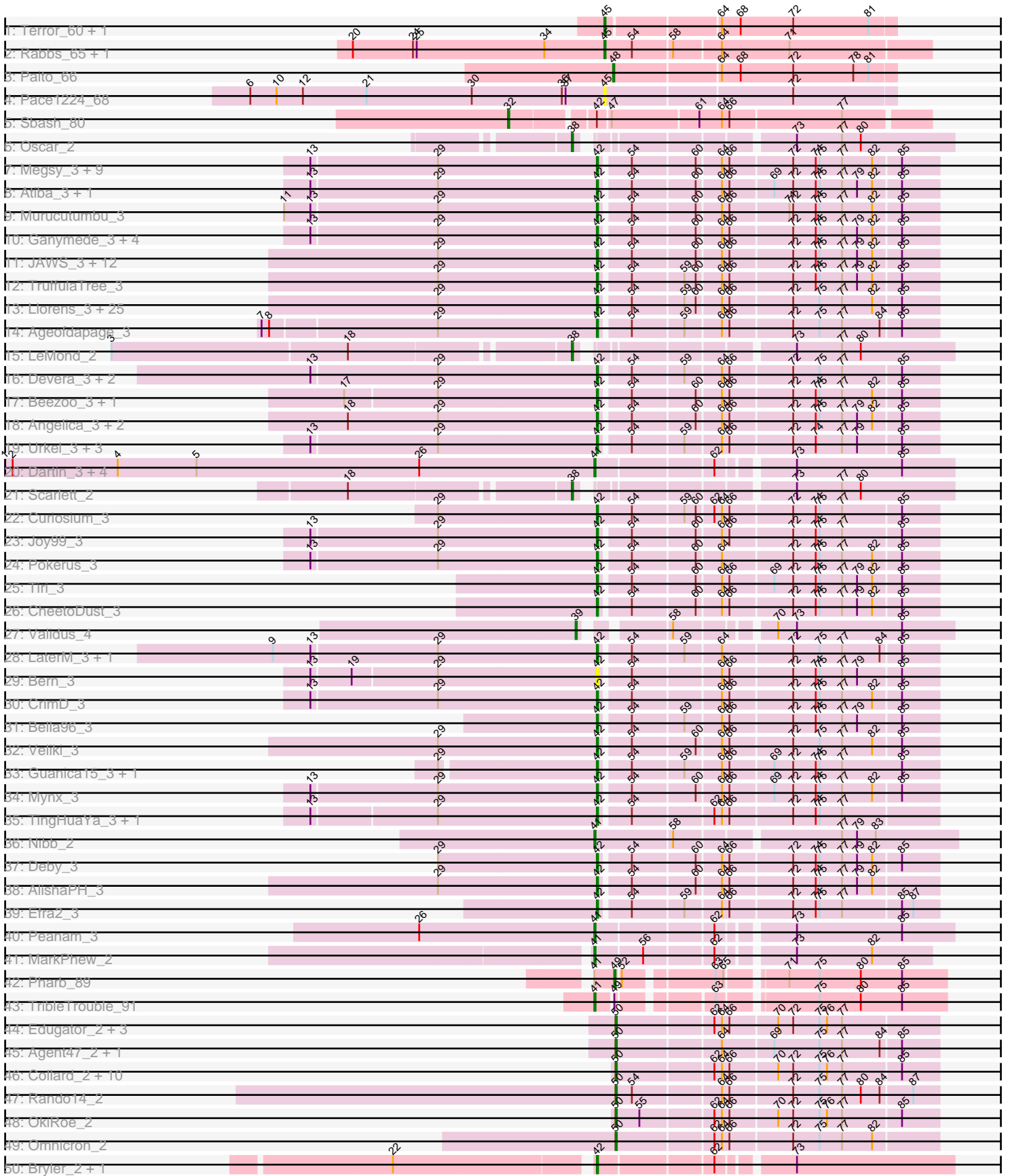
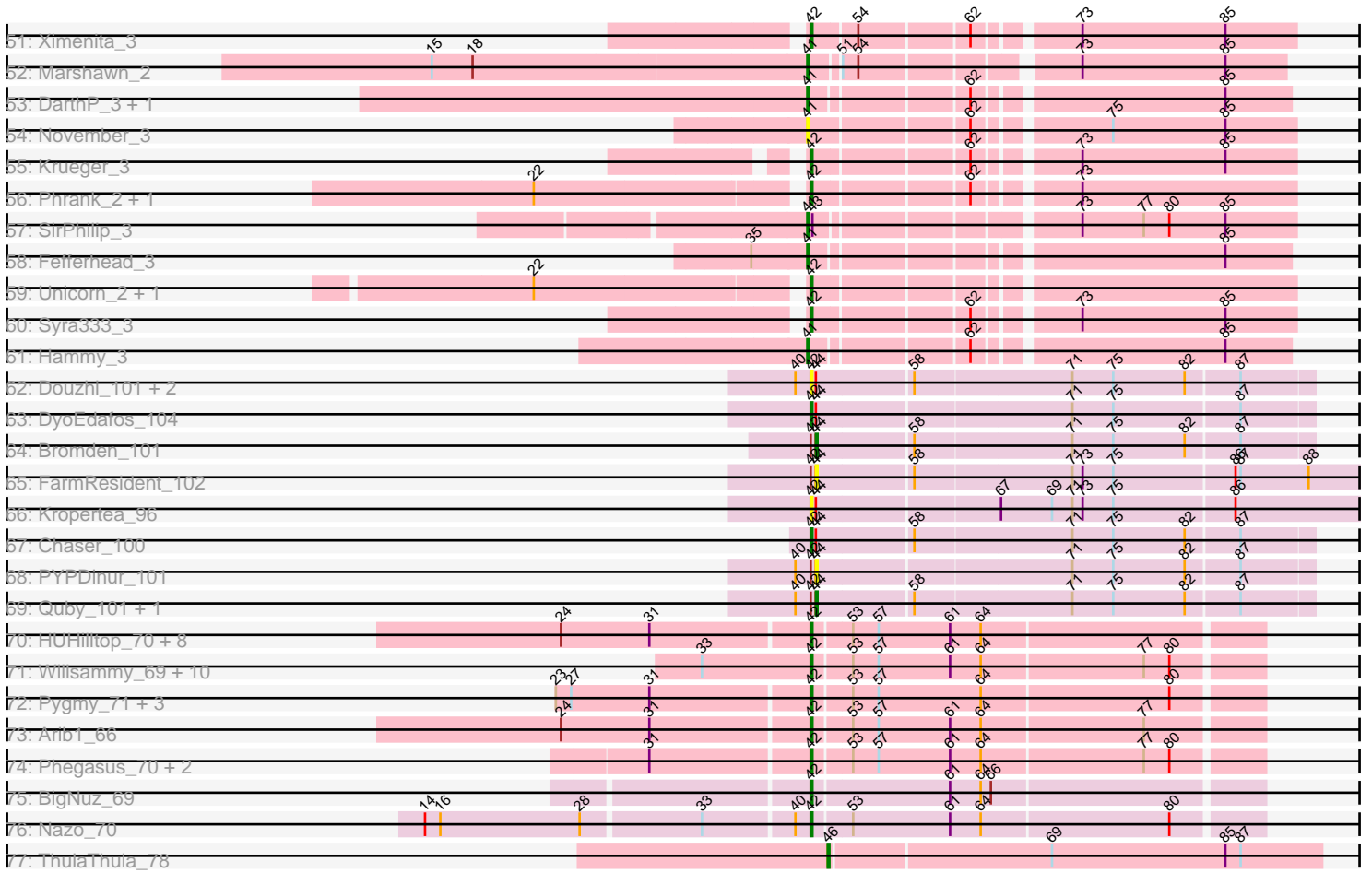


Pham 202704



Pham 202704



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 202704 Report

This analysis was run 01/18/25 on database version 583.

Pham number 202704 has 189 members, 20 are drafts.

Phages represented in each track:

- Track 1 : Terror_60, Taheera_60
- Track 2 : Rabbs_65, Sneeze_64
- Track 3 : Paito_66
- Track 4 : Pace1224_68
- Track 5 : Sbash_80
- Track 6 : Oscar_2
- Track 7 : Megsy_3, Prithvi_3, Clipper_3, LindNT_3, TreyKay_3, MacKat_3, BaghaKamala_3, YoureAdopted_3, TaiwanKao_3, MeaningOfLife_3
- Track 8 : Atiba_3, Tachez_3
- Track 9 : Murucutumbu_3
- Track 10 : Ganymede_3, Adonis_3, CallaLilly_3, QuincyRose_3, Zavala_3
- Track 11 : JAWS_3, BarrelRoll_3, Anaya_3, Adephagia_3, Zabiza_3, Emerson_3, Padpat_3, HedwigODU_3, Slimphazie_3, Jayhawk_3, ActinUp_3, Rapunzel97_3, Ramen_3
- Track 12 : TruffulaTree_3
- Track 13 : Llorens_3, Capricorn_3, Durfee_3, ShiaSurprise_3, Homura_3, Boiiii_3, Topper_3, Twitch_3, Blizzard_3, Piatt_3, Dalmuri_3, Inky_3, Jarvi_3, Belladonna_3, Asayake_3, BEEST_3, Lunahalos_3, Hyperbowlee_3, BGlluviae_3, Jeckyll_3, Rosmarinus_3, Peel_3, CREW_3, Padfoot_3, Spock_3, CaseJules_3
- Track 14 : Ageofdapage_3
- Track 15 : LeMond_2
- Track 16 : Devera_3, Dole_3, Illumine_3
- Track 17 : Beezoo_3, Geraldini_3
- Track 18 : Angelica_3, Apocalypse_3, Sulley_3
- Track 19 : Urkel_3, DrHayes_3, TiniBug_3, SamuelLPlaqson_3
- Track 20 : Dartin_3, McMater_3, Shaobing_3, Niklas_3, Richo_3
- Track 21 : Scarlett_2
- Track 22 : Curiosium_3
- Track 23 : Joy99_3
- Track 24 : Pokerus_3
- Track 25 : Tiri_3
- Track 26 : CheetoDust_3
- Track 27 : Validus_4
- Track 28 : LaterM_3, Stinson_3
- Track 29 : Bern_3
- Track 30 : CrimD_3
- Track 31 : Bella96_3

- Track 32 : Veliki_3
- Track 33 : Guanica15_3, Yunkel11_3
- Track 34 : Mynx_3
- Track 35 : TingHuaYa_3, LastHope_3
- Track 36 : Nibb_2
- Track 37 : Deby_3
- Track 38 : AlishaPH_3
- Track 39 : Efra2_3
- Track 40 : Peanam_3
- Track 41 : MarkPhew_2
- Track 42 : Pharb_89
- Track 43 : TribbleTrouble_91
- Track 44 : Edugator_2, AlleyCat_2, Psycho_2, Dadosky_2
- Track 45 : Agent47_2, InvictusManeo_2
- Track 46 : Collard_2, Heftyboy_2, Paola_2, Waterfoul_2, Leston_2, Thyatira_2, Gengar_2, SoSeph_2, Guillsminger_2, Feyre_2, Miryou_2
- Track 47 : Rando14_2
- Track 48 : OkiRoe_2
- Track 49 : Omnicron_2
- Track 50 : Bryler_2, Cain_2
- Track 51 : Ximenita_3
- Track 52 : Marshawn_2
- Track 53 : DarthP_3, Amohnition_3
- Track 54 : November_3
- Track 55 : Krueger_3
- Track 56 : Phrank_2, Tierra_2
- Track 57 : SirPhilip_3
- Track 58 : Fefferhead_3
- Track 59 : Unicorn_2, PhelpsODU_2
- Track 60 : Syra333_3
- Track 61 : Hammy_3
- Track 62 : Douzhi_101, BrainDrainer_102, Sheng711_102
- Track 63 : DyoEdafos_104
- Track 64 : Bromden_101
- Track 65 : FarmResident_102
- Track 66 : Kropertea_96
- Track 67 : Chaser_100
- Track 68 : PYPDinur_101
- Track 69 : Quby_101, Douge_101
- Track 70 : HUHilltop_70, Malithi_67, Bogie_70, Sonah_68, Dynamo_67, Phineas_68, Camster_68, Necropolis_65, Shipwreck_70
- Track 71 : Willsammy_69, Megiddo_67, Donovan_67, Gavriela_67, Kari_64, Fishburne_66, StressBall_67, KilKor_68, Glaske_67, CactusJack_68, Phalm_68
- Track 72 : Pygmy_71, Techage_68, Bartholomew_63, Venti_65
- Track 73 : Arib1_66
- Track 74 : Phegasus_70, Majeke_70, Mangethe_70
- Track 75 : BigNuz_69
- Track 76 : Nazo_70
- Track 77 : ThulaThula_78

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 123 of the 169 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ActinUp_3, Adephagia_3, Adonis_3, Ageofdapage_3, AlishaPH_3, Anaya_3, Angelica_3, Apocalypse_3, Arib1_66, Asayake_3, Atiba_3, BEEST_3, BGlluviae_3, BaghaKamala_3, BarrelRoll_3, Bartholomew_63, Beezoo_3, Bella96_3, Belladonna_3, Bern_3, BigNuz_69, Blizzard_3, Bogie_70, Boiiii_3, BrainDrainer_102, Bryler_2, CREW_3, CactusJack_68, Cain_2, CallaLilly_3, Camster_68, Capricorn_3, CaseJules_3, Chaser_100, CheetoDust_3, Clipper_3, CrimD_3, Curiosium_3, Dalmuri_3, Deby_3, Devera_3, Dole_3, Donovan_67, Douzhi_101, DrHayes_3, Durfee_3, Dynamo_67, DyoEdafos_104, Efra2_3, Emerson_3, Fishburne_66, Ganymede_3, Gavriela_67, Geraldini_3, Glaske_67, Guanica15_3, HUHilltop_70, HedwigODU_3, Homura_3, Hyperbowlee_3, Illumine_3, Inky_3, JAWS_3, Jarvi_3, Jayhawk_3, Jeckyll_3, Joy99_3, Kari_64, KilKor_68, Kropertea_96, Krueger_3, LastHope_3, LaterM_3, LindNT_3, Llorens_3, Lunahalos_3, MacKat_3, Majeke_70, Malithi_67, Mangethe_70, MeaningOfLife_3, Megiddo_67, Megsy_3, Murucutumbu_3, Mynx_3, Nazo_70, Necropolis_65, Padfoot_3, Padpat_3, Peel_3, Phalm_68, Phegasus_70, PhelpsODU_2, Phineas_68, Phrank_2, Piatt_3, Pokerus_3, Prithvi_3, Pygmy_71, QuincyRose_3, Ramen_3, Rapunzel97_3, Rosmarinus_3, SamuelLPlaqson_3, Sheng711_102, ShiaSurprise_3, Shipwreck_70, Slimphazie_3, Sonah_68, Spock_3, Stinson_3, StressBall_67, Sulley_3, Syra333_3, Tachez_3, TaiwanKao_3, Techage_68, Tierra_2, TingHuaYa_3, TiniBug_3, Tiri_3, Topper_3, TreyKay_3, TruffulaTree_3, Twitch_3, Unicorn_2, Urkel_3, Veliki_3, Venti_65, Willsammy_69, Ximenita_3, YoureAdopted_3, Yunkel11_3, Zabiza_3, Zavala_3,

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

- Bromden_101, Douge_101, FarmResident_102, PYPDinur_101, Quby_101, Sbash_80,

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

- Agent47_2, AlleyCat_2, Amohnition_3, Collard_2, Dadosky_2, DarthP_3, Dartin_3, Edugator_2, Fefferhead_3, Feyre_2, Gengar_2, Guillsminger_2, Hammy_3, Heftyboy_2, InvictusManeo_2, LeMond_2, Leston_2, MarkPhew_2, Marshawn_2, McMater_3, Miryou_2, Nibb_2, Niklas_3, November_3, OkiRoe_2, Omnicron_2, Oscar_2, Pace1224_68, Paito_66, Paola_2, Peanam_3, Pharb_89, Psycho_2, Rabbs_65, Rando14_2, Richo_3, Scarlett_2, Shaobing_3, SirPhilip_3, Sneeze_64, SoSeph_2, Taheera_60, Terror_60, ThulaThula_78, Thyatira_2, TribbleTrouble_91, Validus_4, Waterfoul_2,

Summary by start number:

Start 32:

- Found in 1 of 189 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 169
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sbash_80 (12),

Start 38:

- Found in 3 of 189 (1.6%) of genes in pham
- Manual Annotations of this start: 3 of 169

- Called 100.0% of time when present
- Phage (with cluster) where this start called: LeMond_2 (K1), Oscar_2 (K1), Scarlett_2 (K1),

Start 39:

- Found in 1 of 189 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 169
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Validus_4 (K1),

Start 41:

- Found in 17 of 189 (9.0%) of genes in pham
- Manual Annotations of this start: 12 of 169
- Called 94.1% of time when present
- Phage (with cluster) where this start called: Amohnition_3 (K6), DARTH_3 (K6), Dartin_3 (K1), Fefferhead_3 (K6), Hammy_3 (K6), MarkPheW_2 (K1), Marshawn_2 (K6), McMater_3 (K1), Nibb_2 (K1), Niklas_3 (K1), November_3 (K6), Peanam_3 (K1), Richo_3 (K1), Shaobing_3 (K1), SirPhilip_3 (K6), TripleTrouble_91 (K3),

Start 42:

- Found in 141 of 189 (74.6%) of genes in pham
- Manual Annotations of this start: 123 of 169
- Called 95.7% of time when present
- Phage (with cluster) where this start called: ActinUp_3 (K1), Adephagia_3 (K1), Adonis_3 (K1), Ageofdapage_3 (K1), AlishaPH_3 (K1), Anaya_3 (K1), Angelica_3 (K1), Apocalypse_3 (K1), Arib1_66 (P1), Asayake_3 (K1), Atiba_3 (K1), BEEST_3 (K1), BGlluviae_3 (K1), BaghaKamala_3 (K1), BarrelRoll_3 (K1), Bartholomew_63 (P1), Beezoo_3 (K1), Bella96_3 (K1), Belladonna_3 (K1), Bern_3 (K1), BigNuz_69 (P4), Blizzard_3 (K1), Bogie_70 (P1), Boiii_3 (K1), BrainDrainer_102 (L4), Bryler_2 (K6), CREW_3 (K1), CactusJack_68 (P1), Cain_2 (K6), CallaLilly_3 (K1), Camster_68 (P1), Capricorn_3 (K1), CaseJules_3 (K1), Chaser_100 (L4), CheetoDust_3 (K1), Clipper_3 (K1), CrimD_3 (K1), Curiosium_3 (K1), Dalmuri_3 (K1), Deby_3 (K1), Devera_3 (K1), Dole_3 (K1), Donovan_67 (P1), Douzhi_101 (L4), DrHayes_3 (K1), Durfee_3 (K1), Dynamo_67 (P1), DyoEdafos_104 (L4), Efra2_3 (K1), Emerson_3 (K1), Fishburne_66 (P1), Ganymede_3 (K1), Gavriela_67 (P1), Geraldini_3 (K1), Glaske_67 (P1), Guanica15_3 (K1), HUHilltop_70 (P1), HedwigODU_3 (K1), Homura_3 (K1), Hyperbowlee_3 (K1), Illumine_3 (K1), Inky_3 (K1), JAWS_3 (K1), Jarvi_3 (K1), Jayhawk_3 (K1), Jeckyll_3 (K1), Joy99_3 (K1), Kari_64 (P1), KilKor_68 (P1), Kropertea_96 (L4), Krueger_3 (K6), LastHope_3 (K1), LaterM_3 (K1), LindNT_3 (K1), Llorens_3 (K1), Lunahalos_3 (K1), MacKat_3 (K1), Majeke_70 (P1), Malithi_67 (P1), Mangethe_70 (P1), MeaningOfLife_3 (K1), Megiddo_67 (P1), Megsy_3 (K1), Murucutumbu_3 (K1), Mynx_3 (K1), Nazo_70 (P4), Necropolis_65 (P1), Padfoot_3 (K1), Padpat_3 (K1), Peel_3 (K1), Phalm_68 (P1), Phegasus_70 (P1), PhelpsODU_2 (K6), Phineas_68 (P1), Phrank_2 (K6), Piatt_3 (K1), Pokerus_3 (K1), Prithvi_3 (K1), Pygmy_71 (P1), QuincyRose_3 (K1), Ramen_3 (K1), Rapunzel97_3 (K1), Rosmarinus_3 (K1), SamuelLPlaQson_3 (K1), Sheng711_102 (L4), ShiaSurprise_3 (K1), Shipwreck_70 (P1), Slimphazie_3 (K1), Sonah_68 (P1), Spock_3 (K1), Stinson_3 (K1), StressBall_67 (P1), Sulley_3 (K1), Syra333_3 (K6), Tachez_3 (K1), TaiwanKao_3 (K1), Techage_68 (P1), Tierra_2 (K6), TingHuaYa_3 (K1), TiniBug_3 (K1), Tiri_3 (K1), Topper_3 (K1), TreyKay_3 (K1), TruffulaTree_3 (K1), Twitch_3 (K1), Unicorn_2 (K6), Urkel_3 (K1), Veliki_3 (K1), Venti_65 (P1), Willsammy_69 (P1), Ximenita_3 (K6), YoureAdopted_3 (K1), Yunkel11_3 (K1), Zabiza_3 (K1), Zavala_3 (K1),

Start 44:

- Found in 11 of 189 (5.8%) of genes in pham
- Manual Annotations of this start: 2 of 169
- Called 45.5% of time when present
- Phage (with cluster) where this start called: Bromden_101 (L4), Douge_101 (L4), FarmResident_102 (L4), PYPDinur_101 (L4), Quby_101 (L4),

Start 45:

- Found in 5 of 189 (2.6%) of genes in pham
- Manual Annotations of this start: 4 of 169
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pace1224_68 (G2), Rabbs_65 (G1), Sneeze_64 (G1), Taheera_60 (G1), Terror_60 (G1),

Start 46:

- Found in 1 of 189 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 169
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ThulaThula_78 (P5),

Start 48:

- Found in 1 of 189 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 169
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Paito_66 (G1),

Start 49:

- Found in 2 of 189 (1.1%) of genes in pham
- Manual Annotations of this start: 1 of 169
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Pharb_89 (K3),

Start 50:

- Found in 20 of 189 (10.6%) of genes in pham
- Manual Annotations of this start: 20 of 169
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Agent47_2 (K5), AlleyCat_2 (K5), Collard_2 (K5), Dadosky_2 (K5), Edugator_2 (K5), Feyre_2 (K5), Gengar_2 (K5), Guillsminger_2 (K5), Heftyboy_2 (K5), InvictusManeo_2 (K5), Leston_2 (K5), Miryou_2 (K5), OkiRoe_2 (K5), Omnicron_2 (K5), Paola_2 (K5), Psycho_2 (K5), Rando14_2 (K5), SoSeph_2 (K5), Thyatira_2 (K5), Waterfoul_2 (K5),

Summary by clusters:

There are 11 clusters represented in this pham: P1, G1, P4, P5, I2, L4, K3, K1, K6, K5, G2,

Info for manual annotations of cluster G1:

- Start number 45 was manually annotated 4 times for cluster G1.
- Start number 48 was manually annotated 1 time for cluster G1.

Info for manual annotations of cluster I2:

- Start number 32 was manually annotated 1 time for cluster I2.

Info for manual annotations of cluster K1:

- Start number 38 was manually annotated 3 times for cluster K1.
- Start number 39 was manually annotated 1 time for cluster K1.
- Start number 41 was manually annotated 5 times for cluster K1.
- Start number 42 was manually annotated 84 times for cluster K1.

Info for manual annotations of cluster K3:

- Start number 41 was manually annotated 1 time for cluster K3.
- Start number 49 was manually annotated 1 time for cluster K3.

Info for manual annotations of cluster K5:

- Start number 50 was manually annotated 20 times for cluster K5.

Info for manual annotations of cluster K6:

- Start number 41 was manually annotated 6 times for cluster K6.
- Start number 42 was manually annotated 9 times for cluster K6.

Info for manual annotations of cluster L4:

- Start number 42 was manually annotated 2 times for cluster L4.
- Start number 44 was manually annotated 2 times for cluster L4.

Info for manual annotations of cluster P1:

- Start number 42 was manually annotated 26 times for cluster P1.

Info for manual annotations of cluster P4:

- Start number 42 was manually annotated 2 times for cluster P4.

Info for manual annotations of cluster P5:

- Start number 46 was manually annotated 1 time for cluster P5.

Gene Information:

Gene: ActinUp_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for ActinUp_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (60, 545), (64, 563), (66, 569), (72, 617), (74, 635), (75, 638), (77, 656), (79, 668), (82, 680), (85, 701),

Gene: Adephagia_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Adephagia_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (60, 545), (64, 563), (66, 569), (72, 617), (74, 635), (75, 638), (77, 656), (79, 668), (82, 680), (85, 701),

Gene: Adonis_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for Adonis_3:

(13, 227), (29, 326), (Start: 42 @452 has 123 MA's), (54, 473), (60, 521), (64, 539), (66, 545), (72, 593), (74, 611), (75, 614), (77, 632), (79, 644), (82, 656), (85, 677),

Gene: Agent47_2 Start: 300, Stop: 545, Start Num: 50

Candidate Starts for Agent47_2:

(Start: 50 @300 has 20 MA's), (64, 378), (69, 417), (75, 453), (77, 471), (84, 501), (85, 516),

Gene: Ageofdapage_3 Start: 435, Stop: 689, Start Num: 42

Candidate Starts for Ageofdapage_3:

(7, 174), (8, 180), (29, 309), (Start: 42 @435 has 123 MA's), (54, 456), (59, 495), (64, 522), (66, 528), (72, 576), (75, 597), (77, 615), (84, 645), (85, 660),

Gene: AlishaPH_3 Start: 475, Stop: 729, Start Num: 42

Candidate Starts for AlishaPH_3:

(29, 349), (Start: 42 @475 has 123 MA's), (54, 496), (60, 544), (64, 562), (66, 568), (72, 616), (74, 634), (75, 637), (77, 655), (79, 667), (82, 679),

Gene: AlleyCat_2 Start: 300, Stop: 545, Start Num: 50

Candidate Starts for AlleyCat_2:

(Start: 50 @300 has 20 MA's), (62, 372), (64, 378), (66, 384), (70, 420), (72, 432), (75, 453), (76, 459), (77, 471),

Gene: Amohnition_3 Start: 416, Stop: 673, Start Num: 41

Candidate Starts for Amohnition_3:

(Start: 41 @416 has 12 MA's), (62, 500), (85, 635),

Gene: Anaya_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Anaya_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (60, 545), (64, 563), (66, 569), (72, 617), (74, 635), (75, 638), (77, 656), (79, 668), (82, 680), (85, 701),

Gene: Angelica_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Angelica_3:

(18, 278), (29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (60, 545), (64, 563), (66, 569), (72, 617), (74, 635), (75, 638), (77, 656), (79, 668), (82, 680), (85, 701),

Gene: Apocalypse_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Apocalypse_3:

(18, 278), (29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (60, 545), (64, 563), (66, 569), (72, 617), (74, 635), (75, 638), (77, 656), (79, 668), (82, 680), (85, 701),

Gene: Arib1_66 Start: 42262, Stop: 42516, Start Num: 42

Candidate Starts for Arib1_66:

(24, 42121), (31, 42172), (Start: 42 @42262 has 123 MA's), (53, 42283), (57, 42298), (61, 42340), (64, 42358), (77, 42451),

Gene: Asayake_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Asayake_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (59, 536), (60, 545), (64, 563), (66, 569), (72, 617), (75, 638), (77, 656), (82, 680), (85, 701),

Gene: Atiba_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for Atiba_3:

(13, 227), (29, 326), (Start: 42 @452 has 123 MA's), (54, 473), (60, 521), (64, 539), (66, 545), (69, 578), (72, 593), (74, 611), (75, 614), (77, 632), (79, 644), (82, 656), (85, 677),

Gene: BEEST_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for BEEST_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (59, 536), (60, 545), (64, 563), (66, 569), (72, 617), (75, 638), (77, 656), (82, 680), (85, 701),

Gene: BGlluviae_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for BGlluviae_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (59, 536), (60, 545), (64, 563), (66, 569), (72, 617), (75, 638), (77, 656), (82, 680), (85, 701),

Gene: BaghaKamala_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for BaghaKamala_3:

(13, 227), (29, 326), (Start: 42 @452 has 123 MA's), (54, 473), (60, 521), (64, 539), (66, 545), (72, 593), (74, 611), (75, 614), (77, 632), (82, 656), (85, 677),

Gene: BarrelRoll_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for BarrelRoll_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (60, 545), (64, 563), (66, 569), (72, 617), (74, 635), (75, 638), (77, 656), (79, 668), (82, 680), (85, 701),

Gene: Bartholomew_63 Start: 41542, Stop: 41796, Start Num: 42

Candidate Starts for Bartholomew_63:

(23, 41398), (27, 41407), (31, 41452), (Start: 42 @41542 has 123 MA's), (53, 41563), (57, 41578), (64, 41638), (80, 41746),

Gene: Beezoo_3 Start: 473, Stop: 727, Start Num: 42

Candidate Starts for Beezoo_3:

(17, 275), (29, 347), (Start: 42 @473 has 123 MA's), (54, 494), (60, 542), (64, 560), (66, 566), (72, 614), (74, 632), (75, 635), (77, 653), (82, 677), (85, 698),

Gene: Bella96_3 Start: 440, Stop: 694, Start Num: 42

Candidate Starts for Bella96_3:

(Start: 42 @440 has 123 MA's), (54, 461), (59, 500), (64, 527), (66, 533), (72, 581), (74, 599), (75, 602), (77, 620), (79, 632), (85, 665),

Gene: Belladonna_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Belladonna_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (59, 536), (60, 545), (64, 563), (66, 569), (72, 617), (75, 638), (77, 656), (82, 680), (85, 701),

Gene: Bern_3 Start: 436, Stop: 690, Start Num: 42

Candidate Starts for Bern_3:

(13, 214), (19, 244), (29, 310), (Start: 42 @436 has 123 MA's), (54, 457), (64, 523), (66, 529), (72, 577), (74, 595), (75, 598), (77, 616), (79, 628), (85, 661),

Gene: BigNuz_69 Start: 44457, Stop: 44711, Start Num: 42

Candidate Starts for BigNuz_69:

(Start: 42 @44457 has 123 MA's), (61, 44535), (64, 44553), (66, 44559),

Gene: Blizzard_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Blizzard_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (59, 536), (60, 545), (64, 563), (66, 569), (72, 617), (75, 638), (77, 656), (82, 680), (85, 701),

Gene: Bogie_70 Start: 44612, Stop: 44866, Start Num: 42

Candidate Starts for Bogie_70:

(24, 44471), (31, 44522), (Start: 42 @44612 has 123 MA's), (53, 44633), (57, 44648), (61, 44690), (64, 44708),

Gene: Boiiii_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Boiiii_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (59, 536), (60, 545), (64, 563), (66, 569), (72, 617), (75, 638), (77, 656), (82, 680), (85, 701),

Gene: BrainDrainer_102 Start: 61701, Stop: 61985, Start Num: 42

Candidate Starts for BrainDrainer_102:

(40, 61692), (Start: 42 @61701 has 123 MA's), (Start: 44 @61704 has 2 MA's), (58, 61758), (71, 61848), (75, 61872), (82, 61914), (87, 61944),

Gene: Bromden_101 Start: 62440, Stop: 62721, Start Num: 44

Candidate Starts for Bromden_101:

(Start: 42 @62437 has 123 MA's), (Start: 44 @62440 has 2 MA's), (58, 62494), (71, 62584), (75, 62608), (82, 62650), (87, 62680),

Gene: Bryler_2 Start: 388, Stop: 648, Start Num: 42

Candidate Starts for Bryler_2:

(22, 241), (Start: 42 @388 has 123 MA's), (62, 472), (73, 523),

Gene: CREW_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for CREW_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (59, 536), (60, 545), (64, 563), (66, 569), (72, 617), (75, 638), (77, 656), (82, 680), (85, 701),

Gene: CactusJack_68 Start: 44240, Stop: 44494, Start Num: 42

Candidate Starts for CactusJack_68:

(33, 44177), (Start: 42 @44240 has 123 MA's), (53, 44261), (57, 44276), (61, 44318), (64, 44336), (77, 44429), (80, 44444),

Gene: Cain_2 Start: 388, Stop: 648, Start Num: 42

Candidate Starts for Cain_2:

(22, 241), (Start: 42 @388 has 123 MA's), (62, 472), (73, 523),

Gene: CallaLilly_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for CallaLilly_3:

(13, 227), (29, 326), (Start: 42 @452 has 123 MA's), (54, 473), (60, 521), (64, 539), (66, 545), (72, 593), (74, 611), (75, 614), (77, 632), (79, 644), (82, 656), (85, 677),

Gene: Camster_68 Start: 43073, Stop: 43327, Start Num: 42

Candidate Starts for Camster_68:

(24, 42932), (31, 42983), (Start: 42 @43073 has 123 MA's), (53, 43094), (57, 43109), (61, 43151), (64, 43169),

Gene: Capricorn_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Capricorn_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (59, 536), (60, 545), (64, 563), (66, 569), (72, 617), (75, 638), (77, 656), (82, 680), (85, 701),

Gene: CaseJules_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for CaseJules_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (59, 536), (60, 545), (64, 563), (66, 569), (72, 617), (75, 638), (77, 656), (82, 680), (85, 701),

Gene: Chaser_100 Start: 61053, Stop: 61337, Start Num: 42

Candidate Starts for Chaser_100:

(Start: 42 @61053 has 123 MA's), (Start: 44 @61056 has 2 MA's), (58, 61110), (71, 61200), (75, 61224), (82, 61266), (87, 61296),

Gene: CheetoDust_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for CheetoDust_3:

(Start: 42 @452 has 123 MA's), (54, 473), (60, 521), (64, 539), (66, 545), (72, 593), (74, 611), (75, 614), (77, 632), (79, 644), (82, 656), (85, 677),

Gene: Clipper_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for Clipper_3:

(13, 227), (29, 326), (Start: 42 @452 has 123 MA's), (54, 473), (60, 521), (64, 539), (66, 545), (72, 593), (74, 611), (75, 614), (77, 632), (82, 656), (85, 677),

Gene: Collard_2 Start: 274, Stop: 519, Start Num: 50

Candidate Starts for Collard_2:

(Start: 50 @274 has 20 MA's), (62, 346), (64, 352), (66, 358), (70, 394), (72, 406), (75, 427), (76, 433), (77, 445), (85, 490),

Gene: CrimD_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for CrimD_3:

(13, 227), (29, 326), (Start: 42 @452 has 123 MA's), (54, 473), (64, 539), (66, 545), (72, 593), (74, 611), (75, 614), (77, 632), (82, 656), (85, 677),

Gene: Curiosium_3 Start: 517, Stop: 777, Start Num: 42

Candidate Starts for Curiosium_3:

(29, 391), (Start: 42 @517 has 123 MA's), (54, 544), (59, 583), (60, 592), (62, 604), (64, 610), (66, 616), (72, 664), (74, 682), (75, 685), (77, 703), (85, 748),

Gene: Dadosky_2 Start: 300, Stop: 545, Start Num: 50

Candidate Starts for Dadosky_2:

(Start: 50 @300 has 20 MA's), (62, 372), (64, 378), (66, 384), (70, 420), (72, 432), (75, 453), (76, 459), (77, 471),

Gene: Dalmuri_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Dalmuri_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (59, 536), (60, 545), (64, 563), (66, 569), (72, 617), (75, 638), (77, 656), (82, 680), (85, 701),

Gene: DarthP_3 Start: 416, Stop: 673, Start Num: 41

Candidate Starts for DarthP_3:

(Start: 41 @416 has 12 MA's), (62, 500), (85, 635),

Gene: Dartin_3 Start: 469, Stop: 732, Start Num: 41

Candidate Starts for Dartin_3:

(1, 1), (2, 7), (4, 91), (5, 154), (26, 331), (Start: 41 @469 has 12 MA's), (62, 556), (73, 607), (85, 691),

Gene: Deby_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Deby_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (60, 545), (64, 563), (66, 569), (72, 617), (74, 635), (75, 638), (77, 656), (79, 668), (82, 680), (85, 701),

Gene: Devera_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for Devera_3:

(13, 227), (29, 326), (Start: 42 @452 has 123 MA's), (54, 473), (59, 512), (64, 539), (66, 545), (72, 593), (75, 614), (77, 632), (85, 677),

Gene: Dole_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for Dole_3:

(13, 227), (29, 326), (Start: 42 @452 has 123 MA's), (54, 473), (59, 512), (64, 539), (66, 545), (72, 593), (75, 614), (77, 632), (85, 677),

Gene: Donovan_67 Start: 43202, Stop: 43456, Start Num: 42

Candidate Starts for Donovan_67:

(33, 43139), (Start: 42 @43202 has 123 MA's), (53, 43223), (57, 43238), (61, 43280), (64, 43298), (77, 43391), (80, 43406),

Gene: Douge_101 Start: 61124, Stop: 61405, Start Num: 44

Candidate Starts for Douge_101:

(40, 61112), (Start: 42 @61121 has 123 MA's), (Start: 44 @61124 has 2 MA's), (58, 61178), (71, 61268), (75, 61292), (82, 61334), (87, 61364),

Gene: Douzhi_101 Start: 61390, Stop: 61674, Start Num: 42

Candidate Starts for Douzhi_101:

(40, 61381), (Start: 42 @61390 has 123 MA's), (Start: 44 @61393 has 2 MA's), (58, 61447), (71, 61537), (75, 61561), (82, 61603), (87, 61633),

Gene: DrHayes_3 Start: 440, Stop: 694, Start Num: 42

Candidate Starts for DrHayes_3:

(13, 215), (29, 314), (Start: 42 @440 has 123 MA's), (54, 461), (59, 500), (64, 527), (66, 533), (72, 581), (74, 599), (77, 620), (79, 632), (85, 665),

Gene: Durfee_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Durfee_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (59, 536), (60, 545), (64, 563), (66, 569), (72, 617), (75, 638), (77, 656), (82, 680), (85, 701),

Gene: Dynamo_67 Start: 42646, Stop: 42900, Start Num: 42

Candidate Starts for Dynamo_67:

(24, 42505), (31, 42556), (Start: 42 @42646 has 123 MA's), (53, 42667), (57, 42682), (61, 42724), (64, 42742),

Gene: DyoEdafos_104 Start: 61681, Stop: 61965, Start Num: 42

Candidate Starts for DyoEdafos_104:

(Start: 42 @61681 has 123 MA's), (Start: 44 @61684 has 2 MA's), (71, 61828), (75, 61852), (87, 61924),

Gene: Edugator_2 Start: 300, Stop: 545, Start Num: 50

Candidate Starts for Edugator_2:

(Start: 50 @300 has 20 MA's), (62, 372), (64, 378), (66, 384), (70, 420), (72, 432), (75, 453), (76, 459), (77, 471),

Gene: Efra2_3 Start: 445, Stop: 699, Start Num: 42

Candidate Starts for Efra2_3:

(Start: 42 @445 has 123 MA's), (54, 466), (59, 505), (64, 532), (66, 538), (72, 586), (74, 604), (75, 607), (77, 625), (85, 670), (87, 679),

Gene: Emerson_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Emerson_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (60, 545), (64, 563), (66, 569), (72, 617), (74, 635), (75, 638), (77, 656), (79, 668), (82, 680), (85, 701),

Gene: FarmResident_102 Start: 61280, Stop: 61591, Start Num: 44

Candidate Starts for FarmResident_102:

(Start: 42 @61277 has 123 MA's), (Start: 44 @61280 has 2 MA's), (58, 61334), (71, 61424), (73, 61430), (75, 61448), (86, 61517), (87, 61520), (88, 61559),

Gene: Fefferhead_3 Start: 410, Stop: 667, Start Num: 41

Candidate Starts for Fefferhead_3:

(35, 389), (Start: 41 @410 has 12 MA's), (85, 629),

Gene: Feyre_2 Start: 275, Stop: 520, Start Num: 50

Candidate Starts for Feyre_2:

(Start: 50 @275 has 20 MA's), (62, 347), (64, 353), (66, 359), (70, 395), (72, 407), (75, 428), (76, 434), (77, 446), (85, 491),

Gene: Fishburne_66 Start: 43028, Stop: 43282, Start Num: 42

Candidate Starts for Fishburne_66:

(33, 42965), (Start: 42 @43028 has 123 MA's), (53, 43049), (57, 43064), (61, 43106), (64, 43124), (77, 43217), (80, 43232),

Gene: Ganymede_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for Ganymede_3:

(13, 227), (29, 326), (Start: 42 @452 has 123 MA's), (54, 473), (60, 521), (64, 539), (66, 545), (72, 593), (74, 611), (75, 614), (77, 632), (79, 644), (82, 656), (85, 677),

Gene: Gavriela_67 Start: 43933, Stop: 44187, Start Num: 42

Candidate Starts for Gavriela_67:

(33, 43870), (Start: 42 @43933 has 123 MA's), (53, 43954), (57, 43969), (61, 44011), (64, 44029), (77, 44122), (80, 44137),

Gene: Gengar_2 Start: 300, Stop: 545, Start Num: 50

Candidate Starts for Gengar_2:

(Start: 50 @300 has 20 MA's), (62, 372), (64, 378), (66, 384), (70, 420), (72, 432), (75, 453), (76, 459), (77, 471), (85, 516),

Gene: Geraldini_3 Start: 473, Stop: 727, Start Num: 42

Candidate Starts for Geraldini_3:

(17, 275), (29, 347), (Start: 42 @473 has 123 MA's), (54, 494), (60, 542), (64, 560), (66, 566), (72, 614), (74, 632), (75, 635), (77, 653), (82, 677), (85, 698),

Gene: Glaske_67 Start: 44240, Stop: 44494, Start Num: 42

Candidate Starts for Glaske_67:

(33, 44177), (Start: 42 @44240 has 123 MA's), (53, 44261), (57, 44276), (61, 44318), (64, 44336), (77, 44429), (80, 44444),

Gene: Guanica15_3 Start: 445, Stop: 702, Start Num: 42

Candidate Starts for Guanica15_3:

(29, 325), (Start: 42 @445 has 123 MA's), (54, 466), (59, 505), (64, 532), (66, 538), (69, 571), (72, 586), (74, 604), (75, 607), (77, 625), (85, 673),

Gene: Guillsminger_2 Start: 275, Stop: 520, Start Num: 50

Candidate Starts for Guillsminger_2:

(Start: 50 @275 has 20 MA's), (62, 347), (64, 353), (66, 359), (70, 395), (72, 407), (75, 428), (76, 434), (77, 446), (85, 491),

Gene: HUHilltop_70 Start: 42869, Stop: 43123, Start Num: 42

Candidate Starts for HUHilltop_70:

(24, 42728), (31, 42779), (Start: 42 @42869 has 123 MA's), (53, 42890), (57, 42905), (61, 42947), (64, 42965),

Gene: Hammy_3 Start: 413, Stop: 670, Start Num: 41

Candidate Starts for Hammy_3:

(Start: 41 @413 has 12 MA's), (62, 497), (85, 632),

Gene: HedwigODU_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for HedwigODU_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (60, 545), (64, 563), (66, 569), (72, 617), (74, 635), (75, 638), (77, 656), (79, 668), (82, 680), (85, 701),

Gene: Heftyboy_2 Start: 296, Stop: 541, Start Num: 50

Candidate Starts for Heftyboy_2:

(Start: 50 @296 has 20 MA's), (62, 368), (64, 374), (66, 380), (70, 416), (72, 428), (75, 449), (76, 455), (77, 467), (85, 512),

Gene: Homura_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Homura_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (59, 536), (60, 545), (64, 563), (66, 569), (72, 617), (75, 638), (77, 656), (82, 680), (85, 701),

Gene: Hyperbowlee_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Hyperbowlee_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (59, 536), (60, 545), (64, 563), (66, 569), (72, 617), (75, 638), (77, 656), (82, 680), (85, 701),

Gene: Illumine_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for Illumine_3:

(13, 227), (29, 326), (Start: 42 @452 has 123 MA's), (54, 473), (59, 512), (64, 539), (66, 545), (72, 593), (75, 614), (77, 632), (85, 677),

Gene: Inky_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Inky_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (59, 536), (60, 545), (64, 563), (66, 569), (72, 617), (75, 638), (77, 656), (82, 680), (85, 701),

Gene: InvictusManeo_2 Start: 300, Stop: 545, Start Num: 50

Candidate Starts for InvictusManeo_2:

(Start: 50 @300 has 20 MA's), (64, 378), (69, 417), (75, 453), (77, 471), (84, 501), (85, 516),

Gene: JAWS_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for JAWS_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (60, 545), (64, 563), (66, 569), (72, 617), (74, 635), (75, 638), (77, 656), (79, 668), (82, 680), (85, 701),

Gene: Jarvi_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Jarvi_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (59, 536), (60, 545), (64, 563), (66, 569), (72, 617), (75, 638), (77, 656), (82, 680), (85, 701),

Gene: Jayhawk_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Jayhawk_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (60, 545), (64, 563), (66, 569), (72, 617), (74, 635), (75, 638), (77, 656), (79, 668), (82, 680), (85, 701),

Gene: Jeckyll_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Jeckyll_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (59, 536), (60, 545), (64, 563), (66, 569), (72, 617), (75, 638), (77, 656), (82, 680), (85, 701),

Gene: Joy99_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for Joy99_3:

(13, 227), (29, 326), (Start: 42 @452 has 123 MA's), (54, 473), (60, 521), (64, 539), (66, 545), (72, 593), (74, 611), (75, 614), (77, 632), (85, 677),

Gene: Kari_64 Start: 43025, Stop: 43279, Start Num: 42

Candidate Starts for Kari_64:

(33, 42962), (Start: 42 @43025 has 123 MA's), (53, 43046), (57, 43061), (61, 43103), (64, 43121), (77, 43214), (80, 43229),

Gene: KilKor_68 Start: 44933, Stop: 45187, Start Num: 42

Candidate Starts for KilKor_68:

(33, 44870), (Start: 42 @44933 has 123 MA's), (53, 44954), (57, 44969), (61, 45011), (64, 45029), (77, 45122), (80, 45137),

Gene: Kropertea_96 Start: 60883, Stop: 61203, Start Num: 42

Candidate Starts for Kropertea_96:

(Start: 42 @60883 has 123 MA's), (Start: 44 @60886 has 2 MA's), (67, 60988), (69, 61018), (71, 61030), (73, 61036), (75, 61054), (86, 61123),

Gene: Krueger_3 Start: 500, Stop: 760, Start Num: 42

Candidate Starts for Krueger_3:

(Start: 42 @500 has 123 MA's), (62, 584), (73, 635), (85, 719),

Gene: LastHope_3 Start: 447, Stop: 701, Start Num: 42

Candidate Starts for LastHope_3:

(13, 225), (29, 321), (Start: 42 @447 has 123 MA's), (54, 468), (62, 528), (64, 534), (66, 540), (72, 588), (74, 606), (75, 609), (77, 627),

Gene: LaterM_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for LaterM_3:

(9, 197), (13, 227), (29, 326), (Start: 42 @452 has 123 MA's), (54, 473), (59, 512), (64, 539), (72, 593), (75, 614), (77, 632), (84, 662), (85, 677),

Gene: LeMond_2 Start: 346, Stop: 612, Start Num: 38

Candidate Starts for LeMond_2:

(3, 1), (18, 187), (Start: 38 @346 has 3 MA's), (73, 487), (77, 523), (80, 538),

Gene: Leston_2 Start: 300, Stop: 545, Start Num: 50

Candidate Starts for Leston_2:

(Start: 50 @300 has 20 MA's), (62, 372), (64, 378), (66, 384), (70, 420), (72, 432), (75, 453), (76, 459), (77, 471), (85, 516),

Gene: LindNT_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for LindNT_3:

(13, 227), (29, 326), (Start: 42 @452 has 123 MA's), (54, 473), (60, 521), (64, 539), (66, 545), (72, 593), (74, 611), (75, 614), (77, 632), (82, 656), (85, 677),

Gene: Llorens_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Llorens_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (59, 536), (60, 545), (64, 563), (66, 569), (72, 617), (75, 638), (77, 656), (82, 680), (85, 701),

Gene: Lunahalos_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Lunahalos_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (59, 536), (60, 545), (64, 563), (66, 569), (72, 617), (75, 638), (77, 656), (82, 680), (85, 701),

Gene: MacKat_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for MacKat_3:

(13, 227), (29, 326), (Start: 42 @452 has 123 MA's), (54, 473), (60, 521), (64, 539), (66, 545), (72, 593), (74, 611), (75, 614), (77, 632), (82, 656), (85, 677),

Gene: Majeke_70 Start: 43651, Stop: 43905, Start Num: 42

Candidate Starts for Majeke_70:

(31, 43561), (Start: 42 @43651 has 123 MA's), (53, 43672), (57, 43687), (61, 43729), (64, 43747), (77, 43840), (80, 43855),

Gene: Malithi_67 Start: 42795, Stop: 43049, Start Num: 42

Candidate Starts for Malithi_67:

(24, 42654), (31, 42705), (Start: 42 @42795 has 123 MA's), (53, 42816), (57, 42831), (61, 42873), (64, 42891),

Gene: Mangethe_70 Start: 43651, Stop: 43905, Start Num: 42

Candidate Starts for Mangethe_70:

(31, 43561), (Start: 42 @43651 has 123 MA's), (53, 43672), (57, 43687), (61, 43729), (64, 43747), (77, 43840), (80, 43855),

Gene: MarkPhew_2 Start: 323, Stop: 568, Start Num: 41

Candidate Starts for MarkPhew_2:

(Start: 41 @323 has 12 MA's), (56, 359), (62, 410), (73, 461), (82, 521),

Gene: Marshawn_2 Start: 329, Stop: 583, Start Num: 41

Candidate Starts for Marshawn_2:

(15, 125), (18, 149), (Start: 41 @329 has 12 MA's), (51, 344), (54, 353), (73, 464), (85, 548),

Gene: McMater_3 Start: 469, Stop: 732, Start Num: 41

Candidate Starts for McMater_3:

(1, 1), (2, 7), (4, 91), (5, 154), (26, 331), (Start: 41 @469 has 12 MA's), (62, 556), (73, 607), (85, 691),

Gene: MeaningOfLife_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for MeaningOfLife_3:

(13, 227), (29, 326), (Start: 42 @452 has 123 MA's), (54, 473), (60, 521), (64, 539), (66, 545), (72, 593), (74, 611), (75, 614), (77, 632), (82, 656), (85, 677),

Gene: Megiddo_67 Start: 44801, Stop: 45055, Start Num: 42

Candidate Starts for Megiddo_67:

(33, 44738), (Start: 42 @44801 has 123 MA's), (53, 44822), (57, 44837), (61, 44879), (64, 44897), (77, 44990), (80, 45005),

Gene: Megsy_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for Megsy_3:

(13, 227), (29, 326), (Start: 42 @452 has 123 MA's), (54, 473), (60, 521), (64, 539), (66, 545), (72, 593), (74, 611), (75, 614), (77, 632), (82, 656), (85, 677),

Gene: Miryou_2 Start: 275, Stop: 520, Start Num: 50

Candidate Starts for Miryou_2:

(Start: 50 @275 has 20 MA's), (62, 347), (64, 353), (66, 359), (70, 395), (72, 407), (75, 428), (76, 434), (77, 446), (85, 491),

Gene: Murucutumbu_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for Murucutumbu_3:

(11, 206), (13, 227), (29, 326), (Start: 42 @452 has 123 MA's), (54, 473), (60, 521), (64, 539), (66, 545), (71, 590), (72, 593), (74, 611), (75, 614), (77, 632), (82, 656), (85, 677),

Gene: Mynx_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for Mynx_3:

(13, 227), (29, 326), (Start: 42 @452 has 123 MA's), (54, 473), (60, 521), (64, 539), (66, 545), (69, 578), (72, 593), (74, 611), (75, 614), (77, 632), (82, 656), (85, 677),

Gene: Nazo_70 Start: 44643, Stop: 44897, Start Num: 42

Candidate Starts for Nazo_70:

(14, 44427), (16, 44436), (28, 44517), (33, 44583), (40, 44634), (Start: 42 @44643 has 123 MA's), (53, 44664), (61, 44721), (64, 44739), (80, 44847),

Gene: Necropolis_65 Start: 42235, Stop: 42489, Start Num: 42

Candidate Starts for Necropolis_65:

(24, 42094), (31, 42145), (Start: 42 @42235 has 123 MA's), (53, 42256), (57, 42271), (61, 42313), (64, 42331),

Gene: Nibb_2 Start: 333, Stop: 605, Start Num: 41

Candidate Starts for Nibb_2:

(Start: 41 @333 has 12 MA's), (58, 393), (77, 513), (79, 525), (83, 540),

Gene: Niklas_3 Start: 469, Stop: 732, Start Num: 41

Candidate Starts for Niklas_3:

(1, 1), (2, 7), (4, 91), (5, 154), (26, 331), (Start: 41 @469 has 12 MA's), (62, 556), (73, 607), (85, 691),

Gene: November_3 Start: 424, Stop: 687, Start Num: 41

Candidate Starts for November_3:

(Start: 41 @424 has 12 MA's), (62, 511), (75, 580), (85, 646),

Gene: OkiRoe_2 Start: 275, Stop: 520, Start Num: 50

Candidate Starts for OkiRoe_2:

(Start: 50 @275 has 20 MA's), (55, 293), (62, 347), (64, 353), (66, 359), (70, 395), (72, 407), (75, 428), (76, 434), (77, 446), (85, 491),

Gene: Omnicron_2 Start: 241, Stop: 486, Start Num: 50

Candidate Starts for Omnicron_2:

(Start: 50 @241 has 20 MA's), (62, 313), (64, 319), (66, 325), (72, 373), (75, 394), (77, 412), (82, 436),

Gene: Oscar_2 Start: 346, Stop: 612, Start Num: 38

Candidate Starts for Oscar_2:

(Start: 38 @346 has 3 MA's), (73, 487), (77, 523), (80, 538),

Gene: PYPDinur_101 Start: 61956, Stop: 62237, Start Num: 44

Candidate Starts for PYPDinur_101:

(40, 61944), (Start: 42 @61953 has 123 MA's), (Start: 44 @61956 has 2 MA's), (71, 62100), (75, 62124), (82, 62166), (87, 62196),

Gene: Pace1224_68 Start: 44266, Stop: 44490, Start Num: 45

Candidate Starts for Pace1224_68:

(6, 43984), (10, 44005), (12, 44026), (21, 44077), (30, 44161), (36, 44233), (37, 44236), (Start: 45 @44266 has 4 MA's), (72, 44410),

Gene: Padfoot_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Padfoot_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (59, 536), (60, 545), (64, 563), (66, 569), (72, 617), (75, 638), (77, 656), (82, 680), (85, 701),

Gene: Padpat_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Padpat_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (60, 545), (64, 563), (66, 569), (72, 617), (74, 635), (75, 638), (77, 656), (79, 668), (82, 680), (85, 701),

Gene: Paito_66 Start: 41579, Stop: 41797, Start Num: 48

Candidate Starts for Paito_66:

(Start: 48 @41579 has 1 MA's), (64, 41660), (68, 41675), (72, 41717), (78, 41765), (81, 41777),

Gene: Paola_2 Start: 275, Stop: 520, Start Num: 50

Candidate Starts for Paola_2:

(Start: 50 @275 has 20 MA's), (62, 347), (64, 353), (66, 359), (70, 395), (72, 407), (75, 428), (76, 434), (77, 446), (85, 491),

Gene: Peanam_3 Start: 469, Stop: 732, Start Num: 41

Candidate Starts for Peanam_3:

(26, 331), (Start: 41 @469 has 12 MA's), (62, 556), (73, 607), (85, 691),

Gene: Peel_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Peel_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (59, 536), (60, 545), (64, 563), (66, 569), (72, 617), (75, 638), (77, 656), (82, 680), (85, 701),

Gene: Phalm_68 Start: 44231, Stop: 44485, Start Num: 42

Candidate Starts for Phalm_68:

(33, 44168), (Start: 42 @44231 has 123 MA's), (53, 44252), (57, 44267), (61, 44309), (64, 44327), (77, 44420), (80, 44435),

Gene: Pharb_89 Start: 56013, Stop: 56249, Start Num: 49

Candidate Starts for Pharb_89:

(Start: 41 @56001 has 12 MA's), (Start: 49 @56013 has 1 MA's), (52, 56016), (63, 56079), (65, 56085), (71, 56124), (75, 56148), (80, 56181), (85, 56214),

Gene: Phegasus_70 Start: 43618, Stop: 43872, Start Num: 42

Candidate Starts for Phegasus_70:

(31, 43528), (Start: 42 @43618 has 123 MA's), (53, 43639), (57, 43654), (61, 43696), (64, 43714), (77, 43807), (80, 43822),

Gene: PhelpsODU_2 Start: 389, Stop: 649, Start Num: 42

Candidate Starts for PhelpsODU_2:

(22, 242), (Start: 42 @389 has 123 MA's),

Gene: Phineas_68 Start: 43203, Stop: 43457, Start Num: 42

Candidate Starts for Phineas_68:

(24, 43062), (31, 43113), (Start: 42 @43203 has 123 MA's), (53, 43224), (57, 43239), (61, 43281), (64, 43299),

Gene: Phrank_2 Start: 394, Stop: 654, Start Num: 42

Candidate Starts for Phrank_2:

(22, 247), (Start: 42 @394 has 123 MA's), (62, 478), (73, 529),

Gene: Piatt_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Piatt_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (59, 536), (60, 545), (64, 563), (66, 569), (72, 617), (75, 638), (77, 656), (82, 680), (85, 701),

Gene: Pokerus_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for Pokerus_3:

(13, 227), (29, 326), (Start: 42 @452 has 123 MA's), (54, 473), (60, 521), (64, 539), (72, 593), (74, 611), (75, 614), (77, 632), (82, 656), (85, 677),

Gene: Prithvi_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for Prithvi_3:

(13, 227), (29, 326), (Start: 42 @452 has 123 MA's), (54, 473), (60, 521), (64, 539), (66, 545), (72, 593), (74, 611), (75, 614), (77, 632), (82, 656), (85, 677),

Gene: Psycho_2 Start: 300, Stop: 545, Start Num: 50

Candidate Starts for Psycho_2:

(Start: 50 @300 has 20 MA's), (62, 372), (64, 378), (66, 384), (70, 420), (72, 432), (75, 453), (76, 459), (77, 471),

Gene: Pygmy_71 Start: 44585, Stop: 44839, Start Num: 42

Candidate Starts for Pygmy_71:

(23, 44441), (27, 44450), (31, 44495), (Start: 42 @44585 has 123 MA's), (53, 44606), (57, 44621), (64, 44681), (80, 44789),

Gene: Quby_101 Start: 61285, Stop: 61566, Start Num: 44

Candidate Starts for Quby_101:

(40, 61273), (Start: 42 @61282 has 123 MA's), (Start: 44 @61285 has 2 MA's), (58, 61339), (71, 61429), (75, 61453), (82, 61495), (87, 61525),

Gene: QuincyRose_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for QuincyRose_3:

(13, 227), (29, 326), (Start: 42 @452 has 123 MA's), (54, 473), (60, 521), (64, 539), (66, 545), (72, 593), (74, 611), (75, 614), (77, 632), (79, 644), (82, 656), (85, 677),

Gene: Rabbs_65 Start: 41915, Stop: 42166, Start Num: 45

Candidate Starts for Rabbs_65:

(20, 41714), (24, 41762), (25, 41765), (34, 41867), (Start: 45 @41915 has 4 MA's), (54, 41936), (58, 41966), (64, 42002), (71, 42056),

Gene: Ramen_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Ramen_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (60, 545), (64, 563), (66, 569), (72, 617), (74, 635), (75, 638), (77, 656), (79, 668), (82, 680), (85, 701),

Gene: Rando14_2 Start: 304, Stop: 549, Start Num: 50

Candidate Starts for Rando14_2:

(Start: 50 @304 has 20 MA's), (54, 316), (64, 382), (66, 388), (72, 436), (75, 457), (77, 475), (80, 490), (84, 505), (87, 529),

Gene: Rapunzel97_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Rapunzel97_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (60, 545), (64, 563), (66, 569), (72, 617), (74, 635), (75, 638), (77, 656), (79, 668), (82, 680), (85, 701),

Gene: Richo_3 Start: 469, Stop: 732, Start Num: 41

Candidate Starts for Richo_3:

(1, 1), (2, 7), (4, 91), (5, 154), (26, 331), (Start: 41 @469 has 12 MA's), (62, 556), (73, 607), (85, 691),

Gene: Rosmarinus_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Rosmarinus_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (59, 536), (60, 545), (64, 563), (66, 569), (72, 617), (75, 638), (77, 656), (82, 680), (85, 701),

Gene: SamuelLPlaqson_3 Start: 440, Stop: 694, Start Num: 42

Candidate Starts for SamuelLPlaqson_3:

(13, 215), (29, 314), (Start: 42 @440 has 123 MA's), (54, 461), (59, 500), (64, 527), (66, 533), (72, 581), (74, 599), (77, 620), (79, 632), (85, 665),

Gene: Sbash_80 Start: 51476, Stop: 51787, Start Num: 32

Candidate Starts for Sbash_80:

(Start: 32 @51476 has 1 MA's), (Start: 42 @51536 has 123 MA's), (47, 51545), (61, 51611), (64, 51629), (66, 51635), (77, 51722),

Gene: Scarlett_2 Start: 346, Stop: 612, Start Num: 38
Candidate Starts for Scarlett_2:
(18, 187), (Start: 38 @346 has 3 MA's), (73, 487), (77, 523), (80, 538),

Gene: Shaobing_3 Start: 469, Stop: 732, Start Num: 41
Candidate Starts for Shaobing_3:
(1, 1), (2, 7), (4, 91), (5, 154), (26, 331), (Start: 41 @469 has 12 MA's), (62, 556), (73, 607), (85, 691),

Gene: Sheng711_102 Start: 61477, Stop: 61761, Start Num: 42
Candidate Starts for Sheng711_102:
(40, 61468), (Start: 42 @61477 has 123 MA's), (Start: 44 @61480 has 2 MA's), (58, 61534), (71, 61624), (75, 61648), (82, 61690), (87, 61720),

Gene: ShiaSurprise_3 Start: 476, Stop: 730, Start Num: 42
Candidate Starts for ShiaSurprise_3:
(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (59, 536), (60, 545), (64, 563), (66, 569), (72, 617), (75, 638), (77, 656), (82, 680), (85, 701),

Gene: Shipwreck_70 Start: 44643, Stop: 44897, Start Num: 42
Candidate Starts for Shipwreck_70:
(24, 44502), (31, 44553), (Start: 42 @44643 has 123 MA's), (53, 44664), (57, 44679), (61, 44721), (64, 44739),

Gene: SirPhilip_3 Start: 468, Stop: 731, Start Num: 41
Candidate Starts for SirPhilip_3:
(Start: 41 @468 has 12 MA's), (43, 471), (73, 606), (77, 642), (80, 657), (85, 690),

Gene: Slimphazie_3 Start: 476, Stop: 730, Start Num: 42
Candidate Starts for Slimphazie_3:
(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (60, 545), (64, 563), (66, 569), (72, 617), (74, 635), (75, 638), (77, 656), (79, 668), (82, 680), (85, 701),

Gene: Sneeze_64 Start: 41914, Stop: 42165, Start Num: 45
Candidate Starts for Sneeze_64:
(20, 41713), (24, 41761), (25, 41764), (34, 41866), (Start: 45 @41914 has 4 MA's), (54, 41935), (58, 41965), (64, 42001), (71, 42055),

Gene: SoSeph_2 Start: 296, Stop: 541, Start Num: 50
Candidate Starts for SoSeph_2:
(Start: 50 @296 has 20 MA's), (62, 368), (64, 374), (66, 380), (70, 416), (72, 428), (75, 449), (76, 455), (77, 467), (85, 512),

Gene: Sonah_68 Start: 42340, Stop: 42594, Start Num: 42
Candidate Starts for Sonah_68:
(24, 42199), (31, 42250), (Start: 42 @42340 has 123 MA's), (53, 42361), (57, 42376), (61, 42418), (64, 42436),

Gene: Spock_3 Start: 476, Stop: 730, Start Num: 42
Candidate Starts for Spock_3:
(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (59, 536), (60, 545), (64, 563), (66, 569), (72, 617), (75, 638), (77, 656), (82, 680), (85, 701),

Gene: Stinson_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for Stinson_3:

(9, 197), (13, 227), (29, 326), (Start: 42 @452 has 123 MA's), (54, 473), (59, 512), (64, 539), (72, 593), (75, 614), (77, 632), (84, 662), (85, 677),

Gene: StressBall_67 Start: 43933, Stop: 44187, Start Num: 42

Candidate Starts for StressBall_67:

(33, 43870), (Start: 42 @43933 has 123 MA's), (53, 43954), (57, 43969), (61, 44011), (64, 44029), (77, 44122), (80, 44137),

Gene: Sulley_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Sulley_3:

(18, 278), (29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (60, 545), (64, 563), (66, 569), (72, 617), (74, 635), (75, 638), (77, 656), (79, 668), (82, 680), (85, 701),

Gene: Syra333_3 Start: 509, Stop: 769, Start Num: 42

Candidate Starts for Syra333_3:

(Start: 42 @509 has 123 MA's), (62, 593), (73, 644), (85, 728),

Gene: Tachez_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for Tachez_3:

(13, 227), (29, 326), (Start: 42 @452 has 123 MA's), (54, 473), (60, 521), (64, 539), (66, 545), (69, 578), (72, 593), (74, 611), (75, 614), (77, 632), (79, 644), (82, 656), (85, 677),

Gene: Taheera_60 Start: 40724, Stop: 40945, Start Num: 45

Candidate Starts for Taheera_60:

(Start: 45 @40724 has 4 MA's), (64, 40808), (68, 40823), (72, 40865), (81, 40925),

Gene: TaiwanKao_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for TaiwanKao_3:

(13, 227), (29, 326), (Start: 42 @452 has 123 MA's), (54, 473), (60, 521), (64, 539), (66, 545), (72, 593), (74, 611), (75, 614), (77, 632), (82, 656), (85, 677),

Gene: Techage_68 Start: 43134, Stop: 43388, Start Num: 42

Candidate Starts for Techage_68:

(23, 42990), (27, 42999), (31, 43044), (Start: 42 @43134 has 123 MA's), (53, 43155), (57, 43170), (64, 43230), (80, 43338),

Gene: Terror_60 Start: 40724, Stop: 40945, Start Num: 45

Candidate Starts for Terror_60:

(Start: 45 @40724 has 4 MA's), (64, 40808), (68, 40823), (72, 40865), (81, 40925),

Gene: ThulaThula_78 Start: 49203, Stop: 49487, Start Num: 46

Candidate Starts for ThulaThula_78:

(Start: 46 @49203 has 1 MA's), (69, 49329), (85, 49431), (87, 49440),

Gene: Thyatira_2 Start: 275, Stop: 520, Start Num: 50

Candidate Starts for Thyatira_2:

(Start: 50 @275 has 20 MA's), (62, 347), (64, 353), (66, 359), (70, 395), (72, 407), (75, 428), (76, 434), (77, 446), (85, 491),

Gene: Tierra_2 Start: 395, Stop: 655, Start Num: 42

Candidate Starts for Tierra_2:

(22, 248), (Start: 42 @395 has 123 MA's), (62, 479), (73, 530),

Gene: TingHuaYa_3 Start: 447, Stop: 701, Start Num: 42

Candidate Starts for TingHuaYa_3:

(13, 225), (29, 321), (Start: 42 @447 has 123 MA's), (54, 468), (62, 528), (64, 534), (66, 540), (72, 588), (74, 606), (75, 609), (77, 627),

Gene: TiniBug_3 Start: 440, Stop: 694, Start Num: 42

Candidate Starts for TiniBug_3:

(13, 215), (29, 314), (Start: 42 @440 has 123 MA's), (54, 461), (59, 500), (64, 527), (66, 533), (72, 581), (74, 599), (77, 620), (79, 632), (85, 665),

Gene: Tiri_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for Tiri_3:

(Start: 42 @452 has 123 MA's), (54, 473), (60, 521), (64, 539), (66, 545), (69, 578), (72, 593), (74, 611), (75, 614), (77, 632), (79, 644), (82, 656), (85, 677),

Gene: Topper_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Topper_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (59, 536), (60, 545), (64, 563), (66, 569), (72, 617), (75, 638), (77, 656), (82, 680), (85, 701),

Gene: TreyKay_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for TreyKay_3:

(13, 227), (29, 326), (Start: 42 @452 has 123 MA's), (54, 473), (60, 521), (64, 539), (66, 545), (72, 593), (74, 611), (75, 614), (77, 632), (82, 656), (85, 677),

Gene: TribbleTrouble_91 Start: 58049, Stop: 58294, Start Num: 41

Candidate Starts for TribbleTrouble_91:

(Start: 41 @58049 has 12 MA's), (Start: 49 @58061 has 1 MA's), (63, 58124), (75, 58193), (80, 58226), (85, 58259),

Gene: TruffulaTree_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for TruffulaTree_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (59, 536), (60, 545), (64, 563), (66, 569), (72, 617), (74, 635), (75, 638), (77, 656), (79, 668), (82, 680), (85, 701),

Gene: Twitch_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Twitch_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (59, 536), (60, 545), (64, 563), (66, 569), (72, 617), (75, 638), (77, 656), (82, 680), (85, 701),

Gene: Unicorn_2 Start: 389, Stop: 649, Start Num: 42

Candidate Starts for Unicorn_2:

(22, 242), (Start: 42 @389 has 123 MA's),

Gene: Urkel_3 Start: 440, Stop: 694, Start Num: 42

Candidate Starts for Urkel_3:

(13, 215), (29, 314), (Start: 42 @440 has 123 MA's), (54, 461), (59, 500), (64, 527), (66, 533), (72, 581), (74, 599), (77, 620), (79, 632), (85, 665),

Gene: Validus_4 Start: 682, Stop: 942, Start Num: 39

Candidate Starts for Validus_4:

(Start: 39 @682 has 1 MA's), (58, 736), (70, 802), (73, 817), (85, 901),

Gene: Veliki_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Veliki_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (60, 545), (64, 563), (66, 569), (72, 617), (75, 638), (77, 656), (82, 680), (85, 701),

Gene: Venti_65 Start: 41542, Stop: 41796, Start Num: 42

Candidate Starts for Venti_65:

(23, 41398), (27, 41407), (31, 41452), (Start: 42 @41542 has 123 MA's), (53, 41563), (57, 41578), (64, 41638), (80, 41746),

Gene: Waterfoul_2 Start: 296, Stop: 541, Start Num: 50

Candidate Starts for Waterfoul_2:

(Start: 50 @296 has 20 MA's), (62, 368), (64, 374), (66, 380), (70, 416), (72, 428), (75, 449), (76, 455), (77, 467), (85, 512),

Gene: Willsammy_69 Start: 44417, Stop: 44671, Start Num: 42

Candidate Starts for Willsammy_69:

(33, 44354), (Start: 42 @44417 has 123 MA's), (53, 44438), (57, 44453), (61, 44495), (64, 44513), (77, 44606), (80, 44621),

Gene: Ximenita_3 Start: 509, Stop: 769, Start Num: 42

Candidate Starts for Ximenita_3:

(Start: 42 @509 has 123 MA's), (54, 533), (62, 593), (73, 644), (85, 728),

Gene: YoureAdopted_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for YoureAdopted_3:

(13, 227), (29, 326), (Start: 42 @452 has 123 MA's), (54, 473), (60, 521), (64, 539), (66, 545), (72, 593), (74, 611), (75, 614), (77, 632), (82, 656), (85, 677),

Gene: Yunkel11_3 Start: 445, Stop: 702, Start Num: 42

Candidate Starts for Yunkel11_3:

(29, 325), (Start: 42 @445 has 123 MA's), (54, 466), (59, 505), (64, 532), (66, 538), (69, 571), (72, 586), (74, 604), (75, 607), (77, 625), (85, 673),

Gene: Zabiza_3 Start: 476, Stop: 730, Start Num: 42

Candidate Starts for Zabiza_3:

(29, 350), (Start: 42 @476 has 123 MA's), (54, 497), (60, 545), (64, 563), (66, 569), (72, 617), (74, 635), (75, 638), (77, 656), (79, 668), (82, 680), (85, 701),

Gene: Zavala_3 Start: 452, Stop: 706, Start Num: 42

Candidate Starts for Zavala_3:

(13, 227), (29, 326), (Start: 42 @452 has 123 MA's), (54, 473), (60, 521), (64, 539), (66, 545), (72, 593), (74, 611), (75, 614), (77, 632), (79, 644), (82, 656), (85, 677),