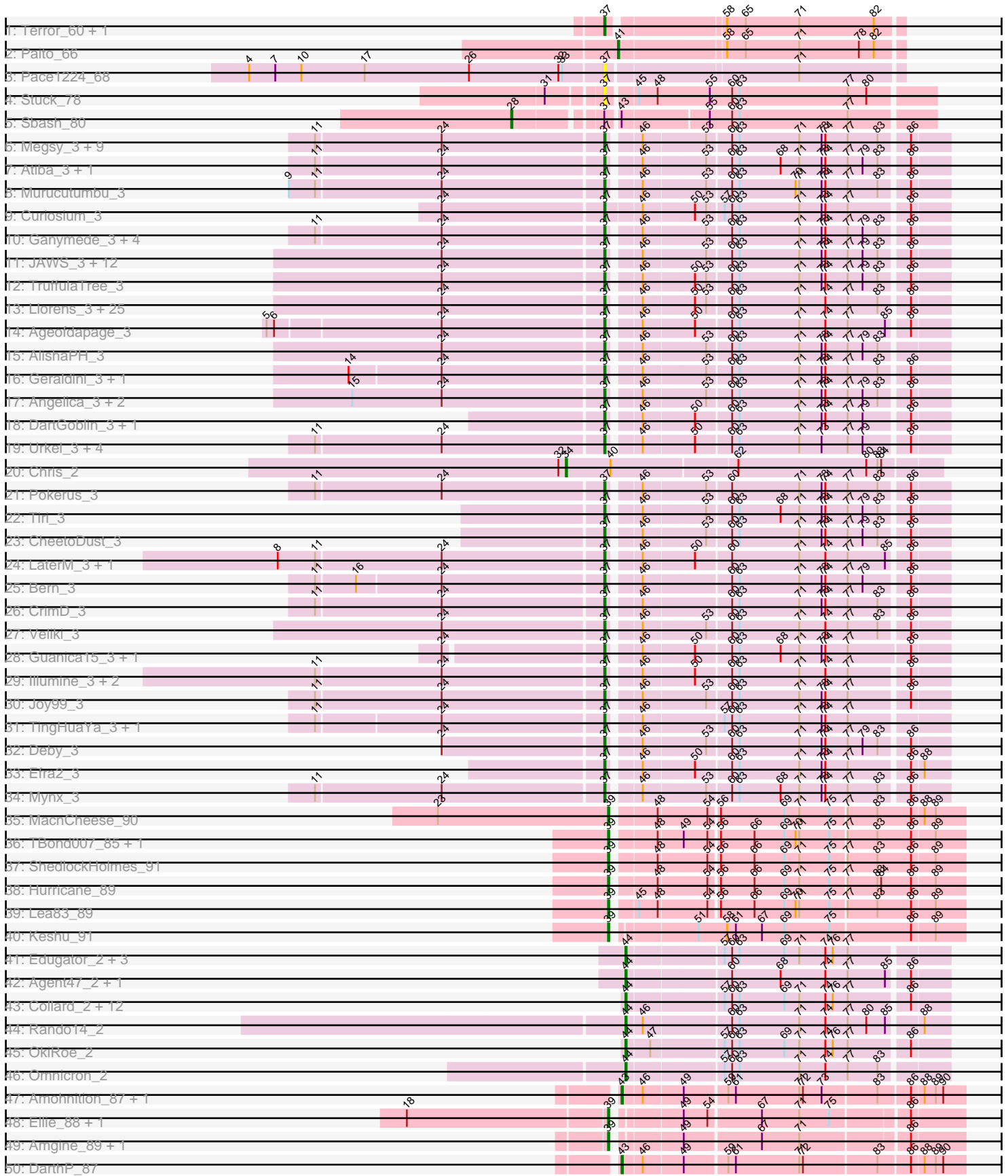
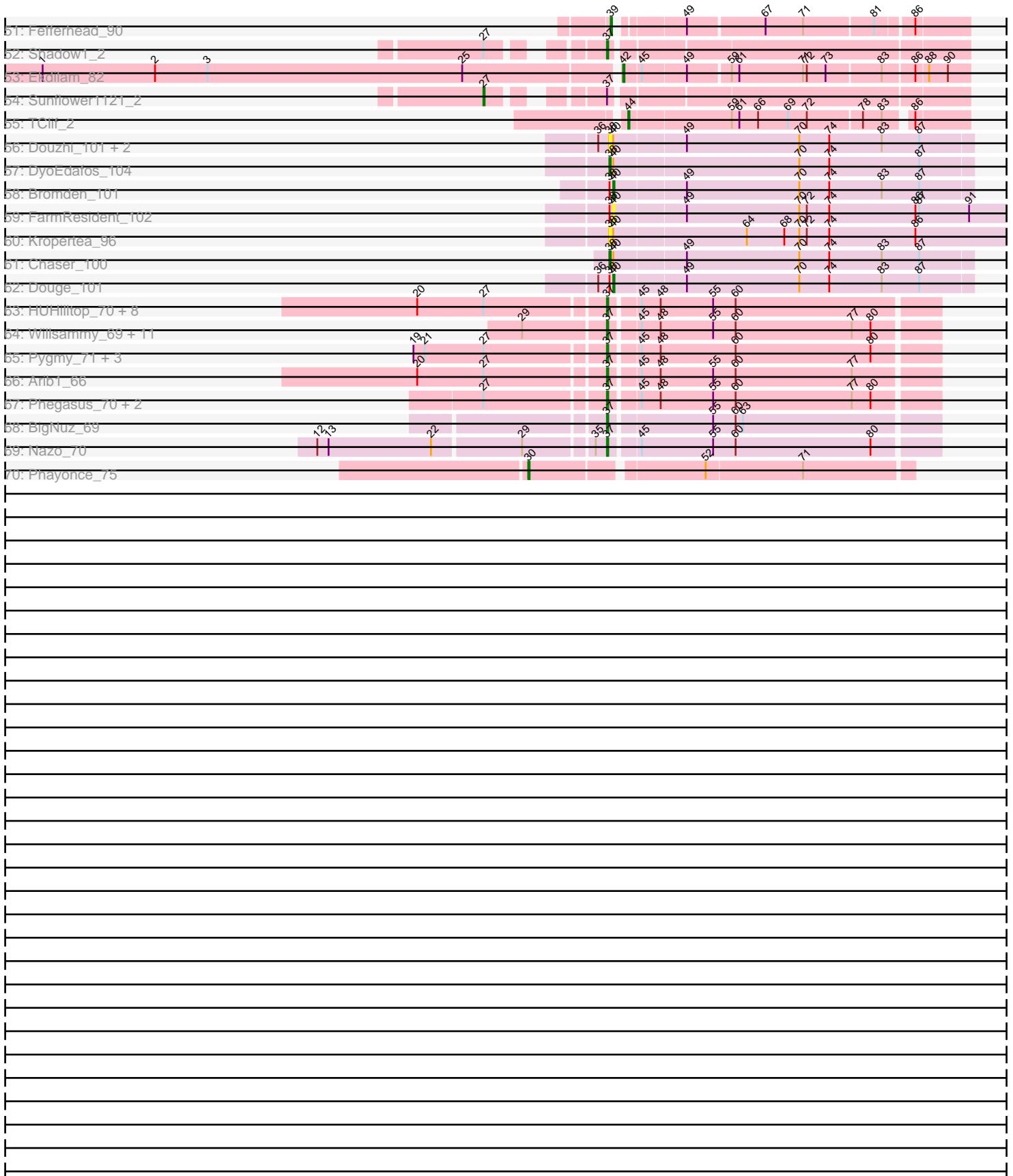


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Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. 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 296277 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296277 has 181 members, 15 are drafts.

Phages represented in each track:

- Track 1 : Terror\_60, Taheera\_60
- Track 2 : Paito\_66
- Track 3 : Pace1224\_68
- Track 4 : Stuck\_78
- Track 5 : Sbash\_80
- Track 6 : Megsy\_3, BaghaKamala\_3, Prithvi\_3, Clipper\_3, LindNT\_3, TreyKay\_3, MacKat\_3, YoureAdopted\_3, TaiwanKao\_3, MeaningOfLife\_3
- Track 7 : Atiba\_3, Tachez\_3
- Track 8 : Murucutumbu\_3
- Track 9 : Curiosium\_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, ActinUp\_3, HedwigODU\_3, Slimphazie\_3, Jayhawk\_3, Padpat\_3, Rapunzel97\_3, Ramen\_3
- Track 12 : TruffulaTree\_3
- Track 13 : Llorens\_3, Capricorn\_3, Durfee\_3, Boiiii\_3, ShiaSurprise\_3, Homura\_3, Topper\_3, Twitch\_3, Blizzard\_3, Piatt\_3, Dalmuri\_3, BEEST\_3, Jarvi\_3, Belladonna\_3, Lunahalos\_3, Asayake\_3, Hyperbowlee\_3, BGIluviae\_3, Jeckyll\_3, Rosmarinus\_3, Peel\_3, CREW\_3, Padfoot\_3, Inky\_3, Spock\_3, CaseJules\_3
- Track 14 : Ageofdapage\_3
- Track 15 : AlishaPH\_3
- Track 16 : Geraldini\_3, Beezoo\_3
- Track 17 : Angelica\_3, Apocalypse\_3, Sulley\_3
- Track 18 : DartGoblin\_3, Bella96\_3
- Track 19 : Urkel\_3, DrHayes\_3, Anma\_3, TiniBug\_3, SamuelLPlaqson\_3
- Track 20 : Chris\_2
- Track 21 : Pokerus\_3
- Track 22 : Tiri\_3
- Track 23 : CheetoDust\_3
- Track 24 : LaterM\_3, Stinson\_3
- Track 25 : Bern\_3
- Track 26 : CrimD\_3
- Track 27 : Veliki\_3
- Track 28 : Guanica15\_3, Yunkel11\_3
- Track 29 : Illumine\_3, Dole\_3, Devera\_3
- Track 30 : Joy99\_3
- Track 31 : TingHuaYa\_3, LastHope\_3

- Track 32 : Deby\_3
- Track 33 : Efra2\_3
- Track 34 : Mynx\_3
- Track 35 : MacnCheese\_90
- Track 36 : TBond007\_85, Pixie\_88
- Track 37 : ShedlockHolmes\_91
- Track 38 : Hurricane\_89
- Track 39 : Lea83\_89
- Track 40 : Keshu\_91
- Track 41 : Edugator\_2, AlleyCat\_2, Psycho\_2, Dadosky\_2
- Track 42 : Agent47\_2, InvictusManeo\_2
- Track 43 : Collard\_2, Heftyboy\_2, Paola\_2, Waterfoul\_2, Leston\_2, Thyatira\_2, Gengar\_2, SoSeph\_2, Guillsminger\_2, BananenDer11\_2, Feyre\_2, Miryou\_2, DoubleChamp\_2
- Track 44 : Rando14\_2
- Track 45 : OkiRoe\_2
- Track 46 : Omnicron\_2
- Track 47 : Amohnition\_87, Hammy\_87
- Track 48 : Ellie\_88, Applecrisp\_87
- Track 49 : Amgine\_89, Lavahound\_89
- Track 50 : DARTH\_87
- Track 51 : Fefferhead\_90
- Track 52 : Shadow1\_2
- Track 53 : Ekdilam\_82
- Track 54 : Sunflower1121\_2
- Track 55 : TClif\_2
- Track 56 : Douzhi\_101, BrainDrainer\_102, Sheng711\_102
- Track 57 : DyoEdafos\_104
- Track 58 : Bromden\_101
- Track 59 : FarmResident\_102
- Track 60 : Kropertea\_96
- Track 61 : Chaser\_100
- Track 62 : Douge\_101
- Track 63 : HUHilltop\_70, Malithi\_67, Bogie\_70, Camster\_68, Sonah\_68, Dynamo\_67, Phineas\_68, Necropolis\_65, Shipwreck\_70
- Track 64 : Willsammy\_69, Megiddo\_67, Chubbello\_66, Donovan\_67, Gavriela\_67, Kari\_67, Fishburne\_66, StressBall\_67, Glaske\_67, KilKor\_68, CactusJack\_68, Phalm\_68
- Track 65 : Pygmy\_71, Techage\_68, Bartholomew\_63, Venti\_65
- Track 66 : Arib1\_66
- Track 67 : Phegasus\_70, Majeke\_70, Mangethe\_70
- Track 68 : BigNuz\_69
- Track 69 : Nazo\_70
- Track 70 : 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 37, it was called in 121 of the 166 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, Anma\_3, Apocalypse\_3, Arib1\_66, Asayake\_3, Atiba\_3, BEEST\_3, BGIlluvia\_3, BaghaKamala\_3, BarrelRoll\_3, Bartholomew\_63, Beezoo\_3, Bella96\_3, Belladonna\_3, Bern\_3, BigNuz\_69, Blizzard\_3, Bogie\_70, Boiiii\_3, CREW\_3, CactusJack\_68, CallaLilly\_3, Camster\_68, Capricorn\_3, CaseJules\_3, CheetoDust\_3, Chubbello\_66, Clipper\_3, CrimD\_3, Curiosium\_3, Dalmuri\_3, DartGoblin\_3, Deby\_3, Devera\_3, Dole\_3, Donovan\_67, DrHayes\_3, Durfee\_3, Dynamo\_67, 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\_67, KilKor\_68, 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, Pace1224\_68, Padfoot\_3, Padpat\_3, Peel\_3, Phalm\_68, Phegasus\_70, Phineas\_68, Piatt\_3, Pokerus\_3, Prithvi\_3, Pygmy\_71, QuincyRose\_3, Ramen\_3, Rapunzel97\_3, Rosmarinus\_3, SamuelLPlaqson\_3, Shadow1\_2, ShiaSurprise\_3, Shipwreck\_70, Slimphazie\_3, Sonah\_68, Spock\_3, Stinson\_3, StressBall\_67, Stuck\_78, Sulley\_3, Tachez\_3, Taheera\_60, TaiwanKao\_3, Techage\_68, Terror\_60, TingHuaYa\_3, TiniBug\_3, Tiri\_3, Topper\_3, TreyKay\_3, TruffulaTree\_3, Twitch\_3, Urkel\_3, Veliki\_3, Venti\_65, Willsammy\_69, YoureAdopted\_3, Yunkel11\_3, Zabiza\_3, Zavala\_3,

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

- Sbash\_80, Sunflower1121\_2,

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

- Agent47\_2, AlleyCat\_2, Amgine\_89, Amohnition\_87, Applecrisp\_87, BananenDer11\_2, BrainDrainer\_102, Bromden\_101, Chaser\_100, Chris\_2, Collard\_2, Dadosky\_2, DarthP\_87, DoubleChamp\_2, Douge\_101, Douzhi\_101, DyoEdafos\_104, Edugator\_2, Ekdilam\_82, Ellie\_88, FarmResident\_102, Fefferhead\_90, Feyre\_2, Gengar\_2, Guillsminger\_2, Hammy\_87, Heftyboy\_2, Hurricane\_89, InvictusManeo\_2, Keshu\_91, Kropertea\_96, Lavahound\_89, Lea83\_89, Leston\_2, MacnCheese\_90, Miryou\_2, OkiRoe\_2, Omnicron\_2, Paito\_66, Paola\_2, Phayonce\_75, Pixie\_88, Psycho\_2, Rando14\_2, ShedlockHolmes\_91, Sheng711\_102, SoSeph\_2, TBond007\_85, TClif\_2, Thyatira\_2, Waterfoul\_2,

### Summary by start number:

Start 27:

- Found in 19 of 181 ( 10.5% ) of genes in pham
- Manual Annotations of this start: 1 of 166
- Called 5.3% of time when present
- Phage (with cluster) where this start called: Sunflower1121\_2 (K6),

Start 28:

- Found in 1 of 181 ( 0.6% ) of genes in pham
- Manual Annotations of this start: 1 of 166
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sbash\_80 (I2),

Start 30:

- Found in 1 of 181 ( 0.6% ) of genes in pham
- Manual Annotations of this start: 1 of 166

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Phayonce\_75 (P5),

#### Start 34:

- Found in 1 of 181 ( 0.6% ) of genes in pham
- Manual Annotations of this start: 1 of 166
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chris\_2 (K1),

#### Start 37:

- Found in 130 of 181 ( 71.8% ) of genes in pham
- Manual Annotations of this start: 121 of 166
- Called 98.5% 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), Anma\_3 (K1), Apocalypse\_3 (K1), Arib1\_66 (P1), Asayake\_3 (K1), Atiba\_3 (K1), BEEST\_3 (K1), BGIlluviae\_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), Boiiii\_3 (K1), CREW\_3 (K1), CactusJack\_68 (P1), CallaLilly\_3 (K1), Camster\_68 (P1), Capricorn\_3 (K1), CaseJules\_3 (K1), CheetoDust\_3 (K1), Chubbello\_66 (P1), Clipper\_3 (K1), CrimD\_3 (K1), Curiosium\_3 (K1), Dalmuri\_3 (K1), DartGoblin\_3 (K1), Deby\_3 (K1), Devera\_3 (K1), Dole\_3 (K1), Donovan\_67 (P1), DrHayes\_3 (K1), Durfee\_3 (K1), Dynamo\_67 (P1), 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\_67 (P1), KilKor\_68 (P1), 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), Pace1224\_68 (G2), Padfoot\_3 (K1), Padpat\_3 (K1), Peel\_3 (K1), Phalm\_68 (P1), Phegasus\_70 (P1), Phineas\_68 (P1), 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), Shadow1\_2 (K6), ShiaSurprise\_3 (K1), Shipwreck\_70 (P1), Slimphazie\_3 (K1), Sonah\_68 (P1), Spock\_3 (K1), Stinson\_3 (K1), StressBall\_67 (P1), Stuck\_78 (I2), Sulley\_3 (K1), Tachez\_3 (K1), Taheera\_60 (G1), TaiwanKao\_3 (K1), Techage\_68 (P1), Terror\_60 (G1), TingHuaYa\_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), Venti\_65 (P1), Willsammy\_69 (P1), YoureAdopted\_3 (K1), Yunkel11\_3 (K1), Zabiza\_3 (K1), Zavala\_3 (K1),

#### Start 38:

- Found in 9 of 181 ( 5.0% ) of genes in pham
- Manual Annotations of this start: 2 of 166
- Called 66.7% of time when present
- Phage (with cluster) where this start called: BrainDrainer\_102 (L4), Chaser\_100 (L4), Douzhi\_101 (L4), DyoEdafos\_104 (L4), Kropertea\_96 (L4), Sheng711\_102 (L4),

#### Start 39:

- Found in 12 of 181 ( 6.6% ) of genes in pham
- Manual Annotations of this start: 11 of 166
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Amgine\_89 (K6), Applecrisp\_87 (K6), Ellie\_88 (K6), Fefferhead\_90 (K6), Hurricane\_89 (K3), Keshu\_91 (K3), Lavahound\_89 (K6), Lea83\_89 (K3), MacnCheese\_90 (K3), Pixie\_88 (K3), ShedlockHolmes\_91 (K3), TBond007\_85 (K3),

#### Start 40:

- Found in 10 of 181 ( 5.5% ) of genes in pham
- Manual Annotations of this start: 2 of 166
- Called 30.0% of time when present
- Phage (with cluster) where this start called: Bromden\_101 (L4), Douge\_101 (L4), FarmResident\_102 (L4),

#### Start 41:

- Found in 1 of 181 ( 0.6% ) of genes in pham
- Manual Annotations of this start: 1 of 166
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Paito\_66 (G1),

#### Start 42:

- Found in 1 of 181 ( 0.6% ) of genes in pham
- Manual Annotations of this start: 1 of 166
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ekdilam\_82 (K6),

#### Start 43:

- Found in 4 of 181 ( 2.2% ) of genes in pham
- Manual Annotations of this start: 3 of 166
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Amohnition\_87 (K6), DARTH\_P\_87 (K6), Hammy\_87 (K6),

#### Start 44:

- Found in 23 of 181 ( 12.7% ) of genes in pham
- Manual Annotations of this start: 21 of 166
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Agent47\_2 (K5), AlleyCat\_2 (K5), BananenDer11\_2 (K5), Collard\_2 (K5), Dadosky\_2 (K5), DoubleChamp\_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), TClif\_2 (K6), 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 37 was manually annotated 2 times for cluster G1.
- Start number 41 was manually annotated 1 time for cluster G1.

#### Info for manual annotations of cluster I2:

- Start number 28 was manually annotated 1 time for cluster I2.

Info for manual annotations of cluster K1:

- Start number 34 was manually annotated 1 time for cluster K1.
- Start number 37 was manually annotated 88 times for cluster K1.

Info for manual annotations of cluster K3:

- Start number 39 was manually annotated 7 times for cluster K3.

Info for manual annotations of cluster K5:

- Start number 44 was manually annotated 20 times for cluster K5.

Info for manual annotations of cluster K6:

- Start number 27 was manually annotated 1 time for cluster K6.
- Start number 37 was manually annotated 1 time for cluster K6.
- Start number 39 was manually annotated 4 times for cluster K6.
- Start number 42 was manually annotated 1 time for cluster K6.
- Start number 43 was manually annotated 3 times for cluster K6.
- Start number 44 was manually annotated 1 time for cluster K6.

Info for manual annotations of cluster L4:

- Start number 38 was manually annotated 2 times for cluster L4.
- Start number 40 was manually annotated 2 times for cluster L4.

Info for manual annotations of cluster P1:

- Start number 37 was manually annotated 28 times for cluster P1.

Info for manual annotations of cluster P4:

- Start number 37 was manually annotated 2 times for cluster P4.

Info for manual annotations of cluster P5:

- Start number 30 was manually annotated 1 time for cluster P5.

### ***Gene Information:***

Gene: ActinUp\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for ActinUp\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (53, 545), (60, 563), (63, 569), (71, 617), (73, 635), (74, 638), (77, 656), (79, 668), (83, 680), (86, 701),

Gene: Adephagia\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Adephagia\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (53, 545), (60, 563), (63, 569), (71, 617), (73, 635), (74, 638), (77, 656), (79, 668), (83, 680), (86, 701),

Gene: Adonis\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for Adonis\_3:

(11, 227), (24, 326), (Start: 37 @452 has 121 MA's), (46, 473), (53, 521), (60, 539), (63, 545), (71, 593), (73, 611), (74, 614), (77, 632), (79, 644), (83, 656), (86, 677),

Gene: Agent47\_2 Start: 300, Stop: 545, Start Num: 44

Candidate Starts for Agent47\_2:

(Start: 44 @300 has 21 MA's), (60, 378), (68, 417), (74, 453), (77, 471), (85, 501), (86, 516),

Gene: Ageofdapage\_3 Start: 435, Stop: 689, Start Num: 37

Candidate Starts for Ageofdapage\_3:

(5, 174), (6, 180), (24, 309), (Start: 37 @435 has 121 MA's), (46, 456), (50, 495), (60, 522), (63, 528), (71, 576), (74, 597), (77, 615), (85, 645), (86, 660),

Gene: AlishaPH\_3 Start: 475, Stop: 729, Start Num: 37

Candidate Starts for AlishaPH\_3:

(24, 349), (Start: 37 @475 has 121 MA's), (46, 496), (53, 544), (60, 562), (63, 568), (71, 616), (73, 634), (74, 637), (77, 655), (79, 667), (83, 679),

Gene: AlleyCat\_2 Start: 300, Stop: 545, Start Num: 44

Candidate Starts for AlleyCat\_2:

(Start: 44 @300 has 21 MA's), (57, 372), (60, 378), (63, 384), (69, 420), (71, 432), (74, 453), (76, 459), (77, 471),

Gene: Amgine\_89 Start: 58064, Stop: 58318, Start Num: 39

Candidate Starts for Amgine\_89:

(Start: 39 @58064 has 11 MA's), (49, 58109), (67, 58166), (71, 58196), (86, 58277),

Gene: Amohnition\_87 Start: 57065, Stop: 57322, Start Num: 43

Candidate Starts for Amohnition\_87:

(Start: 43 @57065 has 3 MA's), (46, 57080), (49, 57110), (59, 57140), (61, 57146), (71, 57197), (72, 57200), (73, 57215), (83, 57257), (86, 57281), (88, 57290), (89, 57299), (90, 57305),

Gene: Anaya\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Anaya\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (53, 545), (60, 563), (63, 569), (71, 617), (73, 635), (74, 638), (77, 656), (79, 668), (83, 680), (86, 701),

Gene: Angelica\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Angelica\_3:

(15, 278), (24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (53, 545), (60, 563), (63, 569), (71, 617), (73, 635), (74, 638), (77, 656), (79, 668), (83, 680), (86, 701),

Gene: Anma\_3 Start: 440, Stop: 694, Start Num: 37

Candidate Starts for Anma\_3:

(11, 215), (24, 314), (Start: 37 @440 has 121 MA's), (46, 461), (50, 500), (60, 527), (63, 533), (71, 581), (73, 599), (77, 620), (79, 632), (86, 665),

Gene: Apocalypse\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Apocalypse\_3:

(15, 278), (24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (53, 545), (60, 563), (63, 569), (71, 617), (73, 635), (74, 638), (77, 656), (79, 668), (83, 680), (86, 701),

Gene: Applecrisp\_87 Start: 57244, Stop: 57498, Start Num: 39

Candidate Starts for Applecrisp\_87:

(18, 57088), (Start: 39 @57244 has 11 MA's), (49, 57289), (54, 57307), (67, 57346), (71, 57376), (75, 57400), (86, 57457),

Gene: Arib1\_66 Start: 42262, Stop: 42516, Start Num: 37

Candidate Starts for Arib1\_66:

(20, 42121), (Start: 27 @42172 has 1 MA's), (Start: 37 @42262 has 121 MA's), (45, 42283), (48, 42298), (55, 42340), (60, 42358), (77, 42451),

Gene: Asayake\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Asayake\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (50, 536), (53, 545), (60, 563), (63, 569), (71, 617), (74, 638), (77, 656), (83, 680), (86, 701),

Gene: Atiba\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for Atiba\_3:

(11, 227), (24, 326), (Start: 37 @452 has 121 MA's), (46, 473), (53, 521), (60, 539), (63, 545), (68, 578), (71, 593), (73, 611), (74, 614), (77, 632), (79, 644), (83, 656), (86, 677),

Gene: BEEST\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for BEEST\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (50, 536), (53, 545), (60, 563), (63, 569), (71, 617), (74, 638), (77, 656), (83, 680), (86, 701),

Gene: BGlluviae\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for BGlluviae\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (50, 536), (53, 545), (60, 563), (63, 569), (71, 617), (74, 638), (77, 656), (83, 680), (86, 701),

Gene: BaghaKamala\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for BaghaKamala\_3:

(11, 227), (24, 326), (Start: 37 @452 has 121 MA's), (46, 473), (53, 521), (60, 539), (63, 545), (71, 593), (73, 611), (74, 614), (77, 632), (83, 656), (86, 677),

Gene: BananenDer11\_2 Start: 274, Stop: 519, Start Num: 44

Candidate Starts for BananenDer11\_2:

(Start: 44 @274 has 21 MA's), (57, 346), (60, 352), (63, 358), (69, 394), (71, 406), (74, 427), (76, 433), (77, 445), (86, 490),

Gene: BarrelRoll\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for BarrelRoll\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (53, 545), (60, 563), (63, 569), (71, 617), (73, 635), (74, 638), (77, 656), (79, 668), (83, 680), (86, 701),

Gene: Bartholomew\_63 Start: 41542, Stop: 41796, Start Num: 37

Candidate Starts for Bartholomew\_63:

(19, 41398), (21, 41407), (Start: 27 @41452 has 1 MA's), (Start: 37 @41542 has 121 MA's), (45, 41563), (48, 41578), (60, 41638), (80, 41746),

Gene: Beezoo\_3 Start: 473, Stop: 727, Start Num: 37

Candidate Starts for Beezoo\_3:

(14, 275), (24, 347), (Start: 37 @473 has 121 MA's), (46, 494), (53, 542), (60, 560), (63, 566), (71, 614), (73, 632), (74, 635), (77, 653), (83, 677), (86, 698),

Gene: Bella96\_3 Start: 440, Stop: 694, Start Num: 37

Candidate Starts for Bella96\_3:

(Start: 37 @440 has 121 MA's), (46, 461), (50, 500), (60, 527), (63, 533), (71, 581), (73, 599), (74, 602), (77, 620), (79, 632), (86, 665),

Gene: Belladonna\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Belladonna\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (50, 536), (53, 545), (60, 563), (63, 569), (71, 617), (74, 638), (77, 656), (83, 680), (86, 701),

Gene: Bern\_3 Start: 436, Stop: 690, Start Num: 37

Candidate Starts for Bern\_3:

(11, 214), (16, 244), (24, 310), (Start: 37 @436 has 121 MA's), (46, 457), (60, 523), (63, 529), (71, 577), (73, 595), (74, 598), (77, 616), (79, 628), (86, 661),

Gene: BigNuz\_69 Start: 44457, Stop: 44711, Start Num: 37

Candidate Starts for BigNuz\_69:

(Start: 37 @44457 has 121 MA's), (55, 44535), (60, 44553), (63, 44559),

Gene: Blizzard\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Blizzard\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (50, 536), (53, 545), (60, 563), (63, 569), (71, 617), (74, 638), (77, 656), (83, 680), (86, 701),

Gene: Bogie\_70 Start: 44612, Stop: 44866, Start Num: 37

Candidate Starts for Bogie\_70:

(20, 44471), (Start: 27 @44522 has 1 MA's), (Start: 37 @44612 has 121 MA's), (45, 44633), (48, 44648), (55, 44690), (60, 44708),

Gene: Boiiii\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Boiiii\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (50, 536), (53, 545), (60, 563), (63, 569), (71, 617), (74, 638), (77, 656), (83, 680), (86, 701),

Gene: BrainDrainer\_102 Start: 61701, Stop: 61985, Start Num: 38

Candidate Starts for BrainDrainer\_102:

(36, 61692), (Start: 38 @61701 has 2 MA's), (Start: 40 @61704 has 2 MA's), (49, 61758), (70, 61848), (74, 61872), (83, 61914), (87, 61944),

Gene: Bromden\_101 Start: 62440, Stop: 62721, Start Num: 40

Candidate Starts for Bromden\_101:

(Start: 38 @62437 has 2 MA's), (Start: 40 @62440 has 2 MA's), (49, 62494), (70, 62584), (74, 62608), (83, 62650), (87, 62680),

Gene: CREW\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for CREW\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (50, 536), (53, 545), (60, 563), (63, 569), (71, 617), (74, 638), (77, 656), (83, 680), (86, 701),

Gene: CactusJack\_68 Start: 44240, Stop: 44494, Start Num: 37

Candidate Starts for CactusJack\_68:

(29, 44177), (Start: 37 @44240 has 121 MA's), (45, 44261), (48, 44276), (55, 44318), (60, 44336), (77, 44429), (80, 44444),

Gene: CallaLilly\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for CallaLilly\_3:

(11, 227), (24, 326), (Start: 37 @452 has 121 MA's), (46, 473), (53, 521), (60, 539), (63, 545), (71, 593), (73, 611), (74, 614), (77, 632), (79, 644), (83, 656), (86, 677),

Gene: Camster\_68 Start: 43073, Stop: 43327, Start Num: 37

Candidate Starts for Camster\_68:

(20, 42932), (Start: 27 @42983 has 1 MA's), (Start: 37 @43073 has 121 MA's), (45, 43094), (48, 43109), (55, 43151), (60, 43169),

Gene: Capricorn\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Capricorn\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (50, 536), (53, 545), (60, 563), (63, 569), (71, 617), (74, 638), (77, 656), (83, 680), (86, 701),

Gene: CaseJules\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for CaseJules\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (50, 536), (53, 545), (60, 563), (63, 569), (71, 617), (74, 638), (77, 656), (83, 680), (86, 701),

Gene: Chaser\_100 Start: 61053, Stop: 61337, Start Num: 38

Candidate Starts for Chaser\_100:

(Start: 38 @61053 has 2 MA's), (Start: 40 @61056 has 2 MA's), (49, 61110), (70, 61200), (74, 61224), (83, 61266), (87, 61296),

Gene: CheetoDust\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for CheetoDust\_3:

(Start: 37 @452 has 121 MA's), (46, 473), (53, 521), (60, 539), (63, 545), (71, 593), (73, 611), (74, 614), (77, 632), (79, 644), (83, 656), (86, 677),

Gene: Chris\_2 Start: 375, Stop: 665, Start Num: 34

Candidate Starts for Chris\_2:

(32, 369), (Start: 34 @375 has 1 MA's), (Start: 40 @411 has 2 MA's), (62, 507), (80, 609), (83, 618), (84, 621),

Gene: Chubbello\_66 Start: 42262, Stop: 42516, Start Num: 37

Candidate Starts for Chubbello\_66:

(29, 42199), (Start: 37 @42262 has 121 MA's), (45, 42283), (48, 42298), (55, 42340), (60, 42358), (77, 42451), (80, 42466),

Gene: Clipper\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for Clipper\_3:

(11, 227), (24, 326), (Start: 37 @452 has 121 MA's), (46, 473), (53, 521), (60, 539), (63, 545), (71, 593), (73, 611), (74, 614), (77, 632), (83, 656), (86, 677),

Gene: Collard\_2 Start: 274, Stop: 519, Start Num: 44

Candidate Starts for Collard\_2:

(Start: 44 @274 has 21 MA's), (57, 346), (60, 352), (63, 358), (69, 394), (71, 406), (74, 427), (76, 433), (77, 445), (86, 490),

Gene: CrimD\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for CrimD\_3:

(11, 227), (24, 326), (Start: 37 @452 has 121 MA's), (46, 473), (60, 539), (63, 545), (71, 593), (73, 611), (74, 614), (77, 632), (83, 656), (86, 677),

Gene: Curiosium\_3 Start: 517, Stop: 777, Start Num: 37

Candidate Starts for Curiosium\_3:

(24, 391), (Start: 37 @517 has 121 MA's), (46, 544), (50, 583), (53, 592), (57, 604), (60, 610), (63, 616), (71, 664), (73, 682), (74, 685), (77, 703), (86, 748),

Gene: Dadosky\_2 Start: 300, Stop: 545, Start Num: 44

Candidate Starts for Dadosky\_2:

(Start: 44 @300 has 21 MA's), (57, 372), (60, 378), (63, 384), (69, 420), (71, 432), (74, 453), (76, 459), (77, 471),

Gene: Dalmuri\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Dalmuri\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (50, 536), (53, 545), (60, 563), (63, 569), (71, 617), (74, 638), (77, 656), (83, 680), (86, 701),

Gene: DartGoblin\_3 Start: 440, Stop: 694, Start Num: 37

Candidate Starts for DartGoblin\_3:

(Start: 37 @440 has 121 MA's), (46, 461), (50, 500), (60, 527), (63, 533), (71, 581), (73, 599), (74, 602), (77, 620), (79, 632), (86, 665),

Gene: DarthP\_87 Start: 56918, Stop: 57175, Start Num: 43

Candidate Starts for DarthP\_87:

(Start: 43 @56918 has 3 MA's), (46, 56933), (49, 56963), (59, 56993), (61, 56999), (71, 57050), (72, 57053), (83, 57110), (86, 57134), (88, 57143), (89, 57152), (90, 57158),

Gene: Deby\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Deby\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (53, 545), (60, 563), (63, 569), (71, 617), (73, 635), (74, 638), (77, 656), (79, 668), (83, 680), (86, 701),

Gene: Devera\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for Devera\_3:

(11, 227), (24, 326), (Start: 37 @452 has 121 MA's), (46, 473), (50, 512), (60, 539), (63, 545), (71, 593), (74, 614), (77, 632), (86, 677),

Gene: Dole\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for Dole\_3:

(11, 227), (24, 326), (Start: 37 @452 has 121 MA's), (46, 473), (50, 512), (60, 539), (63, 545), (71, 593), (74, 614), (77, 632), (86, 677),

Gene: Donovan\_67 Start: 43202, Stop: 43456, Start Num: 37

Candidate Starts for Donovan\_67:

(29, 43139), (Start: 37 @43202 has 121 MA's), (45, 43223), (48, 43238), (55, 43280), (60, 43298), (77, 43391), (80, 43406),

Gene: DoubleChamp\_2 Start: 274, Stop: 519, Start Num: 44

Candidate Starts for DoubleChamp\_2:

(Start: 44 @274 has 21 MA's), (57, 346), (60, 352), (63, 358), (69, 394), (71, 406), (74, 427), (76, 433), (77, 445), (86, 490),

Gene: Douge\_101 Start: 61124, Stop: 61405, Start Num: 40

Candidate Starts for Douge\_101:

(36, 61112), (Start: 38 @61121 has 2 MA's), (Start: 40 @61124 has 2 MA's), (49, 61178), (70, 61268), (74, 61292), (83, 61334), (87, 61364),

Gene: Douzhi\_101 Start: 61390, Stop: 61674, Start Num: 38

Candidate Starts for Douzhi\_101:

(36, 61381), (Start: 38 @61390 has 2 MA's), (Start: 40 @61393 has 2 MA's), (49, 61447), (70, 61537), (74, 61561), (83, 61603), (87, 61633),

Gene: DrHayes\_3 Start: 440, Stop: 694, Start Num: 37

Candidate Starts for DrHayes\_3:

(11, 215), (24, 314), (Start: 37 @440 has 121 MA's), (46, 461), (50, 500), (60, 527), (63, 533), (71, 581), (73, 599), (77, 620), (79, 632), (86, 665),

Gene: Durfee\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Durfee\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (50, 536), (53, 545), (60, 563), (63, 569), (71, 617), (74, 638), (77, 656), (83, 680), (86, 701),

Gene: Dynamo\_67 Start: 42646, Stop: 42900, Start Num: 37

Candidate Starts for Dynamo\_67:

(20, 42505), (Start: 27 @42556 has 1 MA's), (Start: 37 @42646 has 121 MA's), (45, 42667), (48, 42682), (55, 42724), (60, 42742),

Gene: DyoEdafos\_104 Start: 61681, Stop: 61965, Start Num: 38

Candidate Starts for DyoEdafos\_104:

(Start: 38 @61681 has 2 MA's), (Start: 40 @61684 has 2 MA's), (70, 61828), (74, 61852), (87, 61924),

Gene: Edugator\_2 Start: 300, Stop: 545, Start Num: 44

Candidate Starts for Edugator\_2:

(Start: 44 @300 has 21 MA's), (57, 372), (60, 378), (63, 384), (69, 420), (71, 432), (74, 453), (76, 459), (77, 471),

Gene: Efra2\_3 Start: 445, Stop: 699, Start Num: 37

Candidate Starts for Efra2\_3:

(Start: 37 @445 has 121 MA's), (46, 466), (50, 505), (60, 532), (63, 538), (71, 586), (73, 604), (74, 607), (77, 625), (86, 670), (88, 679),

Gene: Ekdilam\_82 Start: 56617, Stop: 56874, Start Num: 42

Candidate Starts for Ekdilam\_82:

(1, 56164), (2, 56254), (3, 56296), (25, 56500), (Start: 42 @56617 has 1 MA's), (45, 56629), (49, 56662), (59, 56692), (61, 56698), (71, 56749), (72, 56752), (73, 56767), (83, 56809), (86, 56833), (88, 56842), (90, 56857),

Gene: Ellie\_88 Start: 57234, Stop: 57488, Start Num: 39

Candidate Starts for Ellie\_88:

(18, 57078), (Start: 39 @57234 has 11 MA's), (49, 57279), (54, 57297), (67, 57336), (71, 57366), (75, 57390), (86, 57447),

Gene: Emerson\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Emerson\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (53, 545), (60, 563), (63, 569), (71, 617), (73, 635), (74, 638), (77, 656), (79, 668), (83, 680), (86, 701),

Gene: FarmResident\_102 Start: 61280, Stop: 61591, Start Num: 40

Candidate Starts for FarmResident\_102:

(Start: 38 @61277 has 2 MA's), (Start: 40 @61280 has 2 MA's), (49, 61334), (70, 61424), (72, 61430), (74, 61448), (86, 61517), (87, 61520), (91, 61559),

Gene: Fefferhead\_90 Start: 57025, Stop: 57279, Start Num: 39

Candidate Starts for Fefferhead\_90:

(Start: 39 @57025 has 11 MA's), (49, 57070), (67, 57127), (71, 57157), (81, 57211), (86, 57238),

Gene: Feyre\_2 Start: 275, Stop: 520, Start Num: 44

Candidate Starts for Feyre\_2:

(Start: 44 @275 has 21 MA's), (57, 347), (60, 353), (63, 359), (69, 395), (71, 407), (74, 428), (76, 434), (77, 446), (86, 491),

Gene: Fishburne\_66 Start: 43028, Stop: 43282, Start Num: 37

Candidate Starts for Fishburne\_66:

(29, 42965), (Start: 37 @43028 has 121 MA's), (45, 43049), (48, 43064), (55, 43106), (60, 43124), (77, 43217), (80, 43232),

Gene: Ganymede\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for Ganymede\_3:

(11, 227), (24, 326), (Start: 37 @452 has 121 MA's), (46, 473), (53, 521), (60, 539), (63, 545), (71, 593), (73, 611), (74, 614), (77, 632), (79, 644), (83, 656), (86, 677),

Gene: Gavriela\_67 Start: 43933, Stop: 44187, Start Num: 37

Candidate Starts for Gavriela\_67:

(29, 43870), (Start: 37 @43933 has 121 MA's), (45, 43954), (48, 43969), (55, 44011), (60, 44029), (77, 44122), (80, 44137),

Gene: Gengar\_2 Start: 300, Stop: 545, Start Num: 44

Candidate Starts for Gengar\_2:

(Start: 44 @300 has 21 MA's), (57, 372), (60, 378), (63, 384), (69, 420), (71, 432), (74, 453), (76, 459), (77, 471), (86, 516),

Gene: Geraldini\_3 Start: 473, Stop: 727, Start Num: 37

Candidate Starts for Geraldini\_3:

(14, 275), (24, 347), (Start: 37 @473 has 121 MA's), (46, 494), (53, 542), (60, 560), (63, 566), (71, 614), (73, 632), (74, 635), (77, 653), (83, 677), (86, 698),

Gene: Glaske\_67 Start: 44240, Stop: 44494, Start Num: 37

Candidate Starts for Glaske\_67:

(29, 44177), (Start: 37 @44240 has 121 MA's), (45, 44261), (48, 44276), (55, 44318), (60, 44336), (77, 44429), (80, 44444),

Gene: Guanica15\_3 Start: 445, Stop: 702, Start Num: 37

Candidate Starts for Guanica15\_3:

(24, 325), (Start: 37 @445 has 121 MA's), (46, 466), (50, 505), (60, 532), (63, 538), (68, 571), (71, 586), (73, 604), (74, 607), (77, 625), (86, 673),

Gene: Guillsminger\_2 Start: 275, Stop: 520, Start Num: 44

Candidate Starts for Guillsminger\_2:

(Start: 44 @275 has 21 MA's), (57, 347), (60, 353), (63, 359), (69, 395), (71, 407), (74, 428), (76, 434), (77, 446), (86, 491),

Gene: HUHilltop\_70 Start: 42869, Stop: 43123, Start Num: 37

Candidate Starts for HUHilltop\_70:

(20, 42728), (Start: 27 @42779 has 1 MA's), (Start: 37 @42869 has 121 MA's), (45, 42890), (48, 42905), (55, 42947), (60, 42965),

Gene: Hammy\_87 Start: 56908, Stop: 57165, Start Num: 43

Candidate Starts for Hammy\_87:

(Start: 43 @56908 has 3 MA's), (46, 56923), (49, 56953), (59, 56983), (61, 56989), (71, 57040), (72, 57043), (73, 57058), (83, 57100), (86, 57124), (88, 57133), (89, 57142), (90, 57148),

Gene: HedwigODU\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for HedwigODU\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (53, 545), (60, 563), (63, 569), (71, 617), (73, 635), (74, 638), (77, 656), (79, 668), (83, 680), (86, 701),

Gene: Heftyboy\_2 Start: 296, Stop: 541, Start Num: 44

Candidate Starts for Heftyboy\_2:

(Start: 44 @296 has 21 MA's), (57, 368), (60, 374), (63, 380), (69, 416), (71, 428), (74, 449), (76, 455), (77, 467), (86, 512),

Gene: Homura\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Homura\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (50, 536), (53, 545), (60, 563), (63, 569), (71, 617), (74, 638), (77, 656), (83, 680), (86, 701),

Gene: Hurricane\_89 Start: 56085, Stop: 56348, Start Num: 39

Candidate Starts for Hurricane\_89:

(Start: 39 @56085 has 11 MA's), (48, 56115), (54, 56151), (56, 56157), (66, 56184), (69, 56208), (71, 56220), (75, 56244), (77, 56256), (83, 56280), (84, 56283), (86, 56307), (89, 56325),

Gene: Hyperbowlee\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Hyperbowlee\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (50, 536), (53, 545), (60, 563), (63, 569), (71, 617), (74, 638), (77, 656), (83, 680), (86, 701),

Gene: Illumine\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for Illumine\_3:

(11, 227), (24, 326), (Start: 37 @452 has 121 MA's), (46, 473), (50, 512), (60, 539), (63, 545), (71, 593), (74, 614), (77, 632), (86, 677),

Gene: Inky\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Inky\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (50, 536), (53, 545), (60, 563), (63, 569), (71, 617), (74, 638), (77, 656), (83, 680), (86, 701),

Gene: InvictusManeo\_2 Start: 300, Stop: 545, Start Num: 44

Candidate Starts for InvictusManeo\_2:

(Start: 44 @300 has 21 MA's), (60, 378), (68, 417), (74, 453), (77, 471), (85, 501), (86, 516),

Gene: JAWS\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for JAWS\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (53, 545), (60, 563), (63, 569), (71, 617), (73, 635), (74, 638), (77, 656), (79, 668), (83, 680), (86, 701),

Gene: Jarvi\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Jarvi\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (50, 536), (53, 545), (60, 563), (63, 569), (71, 617), (74, 638), (77, 656), (83, 680), (86, 701),

Gene: Jayhawk\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Jayhawk\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (53, 545), (60, 563), (63, 569), (71, 617), (73, 635), (74, 638), (77, 656), (79, 668), (83, 680), (86, 701),

Gene: Jeckyll\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Jeckyll\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (50, 536), (53, 545), (60, 563), (63, 569), (71, 617), (74, 638), (77, 656), (83, 680), (86, 701),

Gene: Joy99\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for Joy99\_3:

(11, 227), (24, 326), (Start: 37 @452 has 121 MA's), (46, 473), (53, 521), (60, 539), (63, 545), (71, 593), (73, 611), (74, 614), (77, 632), (86, 677),

Gene: Kari\_67 Start: 43025, Stop: 43279, Start Num: 37

Candidate Starts for Kari\_67:

(29, 42962), (Start: 37 @43025 has 121 MA's), (45, 43046), (48, 43061), (55, 43103), (60, 43121), (77, 43214), (80, 43229),

Gene: Keshu\_91 Start: 56377, Stop: 56640, Start Num: 39

Candidate Starts for Keshu\_91:

(Start: 39 @56377 has 11 MA's), (51, 56434), (58, 56455), (61, 56461), (67, 56482), (69, 56500), (75, 56536), (86, 56599), (89, 56617),

Gene: KilKor\_68 Start: 44933, Stop: 45187, Start Num: 37

Candidate Starts for KilKor\_68:

(29, 44870), (Start: 37 @44933 has 121 MA's), (45, 44954), (48, 44969), (55, 45011), (60, 45029), (77, 45122), (80, 45137),

Gene: Kropertea\_96 Start: 60883, Stop: 61203, Start Num: 38

Candidate Starts for Kropertea\_96:

(Start: 38 @60883 has 2 MA's), (Start: 40 @60886 has 2 MA's), (64, 60988), (68, 61018), (70, 61030), (72, 61036), (74, 61054), (86, 61123),

Gene: LastHope\_3 Start: 447, Stop: 701, Start Num: 37

Candidate Starts for LastHope\_3:

(11, 225), (24, 321), (Start: 37 @447 has 121 MA's), (46, 468), (57, 528), (60, 534), (63, 540), (71, 588), (73, 606), (74, 609), (77, 627),

Gene: LaterM\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for LaterM\_3:

(8, 197), (11, 227), (24, 326), (Start: 37 @452 has 121 MA's), (46, 473), (50, 512), (60, 539), (71, 593), (74, 614), (77, 632), (85, 662), (86, 677),

Gene: Lavahound\_89 Start: 58194, Stop: 58448, Start Num: 39

Candidate Starts for Lavahound\_89:

(Start: 39 @58194 has 11 MA's), (49, 58239), (67, 58296), (71, 58326), (86, 58407),

Gene: Lea83\_89 Start: 56206, Stop: 56469, Start Num: 39

Candidate Starts for Lea83\_89:

(Start: 39 @56206 has 11 MA's), (45, 56221), (48, 56236), (54, 56272), (56, 56278), (66, 56305), (69, 56329), (70, 56338), (71, 56341), (75, 56365), (77, 56377), (83, 56401), (86, 56428), (89, 56446),

Gene: Leston\_2 Start: 300, Stop: 545, Start Num: 44

Candidate Starts for Leston\_2:

(Start: 44 @300 has 21 MA's), (57, 372), (60, 378), (63, 384), (69, 420), (71, 432), (74, 453), (76, 459), (77, 471), (86, 516),

Gene: LindNT\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for LindNT\_3:

(11, 227), (24, 326), (Start: 37 @452 has 121 MA's), (46, 473), (53, 521), (60, 539), (63, 545), (71, 593), (73, 611), (74, 614), (77, 632), (83, 656), (86, 677),

Gene: Llorens\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Llorens\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (50, 536), (53, 545), (60, 563), (63, 569), (71, 617), (74, 638), (77, 656), (83, 680), (86, 701),

Gene: Lunahalos\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Lunahalos\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (50, 536), (53, 545), (60, 563), (63, 569), (71, 617), (74, 638), (77, 656), (83, 680), (86, 701),

Gene: MacKat\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for MacKat\_3:

(11, 227), (24, 326), (Start: 37 @452 has 121 MA's), (46, 473), (53, 521), (60, 539), (63, 545), (71, 593), (73, 611), (74, 614), (77, 632), (83, 656), (86, 677),

Gene: MacnCheese\_90 Start: 56613, Stop: 56876, Start Num: 39

Candidate Starts for MacnCheese\_90:

(23, 56478), (Start: 39 @56613 has 11 MA's), (48, 56643), (54, 56679), (56, 56685), (69, 56736), (71, 56748), (75, 56772), (77, 56784), (83, 56808), (86, 56835), (88, 56844), (89, 56853),

Gene: Majeke\_70 Start: 43651, Stop: 43905, Start Num: 37

Candidate Starts for Majeke\_70:

(Start: 27 @43561 has 1 MA's), (Start: 37 @43651 has 121 MA's), (45, 43672), (48, 43687), (55, 43729), (60, 43747), (77, 43840), (80, 43855),

Gene: Malithi\_67 Start: 42795, Stop: 43049, Start Num: 37

Candidate Starts for Malithi\_67:

(20, 42654), (Start: 27 @42705 has 1 MA's), (Start: 37 @42795 has 121 MA's), (45, 42816), (48, 42831), (55, 42873), (60, 42891),

Gene: Mangethe\_70 Start: 43651, Stop: 43905, Start Num: 37

Candidate Starts for Mangethe\_70:

(Start: 27 @43561 has 1 MA's), (Start: 37 @43651 has 121 MA's), (45, 43672), (48, 43687), (55, 43729), (60, 43747), (77, 43840), (80, 43855),

Gene: MeaningOfLife\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for MeaningOfLife\_3:

(11, 227), (24, 326), (Start: 37 @452 has 121 MA's), (46, 473), (53, 521), (60, 539), (63, 545), (71, 593), (73, 611), (74, 614), (77, 632), (83, 656), (86, 677),

Gene: Megiddo\_67 Start: 44801, Stop: 45055, Start Num: 37

Candidate Starts for Megiddo\_67:

(29, 44738), (Start: 37 @44801 has 121 MA's), (45, 44822), (48, 44837), (55, 44879), (60, 44897), (77, 44990), (80, 45005),

Gene: Megsy\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for Megsy\_3:

(11, 227), (24, 326), (Start: 37 @452 has 121 MA's), (46, 473), (53, 521), (60, 539), (63, 545), (71, 593), (73, 611), (74, 614), (77, 632), (83, 656), (86, 677),

Gene: Miryou\_2 Start: 275, Stop: 520, Start Num: 44

Candidate Starts for Miryou\_2:

(Start: 44 @275 has 21 MA's), (57, 347), (60, 353), (63, 359), (69, 395), (71, 407), (74, 428), (76, 434), (77, 446), (86, 491),

Gene: Murucutumbu\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for Murucutumbu\_3:

(9, 206), (11, 227), (24, 326), (Start: 37 @452 has 121 MA's), (46, 473), (53, 521), (60, 539), (63, 545), (70, 590), (71, 593), (73, 611), (74, 614), (77, 632), (83, 656), (86, 677),

Gene: Mynx\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for Mynx\_3:

(11, 227), (24, 326), (Start: 37 @452 has 121 MA's), (46, 473), (53, 521), (60, 539), (63, 545), (68, 578), (71, 593), (73, 611), (74, 614), (77, 632), (83, 656), (86, 677),

Gene: Nazo\_70 Start: 44643, Stop: 44897, Start Num: 37

Candidate Starts for Nazo\_70:

(12, 44427), (13, 44436), (22, 44517), (29, 44583), (35, 44634), (Start: 37 @44643 has 121 MA's), (45, 44664), (55, 44721), (60, 44739), (80, 44847),

Gene: Necropolis\_65 Start: 42235, Stop: 42489, Start Num: 37

Candidate Starts for Necropolis\_65:

(20, 42094), (Start: 27 @42145 has 1 MA's), (Start: 37 @42235 has 121 MA's), (45, 42256), (48, 42271), (55, 42313), (60, 42331),

Gene: OkiRoe\_2 Start: 275, Stop: 520, Start Num: 44

Candidate Starts for OkiRoe\_2:

(Start: 44 @275 has 21 MA's), (47, 293), (57, 347), (60, 353), (63, 359), (69, 395), (71, 407), (74, 428), (76, 434), (77, 446), (86, 491),

Gene: Omnicron\_2 Start: 241, Stop: 486, Start Num: 44

Candidate Starts for Omnicron\_2:

(Start: 44 @241 has 21 MA's), (57, 313), (60, 319), (63, 325), (71, 373), (74, 394), (77, 412), (83, 436),

Gene: Pace1224\_68 Start: 44266, Stop: 44490, Start Num: 37

Candidate Starts for Pace1224\_68:

(4, 43984), (7, 44005), (10, 44026), (17, 44077), (26, 44161), (32, 44233), (33, 44236), (Start: 37 @44266 has 121 MA's), (71, 44410),

Gene: Padfoot\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Padfoot\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (50, 536), (53, 545), (60, 563), (63, 569), (71, 617), (74, 638), (77, 656), (83, 680), (86, 701),

Gene: Padpat\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Padpat\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (53, 545), (60, 563), (63, 569), (71, 617), (73, 635), (74, 638), (77, 656), (79, 668), (83, 680), (86, 701),

Gene: Paito\_66 Start: 41579, Stop: 41797, Start Num: 41

Candidate Starts for Paito\_66:

(Start: 41 @41579 has 1 MA's), (58, 41660), (65, 41675), (71, 41717), (78, 41765), (82, 41777),

Gene: Paola\_2 Start: 275, Stop: 520, Start Num: 44

Candidate Starts for Paola\_2:

(Start: 44 @275 has 21 MA's), (57, 347), (60, 353), (63, 359), (69, 395), (71, 407), (74, 428), (76, 434), (77, 446), (86, 491),

Gene: Peel\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Peel\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (50, 536), (53, 545), (60, 563), (63, 569), (71, 617), (74, 638), (77, 656), (83, 680), (86, 701),

Gene: Phalm\_68 Start: 44231, Stop: 44485, Start Num: 37

Candidate Starts for Phalm\_68:

(29, 44168), (Start: 37 @44231 has 121 MA's), (45, 44252), (48, 44267), (55, 44309), (60, 44327), (77, 44420), (80, 44435),

Gene: Phayonce\_75 Start: 47994, Stop: 48278, Start Num: 30

Candidate Starts for Phayonce\_75:

(Start: 30 @47994 has 1 MA's), (52, 48120), (71, 48195),

Gene: Phegasus\_70 Start: 43618, Stop: 43872, Start Num: 37

Candidate Starts for Phegasus\_70:

(Start: 27 @43528 has 1 MA's), (Start: 37 @43618 has 121 MA's), (45, 43639), (48, 43654), (55, 43696), (60, 43714), (77, 43807), (80, 43822),

Gene: Phineas\_68 Start: 43203, Stop: 43457, Start Num: 37

Candidate Starts for Phineas\_68:

(20, 43062), (Start: 27 @43113 has 1 MA's), (Start: 37 @43203 has 121 MA's), (45, 43224), (48, 43239), (55, 43281), (60, 43299),

Gene: Piatt\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Piatt\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (50, 536), (53, 545), (60, 563), (63, 569), (71, 617), (74, 638), (77, 656), (83, 680), (86, 701),

Gene: Pixie\_88 Start: 55789, Stop: 56052, Start Num: 39

Candidate Starts for Pixie\_88:

(Start: 39 @55789 has 11 MA's), (48, 55819), (49, 55837), (54, 55855), (56, 55861), (66, 55888), (69, 55912), (70, 55921), (71, 55924), (75, 55948), (77, 55960), (83, 55984), (86, 56011), (89, 56029),

Gene: Pokerus\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for Pokerus\_3:

(11, 227), (24, 326), (Start: 37 @452 has 121 MA's), (46, 473), (53, 521), (60, 539), (71, 593), (73, 611), (74, 614), (77, 632), (83, 656), (86, 677),

Gene: Prithvi\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for Prithvi\_3:

(11, 227), (24, 326), (Start: 37 @452 has 121 MA's), (46, 473), (53, 521), (60, 539), (63, 545), (71, 593), (73, 611), (74, 614), (77, 632), (83, 656), (86, 677),

Gene: Psycho\_2 Start: 300, Stop: 545, Start Num: 44

Candidate Starts for Psycho\_2:

(Start: 44 @300 has 21 MA's), (57, 372), (60, 378), (63, 384), (69, 420), (71, 432), (74, 453), (76, 459), (77, 471),

Gene: Pygmy\_71 Start: 44585, Stop: 44839, Start Num: 37

Candidate Starts for Pygmy\_71:

(19, 44441), (21, 44450), (Start: 27 @44495 has 1 MA's), (Start: 37 @44585 has 121 MA's), (45, 44606), (48, 44621), (60, 44681), (80, 44789),

Gene: QuincyRose\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for QuincyRose\_3:

(11, 227), (24, 326), (Start: 37 @452 has 121 MA's), (46, 473), (53, 521), (60, 539), (63, 545), (71, 593), (73, 611), (74, 614), (77, 632), (79, 644), (83, 656), (86, 677),

Gene: Ramen\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Ramen\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (53, 545), (60, 563), (63, 569), (71, 617), (73, 635), (74, 638), (77, 656), (79, 668), (83, 680), (86, 701),

Gene: Rando14\_2 Start: 304, Stop: 549, Start Num: 44

Candidate Starts for Rando14\_2:

(Start: 44 @304 has 21 MA's), (46, 316), (60, 382), (63, 388), (71, 436), (74, 457), (77, 475), (80, 490), (85, 505), (88, 529),

Gene: Rapunzel97\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Rapunzel97\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (53, 545), (60, 563), (63, 569), (71, 617), (73, 635), (74, 638), (77, 656), (79, 668), (83, 680), (86, 701),

Gene: Rosmarinus\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Rosmarinus\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (50, 536), (53, 545), (60, 563), (63, 569), (71, 617), (74, 638), (77, 656), (83, 680), (86, 701),

Gene: SamuelLPlaqson\_3 Start: 440, Stop: 694, Start Num: 37

Candidate Starts for SamuelLPlaqson\_3:

(11, 215), (24, 314), (Start: 37 @440 has 121 MA's), (46, 461), (50, 500), (60, 527), (63, 533), (71, 581), (73, 599), (77, 620), (79, 632), (86, 665),

Gene: Sbash\_80 Start: 51476, Stop: 51787, Start Num: 28

Candidate Starts for Sbash\_80:

(Start: 28 @51476 has 1 MA's), (Start: 37 @51536 has 121 MA's), (Start: 43 @51545 has 3 MA's), (55, 51611), (60, 51629), (63, 51635), (77, 51722),

Gene: Shadow1\_2 Start: 396, Stop: 665, Start Num: 37

Candidate Starts for Shadow1\_2:

(Start: 27 @330 has 1 MA's), (Start: 37 @396 has 121 MA's),

Gene: ShedlockHolmes\_91 Start: 56212, Stop: 56475, Start Num: 39

Candidate Starts for ShedlockHolmes\_91:

(Start: 39 @56212 has 11 MA's), (48, 56242), (54, 56278), (56, 56284), (66, 56311), (69, 56335), (71, 56347), (75, 56371), (77, 56383), (83, 56407), (86, 56434), (89, 56452),

Gene: Sheng711\_102 Start: 61477, Stop: 61761, Start Num: 38

Candidate Starts for Sheng711\_102:

(36, 61468), (Start: 38 @61477 has 2 MA's), (Start: 40 @61480 has 2 MA's), (49, 61534), (70, 61624), (74, 61648), (83, 61690), (87, 61720),

Gene: ShiaSurprise\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for ShiaSurprise\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (50, 536), (53, 545), (60, 563), (63, 569), (71, 617), (74, 638), (77, 656), (83, 680), (86, 701),

Gene: Shipwreck\_70 Start: 44643, Stop: 44897, Start Num: 37

Candidate Starts for Shipwreck\_70:

(20, 44502), (Start: 27 @44553 has 1 MA's), (Start: 37 @44643 has 121 MA's), (45, 44664), (48, 44679), (55, 44721), (60, 44739),

Gene: Slimphazie\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Slimphazie\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (53, 545), (60, 563), (63, 569), (71, 617), (73, 635), (74, 638), (77, 656), (79, 668), (83, 680), (86, 701),

Gene: SoSeph\_2 Start: 296, Stop: 541, Start Num: 44

Candidate Starts for SoSeph\_2:

(Start: 44 @296 has 21 MA's), (57, 368), (60, 374), (63, 380), (69, 416), (71, 428), (74, 449), (76, 455), (77, 467), (86, 512),

Gene: Sonah\_68 Start: 42340, Stop: 42594, Start Num: 37

Candidate Starts for Sonah\_68:

(20, 42199), (Start: 27 @42250 has 1 MA's), (Start: 37 @42340 has 121 MA's), (45, 42361), (48, 42376), (55, 42418), (60, 42436),

Gene: Spock\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Spock\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (50, 536), (53, 545), (60, 563), (63, 569), (71, 617), (74, 638), (77, 656), (83, 680), (86, 701),

Gene: Stinson\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for Stinson\_3:

(8, 197), (11, 227), (24, 326), (Start: 37 @452 has 121 MA's), (46, 473), (50, 512), (60, 539), (71, 593), (74, 614), (77, 632), (85, 662), (86, 677),

Gene: StressBall\_67 Start: 43933, Stop: 44187, Start Num: 37

Candidate Starts for StressBall\_67:

(29, 43870), (Start: 37 @43933 has 121 MA's), (45, 43954), (48, 43969), (55, 44011), (60, 44029), (77, 44122), (80, 44137),

Gene: Stuck\_78 Start: 50794, Stop: 51048, Start Num: 37

Candidate Starts for Stuck\_78:

(31, 50755), (Start: 37 @50794 has 121 MA's), (45, 50815), (48, 50830), (55, 50872), (60, 50890), (63, 50896), (77, 50983), (80, 50998),

Gene: Sulley\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Sulley\_3:

(15, 278), (24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (53, 545), (60, 563), (63, 569), (71, 617), (73, 635), (74, 638), (77, 656), (79, 668), (83, 680), (86, 701),

Gene: Sunflower1121\_2 Start: 329, Stop: 664, Start Num: 27

Candidate Starts for Sunflower1121\_2:

(Start: 27 @329 has 1 MA's), (Start: 37 @395 has 121 MA's),

Gene: TBond007\_85 Start: 55787, Stop: 56050, Start Num: 39

Candidate Starts for TBond007\_85:

(Start: 39 @55787 has 11 MA's), (48, 55817), (49, 55835), (54, 55853), (56, 55859), (66, 55886), (69, 55910), (70, 55919), (71, 55922), (75, 55946), (77, 55958), (83, 55982), (86, 56009), (89, 56027),

Gene: TClif\_2 Start: 240, Stop: 494, Start Num: 44

Candidate Starts for TClif\_2:

(Start: 44 @240 has 21 MA's), (59, 318), (61, 324), (66, 339), (69, 363), (72, 378), (78, 420), (83, 435), (86, 453),

Gene: Tachez\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for Tachez\_3:

(11, 227), (24, 326), (Start: 37 @452 has 121 MA's), (46, 473), (53, 521), (60, 539), (63, 545), (68, 578), (71, 593), (73, 611), (74, 614), (77, 632), (79, 644), (83, 656), (86, 677),

Gene: Taheera\_60 Start: 40724, Stop: 40945, Start Num: 37

Candidate Starts for Taheera\_60:

(Start: 37 @40724 has 121 MA's), (58, 40808), (65, 40823), (71, 40865), (82, 40925),

Gene: TaiwanKao\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for TaiwanKao\_3:

(11, 227), (24, 326), (Start: 37 @452 has 121 MA's), (46, 473), (53, 521), (60, 539), (63, 545), (71, 593), (73, 611), (74, 614), (77, 632), (83, 656), (86, 677),

Gene: Techage\_68 Start: 43134, Stop: 43388, Start Num: 37

Candidate Starts for Techage\_68:

(19, 42990), (21, 42999), (Start: 27 @43044 has 1 MA's), (Start: 37 @43134 has 121 MA's), (45, 43155), (48, 43170), (60, 43230), (80, 43338),

Gene: Terror\_60 Start: 40724, Stop: 40945, Start Num: 37

Candidate Starts for Terror\_60:

(Start: 37 @40724 has 121 MA's), (58, 40808), (65, 40823), (71, 40865), (82, 40925),

Gene: Thyatira\_2 Start: 275, Stop: 520, Start Num: 44

Candidate Starts for Thyatira\_2:

(Start: 44 @275 has 21 MA's), (57, 347), (60, 353), (63, 359), (69, 395), (71, 407), (74, 428), (76, 434), (77, 446), (86, 491),

Gene: TingHuaYa\_3 Start: 447, Stop: 701, Start Num: 37

Candidate Starts for TingHuaYa\_3:

(11, 225), (24, 321), (Start: 37 @447 has 121 MA's), (46, 468), (57, 528), (60, 534), (63, 540), (71, 588), (73, 606), (74, 609), (77, 627),

Gene: TiniBug\_3 Start: 440, Stop: 694, Start Num: 37

Candidate Starts for TiniBug\_3:

(11, 215), (24, 314), (Start: 37 @440 has 121 MA's), (46, 461), (50, 500), (60, 527), (63, 533), (71, 581), (73, 599), (77, 620), (79, 632), (86, 665),

Gene: Tiri\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for Tiri\_3:

(Start: 37 @452 has 121 MA's), (46, 473), (53, 521), (60, 539), (63, 545), (68, 578), (71, 593), (73, 611), (74, 614), (77, 632), (79, 644), (83, 656), (86, 677),

Gene: Topper\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Topper\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (50, 536), (53, 545), (60, 563), (63, 569), (71, 617), (74, 638), (77, 656), (83, 680), (86, 701),

Gene: TreyKay\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for TreyKay\_3:

(11, 227), (24, 326), (Start: 37 @452 has 121 MA's), (46, 473), (53, 521), (60, 539), (63, 545), (71, 593), (73, 611), (74, 614), (77, 632), (83, 656), (86, 677),

Gene: TruffulaTree\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for TruffulaTree\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (50, 536), (53, 545), (60, 563), (63, 569), (71, 617), (73, 635), (74, 638), (77, 656), (79, 668), (83, 680), (86, 701),

Gene: Twitch\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Twitch\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (50, 536), (53, 545), (60, 563), (63, 569), (71, 617), (74, 638), (77, 656), (83, 680), (86, 701),

Gene: Urkel\_3 Start: 440, Stop: 694, Start Num: 37

Candidate Starts for Urkel\_3:

(11, 215), (24, 314), (Start: 37 @440 has 121 MA's), (46, 461), (50, 500), (60, 527), (63, 533), (71, 581), (73, 599), (77, 620), (79, 632), (86, 665),

Gene: Veliki\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Veliki\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (53, 545), (60, 563), (63, 569), (71, 617), (74, 638), (77, 656), (83, 680), (86, 701),

Gene: Venti\_65 Start: 41542, Stop: 41796, Start Num: 37

Candidate Starts for Venti\_65:

(19, 41398), (21, 41407), (Start: 27 @41452 has 1 MA's), (Start: 37 @41542 has 121 MA's), (45, 41563), (48, 41578), (60, 41638), (80, 41746),

Gene: Waterfoul\_2 Start: 296, Stop: 541, Start Num: 44

Candidate Starts for Waterfoul\_2:

(Start: 44 @296 has 21 MA's), (57, 368), (60, 374), (63, 380), (69, 416), (71, 428), (74, 449), (76, 455), (77, 467), (86, 512),

Gene: Willsammy\_69 Start: 44417, Stop: 44671, Start Num: 37

Candidate Starts for Willsammy\_69:

(29, 44354), (Start: 37 @44417 has 121 MA's), (45, 44438), (48, 44453), (55, 44495), (60, 44513), (77, 44606), (80, 44621),

Gene: YoureAdopted\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for YoureAdopted\_3:

(11, 227), (24, 326), (Start: 37 @452 has 121 MA's), (46, 473), (53, 521), (60, 539), (63, 545), (71, 593), (73, 611), (74, 614), (77, 632), (83, 656), (86, 677),

Gene: Yunkel11\_3 Start: 445, Stop: 702, Start Num: 37

Candidate Starts for Yunkel11\_3:

(24, 325), (Start: 37 @445 has 121 MA's), (46, 466), (50, 505), (60, 532), (63, 538), (68, 571), (71, 586), (73, 604), (74, 607), (77, 625), (86, 673),

Gene: Zabiza\_3 Start: 476, Stop: 730, Start Num: 37

Candidate Starts for Zabiza\_3:

(24, 350), (Start: 37 @476 has 121 MA's), (46, 497), (53, 545), (60, 563), (63, 569), (71, 617), (73, 635), (74, 638), (77, 656), (79, 668), (83, 680), (86, 701),

Gene: Zavala\_3 Start: 452, Stop: 706, Start Num: 37

Candidate Starts for Zavala\_3:

(11, 227), (24, 326), (Start: 37 @452 has 121 MA's), (46, 473), (53, 521), (60, 539), (63, 545), (71, 593), (73, 611), (74, 614), (77, 632), (79, 644), (83, 656), (86, 677),