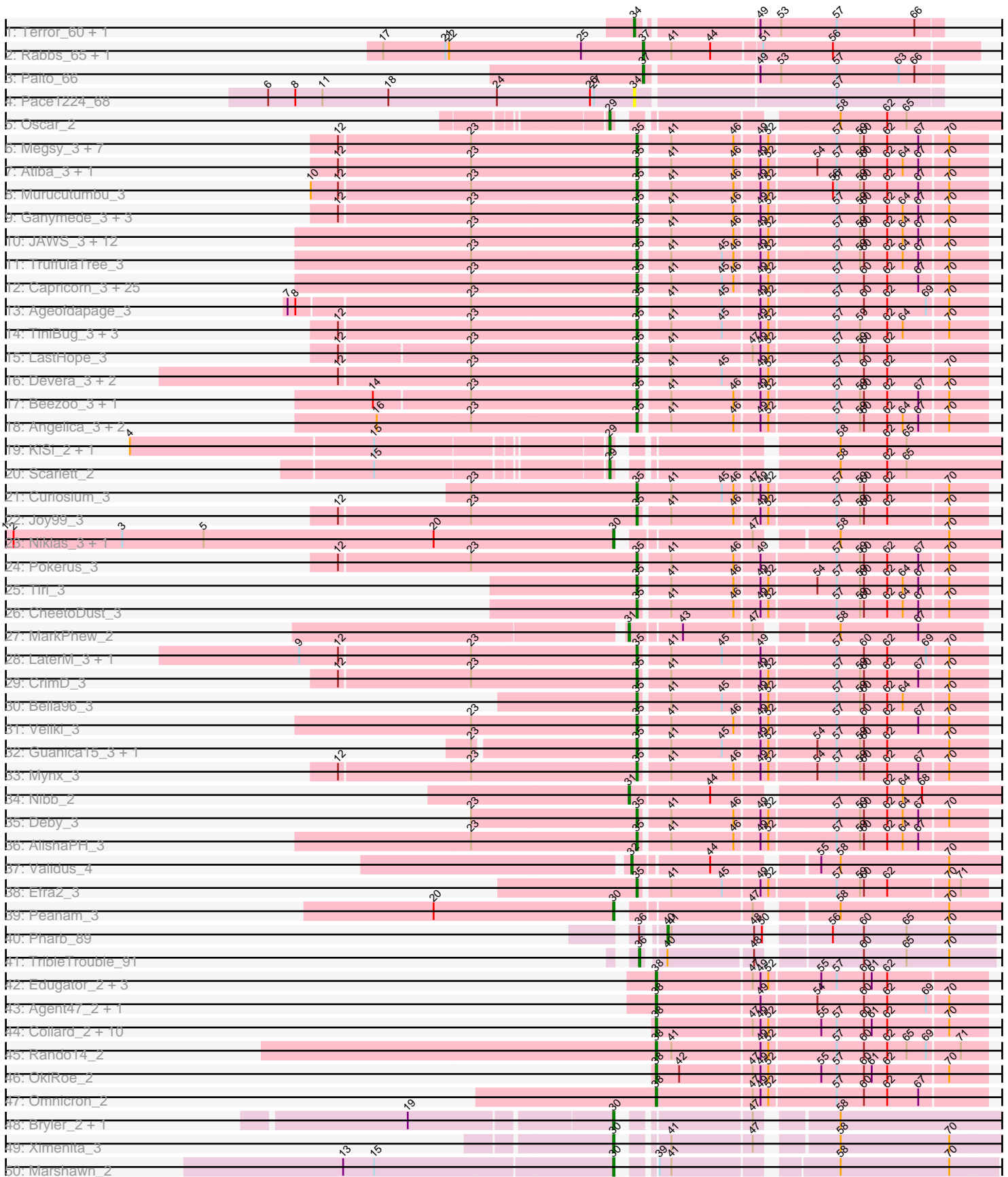
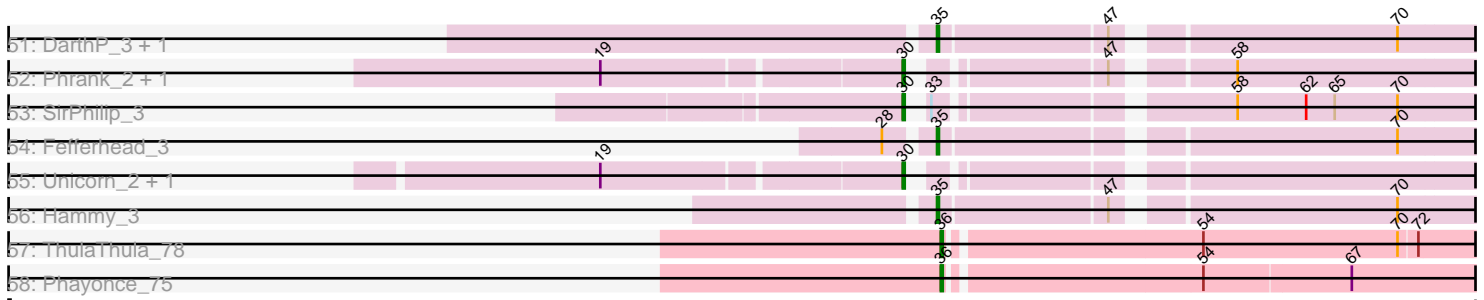


Pham 163422



Pham 163422



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 163422 Report

This analysis was run 05/04/24 on database version 560.

Pham number 163422 has 138 members, 8 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 : Oscar_2
- Track 6 : Megsy_3, LindNT_3, TreyKay_3, YoureAdopted_3, TaiwanKao_3, Prithvi_3, BaghaKamala_3, MeaningOfLife_3
- Track 7 : Atiba_3, Tachez_3
- Track 8 : Murucutumbu_3
- Track 9 : Ganymede_3, Adonis_3, QuincyRose_3, Zavala_3
- Track 10 : JAWS_3, BarrelRoll_3, Anaya_3, Adephagia_3, Slimphazie_3, Zabiza_3, Emerson_3, HedwigODU_3, Jayhawk_3, Padpat_3, ActinUp_3, Rapunzel97_3, Ramen_3
- Track 11 : TruffulaTree_3
- Track 12 : Capricorn_3, Durfee_3, Blizzard_3, ShiaSurprise_3, Homura_3, Boiii_3, Belladonna_3, Topper_3, Twitch_3, Piatt_3, Dalmuri_3, Lunahalos_3, Inky_3, Llorens_3, Jarvi_3, BGlluviae_3, BEEST_3, Asayake_3, Hyperbowlee_3, Jeckyll_3, Rosmarinus_3, Peel_3, CREW_3, Padfoot_3, Spock_3, CaseJules_3
- Track 13 : Ageofdapage_3
- Track 14 : TiniBug_3, Urkel_3, DrHayes_3, SamuelLPlaqson_3
- Track 15 : LastHope_3
- Track 16 : Devera_3, Dole_3, Illumine_3
- Track 17 : Beezoo_3, Geraldini_3
- Track 18 : Angelica_3, Apocalypse_3, Sulley_3
- Track 19 : KiSi_2, LeMond_2
- Track 20 : Scarlett_2
- Track 21 : Curiosium_3
- Track 22 : Joy99_3
- Track 23 : Niklas_3, Shaobing_3
- Track 24 : Pokerus_3
- Track 25 : Tiri_3
- Track 26 : CheetoDust_3
- Track 27 : MarkPhew_2
- Track 28 : LaterM_3, Stinson_3
- Track 29 : CrimD_3
- Track 30 : Bella96_3
- Track 31 : Veliki_3

- Track 32 : Guanica15_3, Yunkel11_3
- Track 33 : Mynx_3
- Track 34 : Nibb_2
- Track 35 : Deby_3
- Track 36 : AlishaPH_3
- Track 37 : Validus_4
- Track 38 : Efra2_3
- Track 39 : Peanam_3
- Track 40 : Pharb_89
- Track 41 : TribbleTrouble_91
- Track 42 : Edugator_2, AlleyCat_2, Psycho_2, Dadosky_2
- Track 43 : Agent47_2, InvictusManeo_2
- Track 44 : Collard_2, Heftyboy_2, Paola_2, Waterfoul_2, Thyatira_2, Gengar_2, SoSeph_2, Guillsminger_2, Feyre_2, Miryou_2, Leston_2
- Track 45 : Rando14_2
- Track 46 : OkiRoe_2
- Track 47 : Omnicron_2
- Track 48 : Bryler_2, Cain_2
- Track 49 : Ximenita_3
- Track 50 : Marshawn_2
- Track 51 : DarthP_3, Amohnition_3
- Track 52 : Phrank_2, Tierra_2
- Track 53 : SirPhilip_3
- Track 54 : Fefferhead_3
- Track 55 : Unicorn_2, PhelpsODU_2
- Track 56 : Hammy_3
- Track 57 : ThulaThula_78
- Track 58 : Phayonce_75

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

The start number called the most often in the published annotations is 35, it was called in 84 of the 130 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• ActinUp_3, Adephagia_3, Adonis_3, Ageofdapage_3, AlishaPH_3, Amohnition_3, Anaya_3, Angelica_3, Apocalypse_3, Asayake_3, Atiba_3, BEEST_3, BGlluviae_3, BaghaKamala_3, BarrelRoll_3, Beezoo_3, Bella96_3, Belladonna_3, Blizzard_3, Boiiii_3, CREW_3, Capricorn_3, CaseJules_3, CheetoDust_3, CrimD_3, Curiosium_3, Dalmuri_3, DarthP_3, Deby_3, Devera_3, Dole_3, DrHayes_3, Durfee_3, Efra2_3, Emerson_3, Fefferhead_3, Ganymede_3, Geraldini_3, Guanica15_3, Hammy_3, HedwigODU_3, Homura_3, Hyperbowlee_3, Illumine_3, Inky_3, JAWS_3, Jarvi_3, Jayhawk_3, Jeckyll_3, Joy99_3, LastHope_3, LaterM_3, LindNT_3, Llorens_3, Lunahalos_3, MeaningOfLife_3, Megsy_3, Murucutumbu_3, Mynx_3, Padfoot_3, Padpat_3, Peel_3, Piatt_3, Pokerus_3, Prithvi_3, QuincyRose_3, Ramen_3, Rapunzel97_3, Rosmarinus_3, SamuelLPlaqson_3, ShiaSurprise_3, Slimphazie_3, Spock_3, Stinson_3, Sulley_3, Tachez_3, TaiwanKao_3, TiniBug_3, Tiri_3, Topper_3, TreyKay_3, TruffulaTree_3, Twitch_3, Urkel_3, Veliki_3, YoureAdopted_3, Yunkel11_3, Zabiza_3, Zavala_3,

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

-

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

- Agent47_2, AlleyCat_2, Bryler_2, Cain_2, Collard_2, Dadosky_2, Edugator_2, Feyre_2, Gengar_2, Guillsminger_2, Heftyboy_2, InvictusManeo_2, KiSi_2, LeMond_2, Leston_2, MarkPhew_2, Marshawn_2, Miryou_2, Nibb_2, Niklas_3, OkiRoe_2, Omnicron_2, Oscar_2, Pace1224_68, Paito_66, Paola_2, Peanam_3, Pharb_89, Phayonce_75, PhelpsODU_2, Phrank_2, Psycho_2, Rabbs_65, Rando14_2, Scarlett_2, Shaobing_3, SirPhilip_3, Sneeze_64, SoSeph_2, Taheera_60, Terror_60, ThulaThula_78, Thyatira_2, Tierra_2, TribbleTrouble_91, Unicorn_2, Validus_4, Waterfoul_2, Ximenita_3,

Summary by start number:

Start 29:

- Found in 4 of 138 (2.9%) of genes in pham
- Manual Annotations of this start: 4 of 130
- Called 100.0% of time when present
- Phage (with cluster) where this start called: KiSi_2 (K1), LeMond_2 (K1), Oscar_2 (K1), Scarlett_2 (K1),

Start 30:

- Found in 12 of 138 (8.7%) of genes in pham
- Manual Annotations of this start: 12 of 130
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bryler_2 (K6), Cain_2 (K6), Marshawn_2 (K6), Niklas_3 (K1), Peanam_3 (K1), PhelpsODU_2 (K6), Phrank_2 (K6), Shaobing_3 (K1), SirPhilip_3 (K6), Tierra_2 (K6), Unicorn_2 (K6), Ximenita_3 (K6),

Start 31:

- Found in 2 of 138 (1.4%) of genes in pham
- Manual Annotations of this start: 2 of 130
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MarkPhew_2 (K1), Nibb_2 (K1),

Start 32:

- Found in 1 of 138 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 130
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Validus_4 (K1),

Start 34:

- Found in 3 of 138 (2.2%) of genes in pham
- Manual Annotations of this start: 2 of 130
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pace1224_68 (G2), Taheera_60 (G1), Terror_60 (G1),

Start 35:

- Found in 89 of 138 (64.5%) of genes in pham
- Manual Annotations of this start: 84 of 130

- Called 100.0% 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), Amohnition_3 (K6), Anaya_3 (K1), Angelica_3 (K1), Apocalypse_3 (K1), Asayake_3 (K1), Atiba_3 (K1), BEEST_3 (K1), BGlluvia_3 (K1), BaghaKamala_3 (K1), BarrelRoll_3 (K1), Beezoo_3 (K1), Bella96_3 (K1), Belladonna_3 (K1), Blizzard_3 (K1), Boiii_3 (K1), CREW_3 (K1), Capricorn_3 (K1), CaseJules_3 (K1), CheetoDust_3 (K1), CrimD_3 (K1), Curiosium_3 (K1), Dalmuri_3 (K1), DarthP_3 (K6), Deby_3 (K1), Devera_3 (K1), Dole_3 (K1), DrHayes_3 (K1), Durfee_3 (K1), Efra2_3 (K1), Emerson_3 (K1), Fefferhead_3 (K6), Ganymede_3 (K1), Geraldini_3 (K1), Guanica15_3 (K1), Hammy_3 (K6), 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), LastHope_3 (K1), LaterM_3 (K1), LindNT_3 (K1), Llorens_3 (K1), Lunahalos_3 (K1), MeaningOfLife_3 (K1), Megsy_3 (K1), Murucutumbu_3 (K1), Mynx_3 (K1), Padfoot_3 (K1), Padpat_3 (K1), Peel_3 (K1), Piatt_3 (K1), Pokerus_3 (K1), Prithvi_3 (K1), QuincyRose_3 (K1), Ramen_3 (K1), Rapunzel97_3 (K1), Rosmarinus_3 (K1), SamuelLPlaqsom_3 (K1), ShiaSurprise_3 (K1), Slimphazie_3 (K1), Spock_3 (K1), Stinson_3 (K1), Sulley_3 (K1), Tachez_3 (K1), TaiwanKao_3 (K1), TiniBug_3 (K1), Tiri_3 (K1), Topper_3 (K1), TreyKay_3 (K1), TruffulaTree_3 (K1), Twitch_3 (K1), Urkel_3 (K1), Veliki_3 (K1), YoureAdopted_3 (K1), Yunkel11_3 (K1), Zabiza_3 (K1), Zavala_3 (K1),

Start 36:

- Found in 4 of 138 (2.9%) of genes in pham
- Manual Annotations of this start: 3 of 130
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Phayonce_75 (P5), ThulaThula_78 (P5), TribbleTrouble_91 (K3),

Start 37:

- Found in 3 of 138 (2.2%) of genes in pham
- Manual Annotations of this start: 3 of 130
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Paito_66 (G1), Rabbs_65 (G1), Sneeze_64 (G1),

Start 38:

- Found in 20 of 138 (14.5%) of genes in pham
- Manual Annotations of this start: 18 of 130
- 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),

Start 40:

- Found in 2 of 138 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 130
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Pharb_89 (K3),

Summary by clusters:

There are 7 clusters represented in this pham: G2, G1, P5, K3, K1, K6, K5,

Info for manual annotations of cluster G1:

- Start number 34 was manually annotated 2 times for cluster G1.
- Start number 37 was manually annotated 3 times for cluster G1.

Info for manual annotations of cluster K1:

- Start number 29 was manually annotated 4 times for cluster K1.
- Start number 30 was manually annotated 3 times for cluster K1.
- Start number 31 was manually annotated 2 times for cluster K1.
- Start number 32 was manually annotated 1 time for cluster K1.
- Start number 35 was manually annotated 80 times for cluster K1.

Info for manual annotations of cluster K3:

- Start number 36 was manually annotated 1 time for cluster K3.
- Start number 40 was manually annotated 1 time for cluster K3.

Info for manual annotations of cluster K5:

- Start number 38 was manually annotated 18 times for cluster K5.

Info for manual annotations of cluster K6:

- Start number 30 was manually annotated 9 times for cluster K6.
- Start number 35 was manually annotated 4 times for cluster K6.

Info for manual annotations of cluster P5:

- Start number 36 was manually annotated 2 times for cluster P5.

Gene Information:

Gene: ActinUp_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for ActinUp_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (46, 545), (49, 563), (52, 569), (57, 617), (59, 635), (60, 638), (62, 656), (64, 668), (67, 680), (70, 701),

Gene: Adephagia_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Adephagia_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (46, 545), (49, 563), (52, 569), (57, 617), (59, 635), (60, 638), (62, 656), (64, 668), (67, 680), (70, 701),

Gene: Adonis_3 Start: 452, Stop: 706, Start Num: 35

Candidate Starts for Adonis_3:

(12, 227), (23, 326), (Start: 35 @452 has 84 MA's), (41, 473), (46, 521), (49, 539), (52, 545), (57, 593), (59, 611), (60, 614), (62, 632), (64, 644), (67, 656), (70, 677),

Gene: Agent47_2 Start: 300, Stop: 545, Start Num: 38

Candidate Starts for Agent47_2:

(Start: 38 @300 has 18 MA's), (49, 378), (54, 417), (60, 453), (62, 471), (69, 501), (70, 516),

Gene: Ageofdapage_3 Start: 435, Stop: 689, Start Num: 35

Candidate Starts for Ageofdapage_3:

(7, 174), (8, 180), (23, 309), (Start: 35 @435 has 84 MA's), (41, 456), (45, 495), (49, 522), (52, 528), (57, 576), (60, 597), (62, 615), (69, 645), (70, 660),

Gene: AlishaPH_3 Start: 475, Stop: 729, Start Num: 35

Candidate Starts for AlishaPH_3:

(23, 349), (Start: 35 @475 has 84 MA's), (41, 496), (46, 544), (49, 562), (52, 568), (57, 616), (59, 634), (60, 637), (62, 655), (64, 667), (67, 679),

Gene: AlleyCat_2 Start: 300, Stop: 545, Start Num: 38

Candidate Starts for AlleyCat_2:

(Start: 38 @300 has 18 MA's), (47, 372), (49, 378), (52, 384), (55, 420), (57, 432), (60, 453), (61, 459), (62, 471),

Gene: Amohnition_3 Start: 416, Stop: 673, Start Num: 35

Candidate Starts for Amohnition_3:

(Start: 35 @416 has 84 MA's), (47, 500), (70, 635),

Gene: Anaya_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Anaya_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (46, 545), (49, 563), (52, 569), (57, 617), (59, 635), (60, 638), (62, 656), (64, 668), (67, 680), (70, 701),

Gene: Angelica_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Angelica_3:

(16, 278), (23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (46, 545), (49, 563), (52, 569), (57, 617), (59, 635), (60, 638), (62, 656), (64, 668), (67, 680), (70, 701),

Gene: Apocalypse_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Apocalypse_3:

(16, 278), (23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (46, 545), (49, 563), (52, 569), (57, 617), (59, 635), (60, 638), (62, 656), (64, 668), (67, 680), (70, 701),

Gene: Asayake_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Asayake_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (45, 536), (46, 545), (49, 563), (52, 569), (57, 617), (60, 638), (62, 656), (67, 680), (70, 701),

Gene: Atiba_3 Start: 452, Stop: 706, Start Num: 35

Candidate Starts for Atiba_3:

(12, 227), (23, 326), (Start: 35 @452 has 84 MA's), (41, 473), (46, 521), (49, 539), (52, 545), (54, 578), (57, 593), (59, 611), (60, 614), (62, 632), (64, 644), (67, 656), (70, 677),

Gene: BEEST_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for BEEST_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (45, 536), (46, 545), (49, 563), (52, 569), (57, 617), (60, 638), (62, 656), (67, 680), (70, 701),

Gene: BGlluviae_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for BGlluviae_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (45, 536), (46, 545), (49, 563), (52, 569), (57, 617), (60, 638), (62, 656), (67, 680), (70, 701),

Gene: BaghaKamala_3 Start: 452, Stop: 706, Start Num: 35

Candidate Starts for BaghaKamala_3:

(12, 227), (23, 326), (Start: 35 @452 has 84 MA's), (41, 473), (46, 521), (49, 539), (52, 545), (57, 593), (59, 611), (60, 614), (62, 632), (67, 656), (70, 677),

Gene: BarrelRoll_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for BarrelRoll_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (46, 545), (49, 563), (52, 569), (57, 617), (59, 635), (60, 638), (62, 656), (64, 668), (67, 680), (70, 701),

Gene: Beezoo_3 Start: 473, Stop: 727, Start Num: 35

Candidate Starts for Beezoo_3:

(14, 275), (23, 347), (Start: 35 @473 has 84 MA's), (41, 494), (46, 542), (49, 560), (52, 566), (57, 614), (59, 632), (60, 635), (62, 653), (67, 677), (70, 698),

Gene: Bella96_3 Start: 440, Stop: 694, Start Num: 35

Candidate Starts for Bella96_3:

(Start: 35 @440 has 84 MA's), (41, 461), (45, 500), (49, 527), (52, 533), (57, 581), (59, 599), (60, 602), (62, 620), (64, 632), (70, 665),

Gene: Belladonna_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Belladonna_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (45, 536), (46, 545), (49, 563), (52, 569), (57, 617), (60, 638), (62, 656), (67, 680), (70, 701),

Gene: Blizzard_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Blizzard_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (45, 536), (46, 545), (49, 563), (52, 569), (57, 617), (60, 638), (62, 656), (67, 680), (70, 701),

Gene: Boiiii_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Boiiii_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (45, 536), (46, 545), (49, 563), (52, 569), (57, 617), (60, 638), (62, 656), (67, 680), (70, 701),

Gene: Bryler_2 Start: 388, Stop: 648, Start Num: 30

Candidate Starts for Bryler_2:

(19, 241), (Start: 30 @388 has 12 MA's), (47, 472), (58, 523),

Gene: CREW_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for CREW_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (45, 536), (46, 545), (49, 563), (52, 569), (57, 617), (60, 638), (62, 656), (67, 680), (70, 701),

Gene: Cain_2 Start: 388, Stop: 648, Start Num: 30

Candidate Starts for Cain_2:

(19, 241), (Start: 30 @388 has 12 MA's), (47, 472), (58, 523),

Gene: Capricorn_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Capricorn_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (45, 536), (46, 545), (49, 563), (52, 569), (57, 617), (60, 638), (62, 656), (67, 680), (70, 701),

Gene: CaseJules_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for CaseJules_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (45, 536), (46, 545), (49, 563), (52, 569), (57, 617), (60, 638), (62, 656), (67, 680), (70, 701),

Gene: CheetoDust_3 Start: 452, Stop: 706, Start Num: 35

Candidate Starts for CheetoDust_3:

(Start: 35 @452 has 84 MA's), (41, 473), (46, 521), (49, 539), (52, 545), (57, 593), (59, 611), (60, 614), (62, 632), (64, 644), (67, 656), (70, 677),

Gene: Collard_2 Start: 274, Stop: 519, Start Num: 38

Candidate Starts for Collard_2:

(Start: 38 @274 has 18 MA's), (47, 346), (49, 352), (52, 358), (55, 394), (57, 406), (60, 427), (61, 433), (62, 445), (70, 490),

Gene: CrimD_3 Start: 452, Stop: 706, Start Num: 35

Candidate Starts for CrimD_3:

(12, 227), (23, 326), (Start: 35 @452 has 84 MA's), (41, 473), (49, 539), (52, 545), (57, 593), (59, 611), (60, 614), (62, 632), (67, 656), (70, 677),

Gene: Curiosium_3 Start: 517, Stop: 777, Start Num: 35

Candidate Starts for Curiosium_3:

(23, 391), (Start: 35 @517 has 84 MA's), (41, 544), (45, 583), (46, 592), (47, 604), (49, 610), (52, 616), (57, 664), (59, 682), (60, 685), (62, 703), (70, 748),

Gene: Dadosky_2 Start: 300, Stop: 545, Start Num: 38

Candidate Starts for Dadosky_2:

(Start: 38 @300 has 18 MA's), (47, 372), (49, 378), (52, 384), (55, 420), (57, 432), (60, 453), (61, 459), (62, 471),

Gene: Dalmuri_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Dalmuri_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (45, 536), (46, 545), (49, 563), (52, 569), (57, 617), (60, 638), (62, 656), (67, 680), (70, 701),

Gene: DarthP_3 Start: 416, Stop: 673, Start Num: 35

Candidate Starts for DarthP_3:

(Start: 35 @416 has 84 MA's), (47, 500), (70, 635),

Gene: Deby_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Deby_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (46, 545), (49, 563), (52, 569), (57, 617), (59, 635), (60, 638), (62, 656), (64, 668), (67, 680), (70, 701),

Gene: Devera_3 Start: 452, Stop: 706, Start Num: 35

Candidate Starts for Devera_3:

(12, 227), (23, 326), (Start: 35 @452 has 84 MA's), (41, 473), (45, 512), (49, 539), (52, 545), (57, 593), (60, 614), (62, 632), (70, 677),

Gene: Dole_3 Start: 452, Stop: 706, Start Num: 35

Candidate Starts for Dole_3:

(12, 227), (23, 326), (Start: 35 @452 has 84 MA's), (41, 473), (45, 512), (49, 539), (52, 545), (57, 593), (60, 614), (62, 632), (70, 677),

Gene: DrHayes_3 Start: 440, Stop: 694, Start Num: 35

Candidate Starts for DrHayes_3:

(12, 215), (23, 314), (Start: 35 @440 has 84 MA's), (41, 461), (45, 500), (49, 527), (52, 533), (57, 581), (59, 599), (62, 620), (64, 632), (70, 665),

Gene: Durfee_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Durfee_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (45, 536), (46, 545), (49, 563), (52, 569), (57, 617), (60, 638), (62, 656), (67, 680), (70, 701),

Gene: Edugator_2 Start: 300, Stop: 545, Start Num: 38

Candidate Starts for Edugator_2:

(Start: 38 @300 has 18 MA's), (47, 372), (49, 378), (52, 384), (55, 420), (57, 432), (60, 453), (61, 459), (62, 471),

Gene: Efra2_3 Start: 445, Stop: 699, Start Num: 35

Candidate Starts for Efra2_3:

(Start: 35 @445 has 84 MA's), (41, 466), (45, 505), (49, 532), (52, 538), (57, 586), (59, 604), (60, 607), (62, 625), (70, 670), (71, 679),

Gene: Emerson_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Emerson_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (46, 545), (49, 563), (52, 569), (57, 617), (59, 635), (60, 638), (62, 656), (64, 668), (67, 680), (70, 701),

Gene: Fefferhead_3 Start: 410, Stop: 667, Start Num: 35

Candidate Starts for Fefferhead_3:

(28, 389), (Start: 35 @410 has 84 MA's), (70, 629),

Gene: Feyre_2 Start: 275, Stop: 520, Start Num: 38

Candidate Starts for Feyre_2:

(Start: 38 @275 has 18 MA's), (47, 347), (49, 353), (52, 359), (55, 395), (57, 407), (60, 428), (61, 434), (62, 446), (70, 491),

Gene: Ganymede_3 Start: 452, Stop: 706, Start Num: 35

Candidate Starts for Ganymede_3:

(12, 227), (23, 326), (Start: 35 @452 has 84 MA's), (41, 473), (46, 521), (49, 539), (52, 545), (57, 593), (59, 611), (60, 614), (62, 632), (64, 644), (67, 656), (70, 677),

Gene: Gengar_2 Start: 300, Stop: 545, Start Num: 38

Candidate Starts for Gengar_2:

(Start: 38 @300 has 18 MA's), (47, 372), (49, 378), (52, 384), (55, 420), (57, 432), (60, 453), (61, 459), (62, 471), (70, 516),

Gene: Geraldini_3 Start: 473, Stop: 727, Start Num: 35

Candidate Starts for Geraldini_3:

(14, 275), (23, 347), (Start: 35 @473 has 84 MA's), (41, 494), (46, 542), (49, 560), (52, 566), (57, 614), (59, 632), (60, 635), (62, 653), (67, 677), (70, 698),

Gene: Guanica15_3 Start: 445, Stop: 702, Start Num: 35

Candidate Starts for Guanica15_3:

(23, 325), (Start: 35 @445 has 84 MA's), (41, 466), (45, 505), (49, 532), (52, 538), (54, 571), (57, 586), (59, 604), (60, 607), (62, 625), (70, 673),

Gene: Guillsminger_2 Start: 275, Stop: 520, Start Num: 38

Candidate Starts for Guillsminger_2:

(Start: 38 @275 has 18 MA's), (47, 347), (49, 353), (52, 359), (55, 395), (57, 407), (60, 428), (61, 434), (62, 446), (70, 491),

Gene: Hammy_3 Start: 413, Stop: 670, Start Num: 35

Candidate Starts for Hammy_3:

(Start: 35 @413 has 84 MA's), (47, 497), (70, 632),

Gene: HedwigODU_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for HedwigODU_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (46, 545), (49, 563), (52, 569), (57, 617), (59, 635), (60, 638), (62, 656), (64, 668), (67, 680), (70, 701),

Gene: Heftyboy_2 Start: 296, Stop: 541, Start Num: 38

Candidate Starts for Heftyboy_2:

(Start: 38 @296 has 18 MA's), (47, 368), (49, 374), (52, 380), (55, 416), (57, 428), (60, 449), (61, 455), (62, 467), (70, 512),

Gene: Homura_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Homura_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (45, 536), (46, 545), (49, 563), (52, 569), (57, 617), (60, 638), (62, 656), (67, 680), (70, 701),

Gene: Hyperbowlee_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Hyperbowlee_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (45, 536), (46, 545), (49, 563), (52, 569), (57, 617), (60, 638), (62, 656), (67, 680), (70, 701),

Gene: Illumine_3 Start: 452, Stop: 706, Start Num: 35

Candidate Starts for Illumine_3:

(12, 227), (23, 326), (Start: 35 @452 has 84 MA's), (41, 473), (45, 512), (49, 539), (52, 545), (57, 593), (60, 614), (62, 632), (70, 677),

Gene: Inky_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Inky_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (45, 536), (46, 545), (49, 563), (52, 569), (57, 617), (60, 638), (62, 656), (67, 680), (70, 701),

Gene: InvictusManeo_2 Start: 300, Stop: 545, Start Num: 38

Candidate Starts for InvictusManeo_2:

(Start: 38 @300 has 18 MA's), (49, 378), (54, 417), (60, 453), (62, 471), (69, 501), (70, 516),

Gene: JAWS_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for JAWS_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (46, 545), (49, 563), (52, 569), (57, 617), (59, 635), (60, 638), (62, 656), (64, 668), (67, 680), (70, 701),

Gene: Jarvi_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Jarvi_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (45, 536), (46, 545), (49, 563), (52, 569), (57, 617), (60, 638), (62, 656), (67, 680), (70, 701),

Gene: Jayhawk_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Jayhawk_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (46, 545), (49, 563), (52, 569), (57, 617), (59, 635), (60, 638), (62, 656), (64, 668), (67, 680), (70, 701),

Gene: Jeckyll_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Jeckyll_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (45, 536), (46, 545), (49, 563), (52, 569), (57, 617), (60, 638), (62, 656), (67, 680), (70, 701),

Gene: Joy99_3 Start: 452, Stop: 706, Start Num: 35

Candidate Starts for Joy99_3:

(12, 227), (23, 326), (Start: 35 @452 has 84 MA's), (41, 473), (46, 521), (49, 539), (52, 545), (57, 593), (59, 611), (60, 614), (62, 632), (70, 677),

Gene: KiSi_2 Start: 346, Stop: 612, Start Num: 29

Candidate Starts for KiSi_2:

(4, 1), (15, 187), (Start: 29 @346 has 4 MA's), (58, 487), (62, 523), (65, 538),

Gene: LastHope_3 Start: 447, Stop: 701, Start Num: 35

Candidate Starts for LastHope_3:

(12, 225), (23, 321), (Start: 35 @447 has 84 MA's), (41, 468), (47, 528), (49, 534), (52, 540), (57, 588), (59, 606), (60, 609), (62, 627),

Gene: LaterM_3 Start: 452, Stop: 706, Start Num: 35

Candidate Starts for LaterM_3:

(9, 197), (12, 227), (23, 326), (Start: 35 @452 has 84 MA's), (41, 473), (45, 512), (49, 539), (57, 593), (60, 614), (62, 632), (69, 662), (70, 677),

Gene: LeMond_2 Start: 346, Stop: 612, Start Num: 29

Candidate Starts for LeMond_2:

(4, 1), (15, 187), (Start: 29 @346 has 4 MA's), (58, 487), (62, 523), (65, 538),

Gene: Leston_2 Start: 300, Stop: 545, Start Num: 38

Candidate Starts for Leston_2:

(Start: 38 @300 has 18 MA's), (47, 372), (49, 378), (52, 384), (55, 420), (57, 432), (60, 453), (61, 459), (62, 471), (70, 516),

Gene: LindNT_3 Start: 452, Stop: 706, Start Num: 35

Candidate Starts for LindNT_3:

(12, 227), (23, 326), (Start: 35 @452 has 84 MA's), (41, 473), (46, 521), (49, 539), (52, 545), (57, 593), (59, 611), (60, 614), (62, 632), (67, 656), (70, 677),

Gene: Llorens_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Llorens_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (45, 536), (46, 545), (49, 563), (52, 569), (57, 617), (60, 638), (62, 656), (67, 680), (70, 701),

Gene: Lunahalos_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Lunahalos_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (45, 536), (46, 545), (49, 563), (52, 569), (57, 617), (60, 638), (62, 656), (67, 680), (70, 701),

Gene: MarkPhew_2 Start: 323, Stop: 568, Start Num: 31

Candidate Starts for MarkPhew_2:

(Start: 31 @323 has 2 MA's), (43, 359), (47, 410), (58, 461), (67, 521),

Gene: Marshawn_2 Start: 329, Stop: 583, Start Num: 30

Candidate Starts for Marshawn_2:

(13, 125), (15, 149), (Start: 30 @329 has 12 MA's), (39, 344), (41, 353), (58, 464), (70, 548),

Gene: MeaningOfLife_3 Start: 452, Stop: 706, Start Num: 35

Candidate Starts for MeaningOfLife_3:

(12, 227), (23, 326), (Start: 35 @452 has 84 MA's), (41, 473), (46, 521), (49, 539), (52, 545), (57, 593), (59, 611), (60, 614), (62, 632), (67, 656), (70, 677),

Gene: Megsy_3 Start: 452, Stop: 706, Start Num: 35

Candidate Starts for Megsy_3:

(12, 227), (23, 326), (Start: 35 @452 has 84 MA's), (41, 473), (46, 521), (49, 539), (52, 545), (57, 593), (59, 611), (60, 614), (62, 632), (67, 656), (70, 677),

Gene: Miryou_2 Start: 275, Stop: 520, Start Num: 38

Candidate Starts for Miryou_2:

(Start: 38 @275 has 18 MA's), (47, 347), (49, 353), (52, 359), (55, 395), (57, 407), (60, 428), (61, 434), (62, 446), (70, 491),

Gene: Murucutumbu_3 Start: 452, Stop: 706, Start Num: 35

Candidate Starts for Murucutumbu_3:

(10, 206), (12, 227), (23, 326), (Start: 35 @452 has 84 MA's), (41, 473), (46, 521), (49, 539), (52, 545), (56, 590), (57, 593), (59, 611), (60, 614), (62, 632), (67, 656), (70, 677),

Gene: Mynx_3 Start: 452, Stop: 706, Start Num: 35

Candidate Starts for Mynx_3:

(12, 227), (23, 326), (Start: 35 @452 has 84 MA's), (41, 473), (46, 521), (49, 539), (52, 545), (54, 578), (57, 593), (59, 611), (60, 614), (62, 632), (67, 656), (70, 677),

Gene: Nibb_2 Start: 333, Stop: 605, Start Num: 31

Candidate Starts for Nibb_2:

(Start: 31 @333 has 2 MA's), (44, 393), (62, 513), (64, 525), (68, 540),

Gene: Niklas_3 Start: 469, Stop: 732, Start Num: 30

Candidate Starts for Niklas_3:

(1, 1), (2, 7), (3, 91), (5, 154), (20, 331), (Start: 30 @469 has 12 MA's), (47, 556), (58, 607), (70, 691),

Gene: OkiRoe_2 Start: 275, Stop: 520, Start Num: 38

Candidate Starts for OkiRoe_2:

(Start: 38 @275 has 18 MA's), (42, 293), (47, 347), (49, 353), (52, 359), (55, 395), (57, 407), (60, 428), (61, 434), (62, 446), (70, 491),

Gene: Omnicron_2 Start: 241, Stop: 486, Start Num: 38

Candidate Starts for Omnicron_2:

(Start: 38 @241 has 18 MA's), (47, 313), (49, 319), (52, 325), (57, 373), (60, 394), (62, 412), (67, 436),

Gene: Oscar_2 Start: 346, Stop: 612, Start Num: 29

Candidate Starts for Oscar_2:

(Start: 29 @346 has 4 MA's), (58, 487), (62, 523), (65, 538),

Gene: Pace1224_68 Start: 44266, Stop: 44490, Start Num: 34

Candidate Starts for Pace1224_68:

(6, 43984), (8, 44005), (11, 44026), (18, 44077), (24, 44161), (26, 44233), (27, 44236), (Start: 34 @44266 has 2 MA's), (57, 44410),

Gene: Padfoot_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Padfoot_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (45, 536), (46, 545), (49, 563), (52, 569), (57, 617), (60, 638), (62, 656), (67, 680), (70, 701),

Gene: Padpat_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Padpat_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (46, 545), (49, 563), (52, 569), (57, 617), (59, 635), (60, 638), (62, 656), (64, 668), (67, 680), (70, 701),

Gene: Paito_66 Start: 41579, Stop: 41797, Start Num: 37

Candidate Starts for Paito_66:

(Start: 37 @41579 has 3 MA's), (49, 41660), (53, 41675), (57, 41717), (63, 41765), (66, 41777),

Gene: Paola_2 Start: 275, Stop: 520, Start Num: 38

Candidate Starts for Paola_2:

(Start: 38 @275 has 18 MA's), (47, 347), (49, 353), (52, 359), (55, 395), (57, 407), (60, 428), (61, 434), (62, 446), (70, 491),

Gene: Peanam_3 Start: 469, Stop: 732, Start Num: 30

Candidate Starts for Peanam_3:

(20, 331), (Start: 30 @469 has 12 MA's), (47, 556), (58, 607), (70, 691),

Gene: Peel_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Peel_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (45, 536), (46, 545), (49, 563), (52, 569), (57, 617), (60, 638), (62, 656), (67, 680), (70, 701),

Gene: Pharb_89 Start: 56013, Stop: 56249, Start Num: 40

Candidate Starts for Pharb_89:

(Start: 36 @56001 has 3 MA's), (Start: 40 @56013 has 1 MA's), (41, 56016), (48, 56079), (50, 56085), (56, 56124), (60, 56148), (65, 56181), (70, 56214),

Gene: Phayonce_75 Start: 47994, Stop: 48278, Start Num: 36

Candidate Starts for Phayonce_75:

(Start: 36 @47994 has 3 MA's), (54, 48120), (67, 48195),

Gene: PhelpsODU_2 Start: 389, Stop: 649, Start Num: 30

Candidate Starts for PhelpsODU_2:

(19, 242), (Start: 30 @389 has 12 MA's),

Gene: Phrank_2 Start: 394, Stop: 654, Start Num: 30

Candidate Starts for Phrank_2:

(19, 247), (Start: 30 @394 has 12 MA's), (47, 478), (58, 529),

Gene: Piatt_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Piatt_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (45, 536), (46, 545), (49, 563), (52, 569), (57, 617), (60, 638), (62, 656), (67, 680), (70, 701),

Gene: Pokerus_3 Start: 452, Stop: 706, Start Num: 35

Candidate Starts for Pokerus_3:

(12, 227), (23, 326), (Start: 35 @452 has 84 MA's), (41, 473), (46, 521), (49, 539), (57, 593), (59, 611), (60, 614), (62, 632), (67, 656), (70, 677),

Gene: Prithvi_3 Start: 452, Stop: 706, Start Num: 35

Candidate Starts for Prithvi_3:

(12, 227), (23, 326), (Start: 35 @452 has 84 MA's), (41, 473), (46, 521), (49, 539), (52, 545), (57, 593), (59, 611), (60, 614), (62, 632), (67, 656), (70, 677),

Gene: Psycho_2 Start: 300, Stop: 545, Start Num: 38

Candidate Starts for Psycho_2:

(Start: 38 @300 has 18 MA's), (47, 372), (49, 378), (52, 384), (55, 420), (57, 432), (60, 453), (61, 459), (62, 471),

Gene: QuincyRose_3 Start: 452, Stop: 706, Start Num: 35

Candidate Starts for QuincyRose_3:

(12, 227), (23, 326), (Start: 35 @452 has 84 MA's), (41, 473), (46, 521), (49, 539), (52, 545), (57, 593), (59, 611), (60, 614), (62, 632), (64, 644), (67, 656), (70, 677),

Gene: Rabbs_65 Start: 41915, Stop: 42166, Start Num: 37

Candidate Starts for Rabbs_65:

(17, 41714), (21, 41762), (22, 41765), (25, 41867), (Start: 37 @41915 has 3 MA's), (41, 41936), (44, 41966), (51, 42002), (56, 42056),

Gene: Ramen_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Ramen_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (46, 545), (49, 563), (52, 569), (57, 617), (59, 635), (60, 638), (62, 656), (64, 668), (67, 680), (70, 701),

Gene: Rando14_2 Start: 304, Stop: 549, Start Num: 38

Candidate Starts for Rando14_2:

(Start: 38 @304 has 18 MA's), (41, 316), (49, 382), (52, 388), (57, 436), (60, 457), (62, 475), (65, 490), (69, 505), (71, 529),

Gene: Rapunzel97_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Rapunzel97_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (46, 545), (49, 563), (52, 569), (57, 617), (59, 635), (60, 638), (62, 656), (64, 668), (67, 680), (70, 701),

Gene: Rosmarinus_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Rosmarinus_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (45, 536), (46, 545), (49, 563), (52, 569), (57, 617), (60, 638), (62, 656), (67, 680), (70, 701),

Gene: SamuelLPlaqson_3 Start: 440, Stop: 694, Start Num: 35

Candidate Starts for SamuelLPlaqson_3:

(12, 215), (23, 314), (Start: 35 @440 has 84 MA's), (41, 461), (45, 500), (49, 527), (52, 533), (57, 581), (59, 599), (62, 620), (64, 632), (70, 665),

Gene: Scarlett_2 Start: 346, Stop: 612, Start Num: 29

Candidate Starts for Scarlett_2:

(15, 187), (Start: 29 @346 has 4 MA's), (58, 487), (62, 523), (65, 538),

Gene: Shaobing_3 Start: 469, Stop: 732, Start Num: 30

Candidate Starts for Shaobing_3:

(1, 1), (2, 7), (3, 91), (5, 154), (20, 331), (Start: 30 @469 has 12 MA's), (47, 556), (58, 607), (70, 691),

Gene: ShiaSurprise_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for ShiaSurprise_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (45, 536), (46, 545), (49, 563), (52, 569), (57, 617), (60, 638), (62, 656), (67, 680), (70, 701),

Gene: SirPhilip_3 Start: 468, Stop: 731, Start Num: 30

Candidate Starts for SirPhilip_3:

(Start: 30 @468 has 12 MA's), (33, 471), (58, 606), (62, 642), (65, 657), (70, 690),

Gene: Slimphazie_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Slimphazie_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (46, 545), (49, 563), (52, 569), (57, 617), (59, 635), (60, 638), (62, 656), (64, 668), (67, 680), (70, 701),

Gene: Sneeze_64 Start: 41914, Stop: 42165, Start Num: 37

Candidate Starts for Sneeze_64:

(17, 41713), (21, 41761), (22, 41764), (25, 41866), (Start: 37 @41914 has 3 MA's), (41, 41935), (44, 41965), (51, 42001), (56, 42055),

Gene: SoSeph_2 Start: 296, Stop: 541, Start Num: 38

Candidate Starts for SoSeph_2:

(Start: 38 @296 has 18 MA's), (47, 368), (49, 374), (52, 380), (55, 416), (57, 428), (60, 449), (61, 455), (62, 467), (70, 512),

Gene: Spock_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Spock_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (45, 536), (46, 545), (49, 563), (52, 569), (57, 617), (60, 638), (62, 656), (67, 680), (70, 701),

Gene: Stinson_3 Start: 452, Stop: 706, Start Num: 35

Candidate Starts for Stinson_3:

(9, 197), (12, 227), (23, 326), (Start: 35 @452 has 84 MA's), (41, 473), (45, 512), (49, 539), (57, 593), (60, 614), (62, 632), (69, 662), (70, 677),

Gene: Sulley_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Sulley_3:

(16, 278), (23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (46, 545), (49, 563), (52, 569), (57, 617), (59, 635), (60, 638), (62, 656), (64, 668), (67, 680), (70, 701),

Gene: Tachez_3 Start: 452, Stop: 706, Start Num: 35

Candidate Starts for Tachez_3:

(12, 227), (23, 326), (Start: 35 @452 has 84 MA's), (41, 473), (46, 521), (49, 539), (52, 545), (54, 578), (57, 593), (59, 611), (60, 614), (62, 632), (64, 644), (67, 656), (70, 677),

Gene: Taheera_60 Start: 40724, Stop: 40945, Start Num: 34

Candidate Starts for Taheera_60:

(Start: 34 @40724 has 2 MA's), (49, 40808), (53, 40823), (57, 40865), (66, 40925),

Gene: TaiwanKao_3 Start: 452, Stop: 706, Start Num: 35

Candidate Starts for TaiwanKao_3:

(12, 227), (23, 326), (Start: 35 @452 has 84 MA's), (41, 473), (46, 521), (49, 539), (52, 545), (57, 593), (59, 611), (60, 614), (62, 632), (67, 656), (70, 677),

Gene: Terror_60 Start: 40724, Stop: 40945, Start Num: 34

Candidate Starts for Terror_60:

(Start: 34 @40724 has 2 MA's), (49, 40808), (53, 40823), (57, 40865), (66, 40925),

Gene: ThulaThula_78 Start: 49203, Stop: 49487, Start Num: 36

Candidate Starts for ThulaThula_78:

(Start: 36 @49203 has 3 MA's), (54, 49329), (70, 49431), (72, 49440),

Gene: Thyatira_2 Start: 275, Stop: 520, Start Num: 38

Candidate Starts for Thyatira_2:

(Start: 38 @275 has 18 MA's), (47, 347), (49, 353), (52, 359), (55, 395), (57, 407), (60, 428), (61, 434), (62, 446), (70, 491),

Gene: Tierra_2 Start: 395, Stop: 655, Start Num: 30

Candidate Starts for Tierra_2:

(19, 248), (Start: 30 @395 has 12 MA's), (47, 479), (58, 530),

Gene: TiniBug_3 Start: 440, Stop: 694, Start Num: 35

Candidate Starts for TiniBug_3:

(12, 215), (23, 314), (Start: 35 @440 has 84 MA's), (41, 461), (45, 500), (49, 527), (52, 533), (57, 581), (59, 599), (62, 620), (64, 632), (70, 665),

Gene: Tiri_3 Start: 452, Stop: 706, Start Num: 35

Candidate Starts for Tiri_3:

(Start: 35 @452 has 84 MA's), (41, 473), (46, 521), (49, 539), (52, 545), (54, 578), (57, 593), (59, 611), (60, 614), (62, 632), (64, 644), (67, 656), (70, 677),

Gene: Topper_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Topper_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (45, 536), (46, 545), (49, 563), (52, 569), (57, 617), (60, 638), (62, 656), (67, 680), (70, 701),

Gene: TreyKay_3 Start: 452, Stop: 706, Start Num: 35

Candidate Starts for TreyKay_3:

(12, 227), (23, 326), (Start: 35 @452 has 84 MA's), (41, 473), (46, 521), (49, 539), (52, 545), (57, 593), (59, 611), (60, 614), (62, 632), (67, 656), (70, 677),

Gene: TribbleTrouble_91 Start: 58049, Stop: 58294, Start Num: 36

Candidate Starts for TribbleTrouble_91:

(Start: 36 @58049 has 3 MA's), (Start: 40 @58061 has 1 MA's), (48, 58124), (60, 58193), (65, 58226), (70, 58259),

Gene: TruffulaTree_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for TruffulaTree_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (45, 536), (46, 545), (49, 563), (52, 569), (57, 617), (59, 635), (60, 638), (62, 656), (64, 668), (67, 680), (70, 701),

Gene: Twitch_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Twitch_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (45, 536), (46, 545), (49, 563), (52, 569), (57, 617), (60, 638), (62, 656), (67, 680), (70, 701),

Gene: Unicorn_2 Start: 389, Stop: 649, Start Num: 30

Candidate Starts for Unicorn_2:

(19, 242), (Start: 30 @389 has 12 MA's),

Gene: Urkel_3 Start: 440, Stop: 694, Start Num: 35

Candidate Starts for Urkel_3:

(12, 215), (23, 314), (Start: 35 @440 has 84 MA's), (41, 461), (45, 500), (49, 527), (52, 533), (57, 581), (59, 599), (62, 620), (64, 632), (70, 665),

Gene: Validus_4 Start: 682, Stop: 942, Start Num: 32

Candidate Starts for Validus_4:

(Start: 32 @682 has 1 MA's), (44, 736), (55, 802), (58, 817), (70, 901),

Gene: Veliki_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Veliki_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (46, 545), (49, 563), (52, 569), (57, 617), (60, 638), (62, 656), (67, 680), (70, 701),

Gene: Waterfoul_2 Start: 296, Stop: 541, Start Num: 38

Candidate Starts for Waterfoul_2:

(Start: 38 @296 has 18 MA's), (47, 368), (49, 374), (52, 380), (55, 416), (57, 428), (60, 449), (61, 455), (62, 467), (70, 512),

Gene: Ximenita_3 Start: 509, Stop: 769, Start Num: 30

Candidate Starts for Ximenita_3:

(Start: 30 @509 has 12 MA's), (41, 533), (47, 593), (58, 644), (70, 728),

Gene: YoureAdopted_3 Start: 452, Stop: 706, Start Num: 35

Candidate Starts for YoureAdopted_3:

(12, 227), (23, 326), (Start: 35 @452 has 84 MA's), (41, 473), (46, 521), (49, 539), (52, 545), (57, 593), (59, 611), (60, 614), (62, 632), (67, 656), (70, 677),

Gene: Yunkel11_3 Start: 445, Stop: 702, Start Num: 35

Candidate Starts for Yunkel11_3:

(23, 325), (Start: 35 @445 has 84 MA's), (41, 466), (45, 505), (49, 532), (52, 538), (54, 571), (57, 586), (59, 604), (60, 607), (62, 625), (70, 673),

Gene: Zabiza_3 Start: 476, Stop: 730, Start Num: 35

Candidate Starts for Zabiza_3:

(23, 350), (Start: 35 @476 has 84 MA's), (41, 497), (46, 545), (49, 563), (52, 569), (57, 617), (59, 635), (60, 638), (62, 656), (64, 668), (67, 680), (70, 701),

Gene: Zavala_3 Start: 452, Stop: 706, Start Num: 35

Candidate Starts for Zavala_3:

(12, 227), (23, 326), (Start: 35 @452 has 84 MA's), (41, 473), (46, 521), (49, 539), (52, 545), (57, 593),
(59, 611), (60, 614), (62, 632), (64, 644), (67, 656), (70, 677),