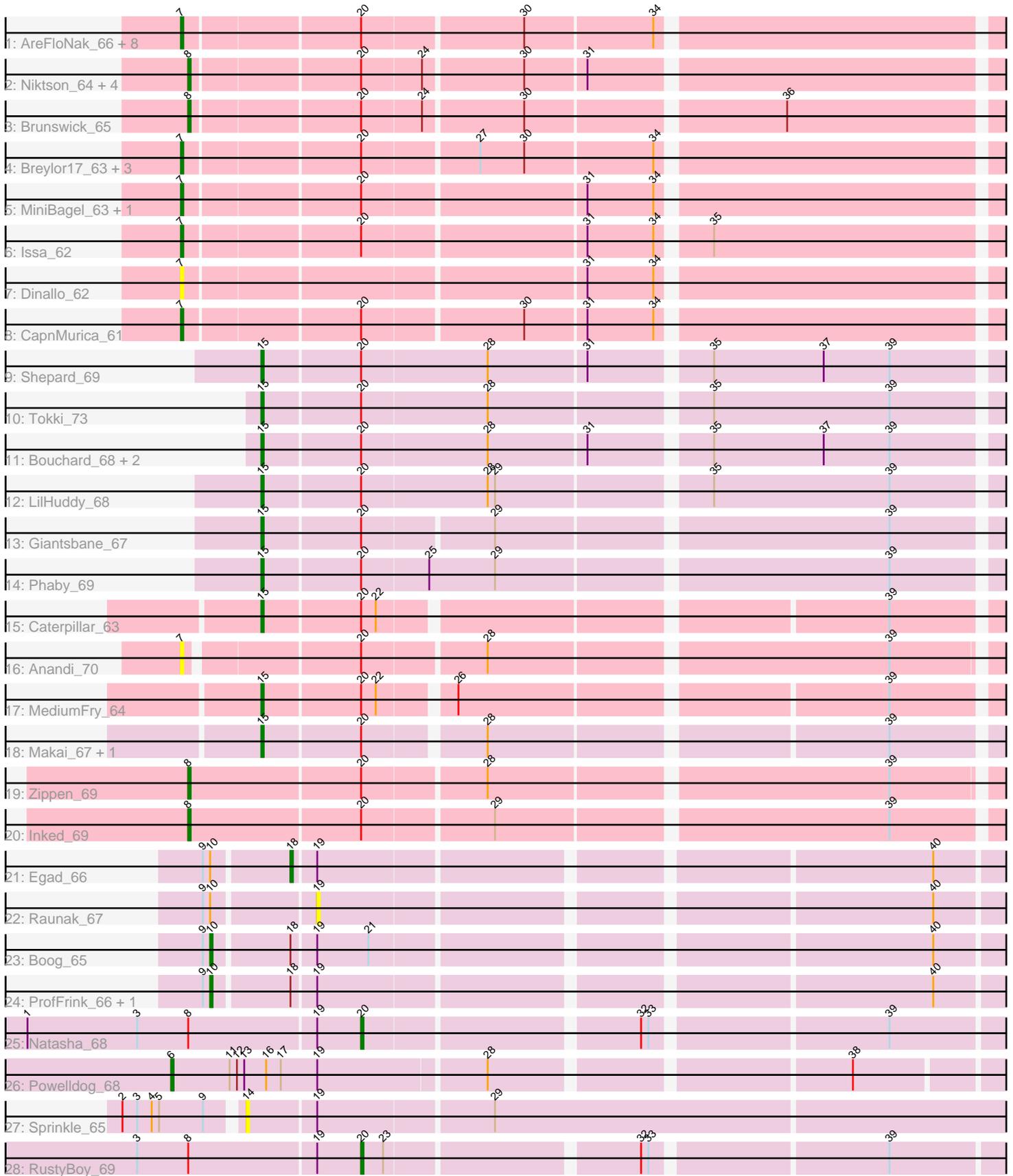


# Pham 283913



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 283913 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283913 has 48 members, 10 are drafts.

Phages represented in each track:

- Track 1 : AreFloNak\_66, Westerlin\_63, Gordon\_61, DevitoJr\_63, Darby\_62, Nivinsha\_66, Tatanka\_59, Synepsis\_62, ScienceWizSam\_64
- Track 2 : Niktson\_64, ElephantMan\_64, Teacup\_65, Acai\_64, LucySwiss\_64
- Track 3 : Brunswick\_65
- Track 4 : Breylor17\_63, CastorTray\_67, Trustiboi\_63, Nightmare\_65
- Track 5 : MiniBagel\_63, Tenno\_64
- Track 6 : Issa\_62
- Track 7 : Dinallo\_62
- Track 8 : CapnMurica\_61
- Track 9 : Shepard\_69
- Track 10 : Tokki\_73
- Track 11 : Bouchard\_68, Tipton\_68, Chlochlo\_68
- Track 12 : LilHuddy\_68
- Track 13 : Giantsbane\_67
- Track 14 : Phaby\_69
- Track 15 : Caterpillar\_63
- Track 16 : Anandi\_70
- Track 17 : MediumFry\_64
- Track 18 : Makai\_67, Truckee\_65
- Track 19 : Zippen\_69
- Track 20 : Inked\_69
- Track 21 : Egad\_66
- Track 22 : Raunak\_67
- Track 23 : Boog\_65
- Track 24 : ProfFrink\_66, HerbBucket\_64
- Track 25 : Natasha\_68
- Track 26 : PowellDog\_68
- Track 27 : Sprinkle\_65
- Track 28 : RustyBoy\_69

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

The start number called the most often in the published annotations is 7, it was called in 14 of the 38 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Anandi\_70, AreFloNak\_66, Breylor17\_63, CapnMurica\_61, CastorTray\_67, Darby\_62, DevitoJr\_63, Dinallo\_62, Gordon\_61, Issa\_62, MiniBagel\_63, Nightmare\_65, Nivinsha\_66, ScienceWizSam\_64, Synepsis\_62, Tatanka\_59, Tenno\_64, Trustiboi\_63, Westerlin\_63,

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

- 

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

- Acai\_64, Boog\_65, Bouchard\_68, Brunswick\_65, Caterpillar\_63, Chlochlo\_68, Egad\_66, ElephantMan\_64, Giantsbane\_67, HerbBucket\_64, Inked\_69, LilHuddy\_68, LucySwiss\_64, Makai\_67, MediumFry\_64, Natasha\_68, Niktson\_64, Phaby\_69, Powellldog\_68, ProfFrink\_66, Raunak\_67, RustyBoy\_69, Shepard\_69, Sprinkle\_65, Teacup\_65, Tipton\_68, Tokki\_73, Truckee\_65, Zippen\_69,

### Summary by start number:

Start 6:

- Found in 1 of 48 ( 2.1% ) of genes in pham
- Manual Annotations of this start: 1 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Powellldog\_68 (AW),

Start 7:

- Found in 19 of 48 ( 39.6% ) of genes in pham
- Manual Annotations of this start: 14 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anandi\_70 (AU4), AreFloNak\_66 (AU1), Breylor17\_63 (AU1), CapnMurica\_61 (AU1), CastorTray\_67 (AU1), Darby\_62 (AU1), DevitoJr\_63 (AU1), Dinallo\_62 (AU1), Gordon\_61 (AU1), Issa\_62 (AU1), MiniBagel\_63 (AU1), Nightmare\_65 (AU1), Nivinsha\_66 (AU1), ScienceWizSam\_64 (AU1), Synepsis\_62 (AU1), Tatanka\_59 (AU1), Tenno\_64 (AU1), Trustiboi\_63 (AU1), Westerlin\_63 (AU1),

Start 8:

- Found in 10 of 48 ( 20.8% ) of genes in pham
- Manual Annotations of this start: 7 of 38
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Acai\_64 (AU1), Brunswick\_65 (AU1), ElephantMan\_64 (AU1), Inked\_69 (AU7), LucySwiss\_64 (AU1), Niktson\_64 (AU1), Teacup\_65 (AU1), Zippen\_69 (AU7),

Start 10:

- Found in 5 of 48 ( 10.4% ) of genes in pham
- Manual Annotations of this start: 2 of 38
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Boog\_65 (AW), HerbBucket\_64 (AW), ProfFrink\_66 (AW),

Start 14:

- Found in 1 of 48 ( 2.1% ) of genes in pham

- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sprinkle\_65 (AW),

Start 15:

- Found in 12 of 48 ( 25.0% ) of genes in pham
- Manual Annotations of this start: 11 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bouchard\_68 (AU2), Caterpillar\_63 (AU4), Chlochlo\_68 (AU2), Giantsbane\_67 (AU2), LilHuddy\_68 (AU2), Makai\_67 (AU5), MediumFry\_64 (AU4), Phaby\_69 (AU2), Shepard\_69 (AU2), Tipton\_68 (AU2), Tokki\_73 (AU2), Truckee\_65 (AU5),

Start 18:

- Found in 4 of 48 ( 8.3% ) of genes in pham
- Manual Annotations of this start: 1 of 38
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Egad\_66 (AW),

Start 19:

- Found in 9 of 48 ( 18.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 11.1% of time when present
- Phage (with cluster) where this start called: Raunak\_67 (AW),

Start 20:

- Found in 40 of 48 ( 83.3% ) of genes in pham
- Manual Annotations of this start: 2 of 38
- Called 5.0% of time when present
- Phage (with cluster) where this start called: Natasha\_68 (AW), RustyBoy\_69 (AW),

### **Summary by clusters:**

There are 6 clusters represented in this pham: AW, AU1, AU2, AU5, AU4, AU7,

Info for manual annotations of cluster AU1:

- Start number 7 was manually annotated 14 times for cluster AU1.
- Start number 8 was manually annotated 5 times for cluster AU1.

Info for manual annotations of cluster AU2:

- Start number 15 was manually annotated 7 times for cluster AU2.

Info for manual annotations of cluster AU4:

- Start number 15 was manually annotated 2 times for cluster AU4.

Info for manual annotations of cluster AU5:

- Start number 15 was manually annotated 2 times for cluster AU5.

Info for manual annotations of cluster AU7:

- Start number 8 was manually annotated 2 times for cluster AU7.

Info for manual annotations of cluster AW:

- Start number 6 was manually annotated 1 time for cluster AW.

- Start number 10 was manually annotated 2 times for cluster AW.
- Start number 18 was manually annotated 1 time for cluster AW.
- Start number 20 was manually annotated 2 times for cluster AW.

### **Gene Information:**

Gene: Acai\_64 Start: 44756, Stop: 45067, Start Num: 8

Candidate Starts for Acai\_64:

(Start: 8 @44756 has 7 MA's), (Start: 20 @44822 has 2 MA's), (24, 44846), (30, 44885), (31, 44909),

Gene: Anandi\_70 Start: 45261, Stop: 45578, Start Num: 7

Candidate Starts for Anandi\_70:

(Start: 7 @45261 has 14 MA's), (Start: 20 @45327 has 2 MA's), (28, 45375), (39, 45531),

Gene: AreFloNak\_66 Start: 44576, Stop: 44890, Start Num: 7

Candidate Starts for AreFloNak\_66:

(Start: 7 @44576 has 14 MA's), (Start: 20 @44645 has 2 MA's), (30, 44708), (34, 44759),

Gene: Boog\_65 Start: 42487, Stop: 42786, Start Num: 10

Candidate Starts for Boog\_65:

(9, 42484), (Start: 10 @42487 has 2 MA's), (Start: 18 @42517 has 1 MA's), (19, 42526), (21, 42547), (40, 42760),

Gene: Bouchard\_68 Start: 45451, Stop: 45738, Start Num: 15

Candidate Starts for Bouchard\_68:

(Start: 15 @45451 has 11 MA's), (Start: 20 @45490 has 2 MA's), (28, 45541), (31, 45580), (35, 45625), (37, 45670), (39, 45697),

Gene: Breylor17\_63 Start: 45151, Stop: 45465, Start Num: 7

Candidate Starts for Breylor17\_63:

(Start: 7 @45151 has 14 MA's), (Start: 20 @45220 has 2 MA's), (27, 45265), (30, 45283), (34, 45334),

Gene: Brunswick\_65 Start: 44599, Stop: 44910, Start Num: 8

Candidate Starts for Brunswick\_65:

(Start: 8 @44599 has 7 MA's), (Start: 20 @44665 has 2 MA's), (24, 44689), (30, 44728), (36, 44827),

Gene: CapnMurica\_61 Start: 45337, Stop: 45651, Start Num: 7

Candidate Starts for CapnMurica\_61:

(Start: 7 @45337 has 14 MA's), (Start: 20 @45406 has 2 MA's), (30, 45469), (31, 45493), (34, 45520),

Gene: CastorTray\_67 Start: 45340, Stop: 45654, Start Num: 7

Candidate Starts for CastorTray\_67:

(Start: 7 @45340 has 14 MA's), (Start: 20 @45409 has 2 MA's), (27, 45454), (30, 45472), (34, 45523),

Gene: Caterpillar\_63 Start: 44268, Stop: 44546, Start Num: 15

Candidate Starts for Caterpillar\_63:

(Start: 15 @44268 has 11 MA's), (Start: 20 @44307 has 2 MA's), (22, 44313), (39, 44505),

Gene: Chlochlo\_68 Start: 44978, Stop: 45265, Start Num: 15

Candidate Starts for Chlochlo\_68:

(Start: 15 @44978 has 11 MA's), (Start: 20 @45017 has 2 MA's), (28, 45068), (31, 45107), (35, 45152), (37, 45197), (39, 45224),

Gene: Darby\_62 Start: 44386, Stop: 44700, Start Num: 7

Candidate Starts for Darby\_62:

(Start: 7 @44386 has 14 MA's), (Start: 20 @44455 has 2 MA's), (30, 44518), (34, 44569),

Gene: DevitoJr\_63 Start: 44772, Stop: 45086, Start Num: 7

Candidate Starts for DevitoJr\_63:

(Start: 7 @44772 has 14 MA's), (Start: 20 @44841 has 2 MA's), (30, 44904), (34, 44955),

Gene: Dinallo\_62 Start: 45647, Stop: 45961, Start Num: 7

Candidate Starts for Dinallo\_62:

(Start: 7 @45647 has 14 MA's), (31, 45803), (34, 45830),

Gene: Egad\_66 Start: 42768, Stop: 43037, Start Num: 18

Candidate Starts for Egad\_66:

(9, 42735), (Start: 10 @42738 has 2 MA's), (Start: 18 @42768 has 1 MA's), (19, 42777), (40, 43011),

Gene: ElephantMan\_64 Start: 45229, Stop: 45540, Start Num: 8

Candidate Starts for ElephantMan\_64:

(Start: 8 @45229 has 7 MA's), (Start: 20 @45295 has 2 MA's), (24, 45319), (30, 45358), (31, 45382),

Gene: Giantsbane\_67 Start: 43961, Stop: 44245, Start Num: 15

Candidate Starts for Giantsbane\_67:

(Start: 15 @43961 has 11 MA's), (Start: 20 @44000 has 2 MA's), (29, 44051), (39, 44204),

Gene: Gordon\_61 Start: 45264, Stop: 45578, Start Num: 7

Candidate Starts for Gordon\_61:

(Start: 7 @45264 has 14 MA's), (Start: 20 @45333 has 2 MA's), (30, 45396), (34, 45447),

Gene: HerbBucket\_64 Start: 42469, Stop: 42768, Start Num: 10

Candidate Starts for HerbBucket\_64:

(9, 42466), (Start: 10 @42469 has 2 MA's), (Start: 18 @42499 has 1 MA's), (19, 42508), (40, 42742),

Gene: Inked\_69 Start: 45815, Stop: 46129, Start Num: 8

Candidate Starts for Inked\_69:

(Start: 8 @45815 has 7 MA's), (Start: 20 @45884 has 2 MA's), (29, 45935), (39, 46088),

Gene: Issa\_62 Start: 44432, Stop: 44746, Start Num: 7

Candidate Starts for Issa\_62:

(Start: 7 @44432 has 14 MA's), (Start: 20 @44501 has 2 MA's), (31, 44588), (34, 44615), (35, 44633),

Gene: LilHuddy\_68 Start: 45074, Stop: 45361, Start Num: 15

Candidate Starts for LilHuddy\_68:

(Start: 15 @45074 has 11 MA's), (Start: 20 @45113 has 2 MA's), (28, 45164), (29, 45167), (35, 45248), (39, 45320),

Gene: LucySwiss\_64 Start: 44380, Stop: 44691, Start Num: 8

Candidate Starts for LucySwiss\_64:

(Start: 8 @44380 has 7 MA's), (Start: 20 @44446 has 2 MA's), (24, 44470), (30, 44509), (31, 44533),

Gene: Makai\_67 Start: 45228, Stop: 45506, Start Num: 15

Candidate Starts for Makai\_67:

(Start: 15 @45228 has 11 MA's), (Start: 20 @45267 has 2 MA's), (28, 45312), (39, 45465),

Gene: MediumFry\_64 Start: 44564, Stop: 44842, Start Num: 15

Candidate Starts for MediumFry\_64:

(Start: 15 @44564 has 11 MA's), (Start: 20 @44603 has 2 MA's), (22, 44609), (26, 44636), (39, 44801),

Gene: MiniBagel\_63 Start: 45328, Stop: 45642, Start Num: 7

Candidate Starts for MiniBagel\_63:

(Start: 7 @45328 has 14 MA's), (Start: 20 @45397 has 2 MA's), (31, 45484), (34, 45511),

Gene: Natasha\_68 Start: 42740, Stop: 42982, Start Num: 20

Candidate Starts for Natasha\_68:

(1, 42605), (3, 42650), (Start: 8 @42671 has 7 MA's), (19, 42722), (Start: 20 @42740 has 2 MA's), (32, 42845), (33, 42848), (39, 42938),

Gene: Nightmare\_65 Start: 45626, Stop: 45940, Start Num: 7

Candidate Starts for Nightmare\_65:

(Start: 7 @45626 has 14 MA's), (Start: 20 @45695 has 2 MA's), (27, 45740), (30, 45758), (34, 45809),

Gene: Niktson\_64 Start: 45229, Stop: 45540, Start Num: 8

Candidate Starts for Niktson\_64:

(Start: 8 @45229 has 7 MA's), (Start: 20 @45295 has 2 MA's), (24, 45319), (30, 45358), (31, 45382),

Gene: Nivinsha\_66 Start: 44576, Stop: 44890, Start Num: 7

Candidate Starts for Nivinsha\_66:

(Start: 7 @44576 has 14 MA's), (Start: 20 @44645 has 2 MA's), (30, 44708), (34, 44759),

Gene: Phaby\_69 Start: 45635, Stop: 45922, Start Num: 15

Candidate Starts for Phaby\_69:

(Start: 15 @45635 has 11 MA's), (Start: 20 @45674 has 2 MA's), (25, 45701), (29, 45728), (39, 45881),

Gene: Powelldog\_68 Start: 43177, Stop: 43494, Start Num: 6

Candidate Starts for Powelldog\_68:

(Start: 6 @43177 has 1 MA's), (11, 43201), (12, 43204), (13, 43207), (16, 43216), (17, 43222), (19, 43237), (28, 43303), (38, 43438),

Gene: ProfFrink\_66 Start: 42737, Stop: 43036, Start Num: 10

Candidate Starts for ProfFrink\_66:

(9, 42734), (Start: 10 @42737 has 2 MA's), (Start: 18 @42767 has 1 MA's), (19, 42776), (40, 43010),

Gene: Raunak\_67 Start: 42437, Stop: 42697, Start Num: 19

Candidate Starts for Raunak\_67:

(9, 42395), (Start: 10 @42398 has 2 MA's), (19, 42437), (40, 42671),

Gene: RustyBoy\_69 Start: 42939, Stop: 43181, Start Num: 20

Candidate Starts for RustyBoy\_69:

(3, 42849), (Start: 8 @42870 has 7 MA's), (19, 42921), (Start: 20 @42939 has 2 MA's), (23, 42948), (32, 43044), (33, 43047), (39, 43137),

Gene: ScienceWizSam\_64 Start: 44738, Stop: 45052, Start Num: 7

Candidate Starts for ScienceWizSam\_64:

(Start: 7 @44738 has 14 MA's), (Start: 20 @44807 has 2 MA's), (30, 44870), (34, 44921),

Gene: Shepard\_69 Start: 44933, Stop: 45220, Start Num: 15

Candidate Starts for Shepard\_69:

(Start: 15 @44933 has 11 MA's), (Start: 20 @44972 has 2 MA's), (28, 45023), (31, 45062), (35, 45107), (37, 45152), (39, 45179),

Gene: Sprinkle\_65 Start: 42929, Stop: 43231, Start Num: 14

Candidate Starts for Sprinkle\_65:

(2, 42884), (3, 42890), (4, 42896), (5, 42899), (9, 42917), (14, 42929), (19, 42956), (29, 43025),

Gene: Synopsis\_62 Start: 44739, Stop: 45053, Start Num: 7

Candidate Starts for Synopsis\_62:

(Start: 7 @44739 has 14 MA's), (Start: 20 @44808 has 2 MA's), (30, 44871), (34, 44922),

Gene: Tatanka\_59 Start: 44875, Stop: 45189, Start Num: 7

Candidate Starts for Tatanka\_59:

(Start: 7 @44875 has 14 MA's), (Start: 20 @44944 has 2 MA's), (30, 45007), (34, 45058),

Gene: Teacup\_65 Start: 45308, Stop: 45619, Start Num: 8

Candidate Starts for Teacup\_65:

(Start: 8 @45308 has 7 MA's), (Start: 20 @45374 has 2 MA's), (24, 45398), (30, 45437), (31, 45461),

Gene: Tenno\_64 Start: 45392, Stop: 45706, Start Num: 7

Candidate Starts for Tenno\_64:

(Start: 7 @45392 has 14 MA's), (Start: 20 @45461 has 2 MA's), (31, 45548), (34, 45575),

Gene: Tipton\_68 Start: 45472, Stop: 45759, Start Num: 15

Candidate Starts for Tipton\_68:

(Start: 15 @45472 has 11 MA's), (Start: 20 @45511 has 2 MA's), (28, 45562), (31, 45601), (35, 45646), (37, 45691), (39, 45718),

Gene: Tokki\_73 Start: 45503, Stop: 45790, Start Num: 15

Candidate Starts for Tokki\_73:

(Start: 15 @45503 has 11 MA's), (Start: 20 @45542 has 2 MA's), (28, 45593), (35, 45677), (39, 45749),

Gene: Truckee\_65 Start: 45012, Stop: 45290, Start Num: 15

Candidate Starts for Truckee\_65:

(Start: 15 @45012 has 11 MA's), (Start: 20 @45051 has 2 MA's), (28, 45096), (39, 45249),

Gene: Trustiboi\_63 Start: 44994, Stop: 45308, Start Num: 7

Candidate Starts for Trustiboi\_63:

(Start: 7 @44994 has 14 MA's), (Start: 20 @45063 has 2 MA's), (27, 45108), (30, 45126), (34, 45177),

Gene: Westerlin\_63 Start: 46083, Stop: 46397, Start Num: 7

Candidate Starts for Westerlin\_63:

(Start: 7 @46083 has 14 MA's), (Start: 20 @46152 has 2 MA's), (30, 46215), (34, 46266),

Gene: Zippen\_69 Start: 45683, Stop: 46003, Start Num: 8

Candidate Starts for Zippen\_69:

(Start: 8 @45683 has 7 MA's), (Start: 20 @45752 has 2 MA's), (28, 45800), (39, 45956),