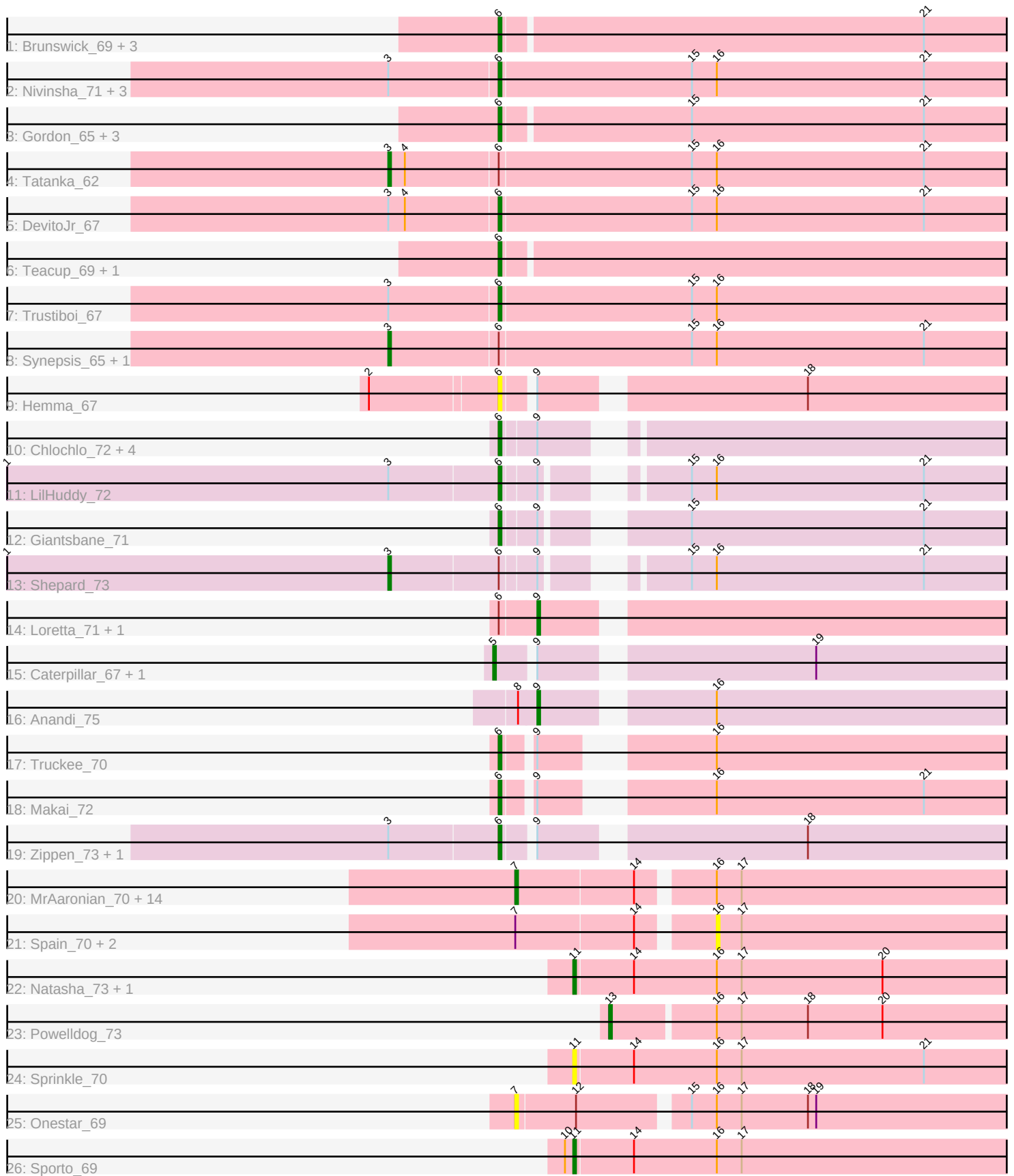


# Pham 330868



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 330868 Report

This analysis was run 09/05/26 on database version 662.

Pham number 330868 has 61 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Brunswick\_69, Niktson\_68, ElephantMan\_68, Acai\_68
- Track 2 : Nivinsha\_71, AreFloNak\_72, Nightmare\_69, CastorTray\_71
- Track 3 : Gordon\_65, Tenno\_68, CapnMurica\_65, MiniBagel\_67
- Track 4 : Tatanka\_62
- Track 5 : DevitoJr\_67
- Track 6 : Teacup\_69, LucySwiss\_68
- Track 7 : Trustiboi\_67
- Track 8 : Synopsis\_65, ScienceWizSam\_69
- Track 9 : Hemma\_67
- Track 10 : Chlochlo\_72, Tipton\_73, Bouchard\_72, Phaby\_73, Tokki\_77
- Track 11 : LilHuddy\_72
- Track 12 : Giantsbane\_71
- Track 13 : Shepard\_73
- Track 14 : Loretta\_71, Ingrid\_74
- Track 15 : Caterpillar\_67, MediumFry\_68
- Track 16 : Anandi\_75
- Track 17 : Truckee\_70
- Track 18 : Makai\_72
- Track 19 : Zippen\_73, Inked\_73
- Track 20 : MrAaronian\_70, Sloopyjoe\_70, Boog\_69, Jeremy4pt0\_69, Shiba\_69, Salk\_70, Stayer\_70, BronxBay\_70, Egad\_70, StarLord\_70, Djungelskog\_69, ProfFrink\_70, Michelle\_70, Linda\_70, DoctorPepper\_69
- Track 21 : Spain\_70, Raunak\_71, HerbBucket\_68
- Track 22 : Natasha\_73, RustyBoy\_74
- Track 23 : PowellDog\_73
- Track 24 : Sprinkle\_70
- Track 25 : Onestar\_69
- Track 26 : Sporto\_69

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

The start number called the most often in the published annotations is 6, it was called in 25 of the 53 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acai\_68, AreFloNak\_72, Bouchard\_72, Brunswick\_69, CapnMurica\_65, CastorTray\_71, Chlochlo\_72, DevitoJr\_67, ElephantMan\_68, Giantsbane\_71, Gordon\_65, Hemma\_67, Inked\_73, LilHuddy\_72, LucySwiss\_68, Makai\_72, MiniBagel\_67, Nightmare\_69, Niktson\_68, Nivinsha\_71, Phaby\_73, Teacup\_69, Tenno\_68, Tipton\_73, Tokki\_77, Truckee\_70, Trustiboi\_67, Zippen\_73,

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

- Ingrid\_74, Loretta\_71, ScienceWizSam\_69, Shepard\_73, Synepsis\_65, Tatanka\_62,

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

- Anandi\_75, Boog\_69, BronxBay\_70, Caterpillar\_67, Djungelskog\_69, DoctorPepper\_69, Egad\_70, HerbBucket\_68, Jeremy4pt0\_69, Linda\_70, MediumFry\_68, Michelle\_70, MrAaronian\_70, Natasha\_73, Onestar\_69, PowellDog\_73, ProfFrink\_70, Raunak\_71, RustyBoy\_74, Salk\_70, Shiba\_69, Sloopyjoe\_70, Spain\_70, Sporto\_69, Sprinkle\_70, StarLord\_70, Stayer\_70,

### Summary by start number:

Start 3:

- Found in 13 of 61 ( 21.3% ) of genes in pham
- Manual Annotations of this start: 4 of 53
- Called 30.8% of time when present
- Phage (with cluster) where this start called: ScienceWizSam\_69 (AU1), Shepard\_73 (AU2), Synepsis\_65 (AU1), Tatanka\_62 (AU1),

Start 5:

- Found in 2 of 61 ( 3.3% ) of genes in pham
- Manual Annotations of this start: 2 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Caterpillar\_67 (AU4), MediumFry\_68 (AU4),

Start 6:

- Found in 34 of 61 ( 55.7% ) of genes in pham
- Manual Annotations of this start: 25 of 53
- Called 82.4% of time when present
- Phage (with cluster) where this start called: Acai\_68 (AU1), AreFloNak\_72 (AU1), Bouchard\_72 (AU2), Brunswick\_69 (AU1), CapnMurica\_65 (AU1), CastorTray\_71 (AU1), Chlochlo\_72 (AU2), DevitoJr\_67 (AU1), ElephantMan\_68 (AU1), Giantsbane\_71 (AU2), Gordon\_65 (AU1), Hemma\_67 (AU1), Inked\_73 (AU7), LilHuddy\_72 (AU2), LucySwiss\_68 (AU1), Makai\_72 (AU5), MiniBagel\_67 (AU1), Nightmare\_69 (AU1), Niktson\_68 (AU1), Nivinsha\_71 (AU1), Phaby\_73 (AU2), Teacup\_69 (AU1), Tenno\_68 (AU1), Tipton\_73 (AU2), Tokki\_77 (AU2), Truckee\_70 (AU5), Trustiboi\_67 (AU1), Zippen\_73 (AU7),

Start 7:

- Found in 19 of 61 ( 31.1% ) of genes in pham
- Manual Annotations of this start: 15 of 53
- Called 84.2% of time when present
- Phage (with cluster) where this start called: Boog\_69 (AW), BronxBay\_70 (AW), Djungelskog\_69 (AW), DoctorPepper\_69 (AW), Egad\_70 (AW), Jeremy4pt0\_69 (AW), Linda\_70 (AW), Michelle\_70 (AW), MrAaronian\_70 (AW), Onestar\_69 (AW),

ProfFrink\_70 (AW), Salk\_70 (AW), Shiba\_69 (AW), Sloopyjoe\_70 (AW), StarLord\_70 (AW), Stayer\_70 (AW),

Start 9:

- Found in 18 of 61 ( 29.5% ) of genes in pham
- Manual Annotations of this start: 3 of 53
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Anandi\_75 (AU4), Ingrid\_74 (AU3), Loretta\_71 (AU3),

Start 11:

- Found in 4 of 61 ( 6.6% ) of genes in pham
- Manual Annotations of this start: 3 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Natasha\_73 (AW), RustyBoy\_74 (AW), Sporto\_69 (AW), Sprinkle\_70 (AW),

Start 13:

- Found in 1 of 61 ( 1.6% ) of genes in pham
- Manual Annotations of this start: 1 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Powelldog\_73 (AW),

Start 16:

- Found in 38 of 61 ( 62.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 7.9% of time when present
- Phage (with cluster) where this start called: HerbBucket\_68 (AW), Raunak\_71 (AW), Spain\_70 (AW),

### **Summary by clusters:**

There are 7 clusters represented in this pham: AW, AU1, AU3, AU2, AU5, AU4, AU7,

Info for manual annotations of cluster AU1:

- Start number 3 was manually annotated 3 times for cluster AU1.
- Start number 6 was manually annotated 14 times for cluster AU1.

Info for manual annotations of cluster AU2:

- Start number 3 was manually annotated 1 time for cluster AU2.
- Start number 6 was manually annotated 7 times for cluster AU2.

Info for manual annotations of cluster AU3:

- Start number 9 was manually annotated 2 times for cluster AU3.

Info for manual annotations of cluster AU4:

- Start number 5 was manually annotated 2 times for cluster AU4.
- Start number 9 was manually annotated 1 time for cluster AU4.

Info for manual annotations of cluster AU5:

- Start number 6 was manually annotated 2 times for cluster AU5.

Info for manual annotations of cluster AU7:

- Start number 6 was manually annotated 2 times for cluster AU7.

Info for manual annotations of cluster AW:

- Start number 7 was manually annotated 15 times for cluster AW.
- Start number 11 was manually annotated 3 times for cluster AW.
- Start number 13 was manually annotated 1 time for cluster AW.

### **Gene Information:**

Gene: Acai\_68 Start: 46338, Stop: 46538, Start Num: 6

Candidate Starts for Acai\_68:

(Start: 6 @46338 has 25 MA's), (21, 46488),

Gene: Anandi\_75 Start: 47127, Stop: 47306, Start Num: 9

Candidate Starts for Anandi\_75:

(8, 47124), (Start: 9 @47127 has 3 MA's), (16, 47181),

Gene: AreFloNak\_72 Start: 46382, Stop: 46585, Start Num: 6

Candidate Starts for AreFloNak\_72:

(Start: 3 @46343 has 4 MA's), (Start: 6 @46382 has 25 MA's), (15, 46451), (16, 46460), (21, 46535),

Gene: Boog\_69 Start: 44324, Stop: 44518, Start Num: 7

Candidate Starts for Boog\_69:

(Start: 7 @44324 has 15 MA's), (14, 44366), (16, 44390), (17, 44399),

Gene: Bouchard\_72 Start: 46989, Stop: 47174, Start Num: 6

Candidate Starts for Bouchard\_72:

(Start: 6 @46989 has 25 MA's), (Start: 9 @47001 has 3 MA's),

Gene: BronxBay\_70 Start: 44596, Stop: 44790, Start Num: 7

Candidate Starts for BronxBay\_70:

(Start: 7 @44596 has 15 MA's), (14, 44638), (16, 44662), (17, 44671),

Gene: Brunswick\_69 Start: 46217, Stop: 46417, Start Num: 6

Candidate Starts for Brunswick\_69:

(Start: 6 @46217 has 25 MA's), (21, 46367),

Gene: CapnMurica\_65 Start: 46955, Stop: 47140, Start Num: 6

Candidate Starts for CapnMurica\_65:

(Start: 6 @46955 has 25 MA's), (15, 47006), (21, 47090),

Gene: CastorTray\_71 Start: 46964, Stop: 47170, Start Num: 6

Candidate Starts for CastorTray\_71:

(Start: 3 @46925 has 4 MA's), (Start: 6 @46964 has 25 MA's), (15, 47033), (16, 47042), (21, 47117),

Gene: Caterpillar\_67 Start: 45815, Stop: 46006, Start Num: 5

Candidate Starts for Caterpillar\_67:

(Start: 5 @45815 has 2 MA's), (Start: 9 @45827 has 3 MA's), (19, 45917),

Gene: Chlochlo\_72 Start: 46516, Stop: 46701, Start Num: 6

Candidate Starts for Chlochlo\_72:

(Start: 6 @46516 has 25 MA's), (Start: 9 @46528 has 3 MA's),

Gene: DevitoJr\_67 Start: 46345, Stop: 46548, Start Num: 6

Candidate Starts for DevitoJr\_67:

(Start: 3 @46306 has 4 MA's), (4, 46312), (Start: 6 @46345 has 25 MA's), (15, 46414), (16, 46423), (21, 46498),

Gene: Djungelskog\_69 Start: 44598, Stop: 44792, Start Num: 7

Candidate Starts for Djungelskog\_69:

(Start: 7 @44598 has 15 MA's), (14, 44640), (16, 44664), (17, 44673),

Gene: DoctorPepper\_69 Start: 44300, Stop: 44494, Start Num: 7

Candidate Starts for DoctorPepper\_69:

(Start: 7 @44300 has 15 MA's), (14, 44342), (16, 44366), (17, 44375),

Gene: Egad\_70 Start: 44574, Stop: 44768, Start Num: 7

Candidate Starts for Egad\_70:

(Start: 7 @44574 has 15 MA's), (14, 44616), (16, 44640), (17, 44649),

Gene: ElephantMan\_68 Start: 46847, Stop: 47047, Start Num: 6

Candidate Starts for ElephantMan\_68:

(Start: 6 @46847 has 25 MA's), (21, 46997),

Gene: Giantsbane\_71 Start: 45514, Stop: 45702, Start Num: 6

Candidate Starts for Giantsbane\_71:

(Start: 6 @45514 has 25 MA's), (Start: 9 @45526 has 3 MA's), (15, 45565), (21, 45649),

Gene: Gordon\_65 Start: 46838, Stop: 47038, Start Num: 6

Candidate Starts for Gordon\_65:

(Start: 6 @46838 has 25 MA's), (15, 46904), (21, 46988),

Gene: Hemma\_67 Start: 44264, Stop: 44455, Start Num: 6

Candidate Starts for Hemma\_67:

(2, 44219), (Start: 6 @44264 has 25 MA's), (Start: 9 @44273 has 3 MA's), (18, 44360),

Gene: HerbBucket\_68 Start: 44372, Stop: 44500, Start Num: 16

Candidate Starts for HerbBucket\_68:

(Start: 7 @44306 has 15 MA's), (14, 44348), (16, 44372), (17, 44381),

Gene: Ingrid\_74 Start: 46820, Stop: 46999, Start Num: 9

Candidate Starts for Ingrid\_74:

(Start: 6 @46811 has 25 MA's), (Start: 9 @46820 has 3 MA's),

Gene: Inked\_73 Start: 47436, Stop: 47624, Start Num: 6

Candidate Starts for Inked\_73:

(Start: 3 @47397 has 4 MA's), (Start: 6 @47436 has 25 MA's), (Start: 9 @47445 has 3 MA's), (18, 47532),

Gene: Jeremy4pt0\_69 Start: 44295, Stop: 44489, Start Num: 7

Candidate Starts for Jeremy4pt0\_69:

(Start: 7 @44295 has 15 MA's), (14, 44337), (16, 44361), (17, 44370),

Gene: LilHuddy\_72 Start: 46642, Stop: 46827, Start Num: 6

Candidate Starts for LilHuddy\_72:

(1, 46465), (Start: 3 @46603 has 4 MA's), (Start: 6 @46642 has 25 MA's), (Start: 9 @46654 has 3 MA's), (15, 46690), (16, 46699), (21, 46774),

Gene: Linda\_70 Start: 44593, Stop: 44787, Start Num: 7

Candidate Starts for Linda\_70:

(Start: 7 @44593 has 15 MA's), (14, 44635), (16, 44659), (17, 44668),

Gene: Loretta\_71 Start: 46820, Stop: 46999, Start Num: 9

Candidate Starts for Loretta\_71:

(Start: 6 @46811 has 25 MA's), (Start: 9 @46820 has 3 MA's),

Gene: LucySwiss\_68 Start: 45956, Stop: 46156, Start Num: 6

Candidate Starts for LucySwiss\_68:

(Start: 6 @45956 has 25 MA's),

Gene: Makai\_72 Start: 46941, Stop: 47126, Start Num: 6

Candidate Starts for Makai\_72:

(Start: 6 @46941 has 25 MA's), (Start: 9 @46950 has 3 MA's), (16, 46998), (21, 47073),

Gene: MediumFry\_68 Start: 46153, Stop: 46344, Start Num: 5

Candidate Starts for MediumFry\_68:

(Start: 5 @46153 has 2 MA's), (Start: 9 @46165 has 3 MA's), (19, 46255),

Gene: Michelle\_70 Start: 44595, Stop: 44789, Start Num: 7

Candidate Starts for Michelle\_70:

(Start: 7 @44595 has 15 MA's), (14, 44637), (16, 44661), (17, 44670),

Gene: MiniBagel\_67 Start: 46944, Stop: 47144, Start Num: 6

Candidate Starts for MiniBagel\_67:

(Start: 6 @46944 has 25 MA's), (15, 47010), (21, 47094),

Gene: MrAaronian\_70 Start: 44595, Stop: 44789, Start Num: 7

Candidate Starts for MrAaronian\_70:

(Start: 7 @44595 has 15 MA's), (14, 44637), (16, 44661), (17, 44670),

Gene: Natasha\_73 Start: 44917, Stop: 45096, Start Num: 11

Candidate Starts for Natasha\_73:

(Start: 11 @44917 has 3 MA's), (14, 44938), (16, 44968), (17, 44977), (20, 45028),

Gene: Nightmare\_69 Start: 47250, Stop: 47453, Start Num: 6

Candidate Starts for Nightmare\_69:

(Start: 3 @47211 has 4 MA's), (Start: 6 @47250 has 25 MA's), (15, 47319), (16, 47328), (21, 47403),

Gene: Niktson\_68 Start: 46847, Stop: 47047, Start Num: 6

Candidate Starts for Niktson\_68:

(Start: 6 @46847 has 25 MA's), (21, 46997),

Gene: Nivinsha\_71 Start: 46382, Stop: 46585, Start Num: 6

Candidate Starts for Nivinsha\_71:

(Start: 3 @46343 has 4 MA's), (Start: 6 @46382 has 25 MA's), (15, 46451), (16, 46460), (21, 46535),

Gene: Onestar\_69 Start: 44736, Stop: 44930, Start Num: 7

Candidate Starts for Onestar\_69:

(Start: 7 @44736 has 15 MA's), (12, 44757), (15, 44793), (16, 44802), (17, 44811), (18, 44835), (19, 44838),

Gene: Phaby\_73 Start: 47173, Stop: 47358, Start Num: 6

Candidate Starts for Phaby\_73:

(Start: 6 @47173 has 25 MA's), (Start: 9 @47185 has 3 MA's),

Gene: Powelldog\_73 Start: 45329, Stop: 45493, Start Num: 13

Candidate Starts for Powelldog\_73:

(Start: 13 @45329 has 1 MA's), (16, 45365), (17, 45374), (18, 45398), (20, 45425),

Gene: ProfFrink\_70 Start: 44573, Stop: 44767, Start Num: 7

Candidate Starts for ProfFrink\_70:

(Start: 7 @44573 has 15 MA's), (14, 44615), (16, 44639), (17, 44648),

Gene: Raunak\_71 Start: 44301, Stop: 44429, Start Num: 16

Candidate Starts for Raunak\_71:

(Start: 7 @44235 has 15 MA's), (14, 44277), (16, 44301), (17, 44310),

Gene: RustyBoy\_74 Start: 45116, Stop: 45295, Start Num: 11

Candidate Starts for RustyBoy\_74:

(Start: 11 @45116 has 3 MA's), (14, 45137), (16, 45167), (17, 45176), (20, 45227),

Gene: Salk\_70 Start: 44593, Stop: 44787, Start Num: 7

Candidate Starts for Salk\_70:

(Start: 7 @44593 has 15 MA's), (14, 44635), (16, 44659), (17, 44668),

Gene: ScienceWizSam\_69 Start: 46505, Stop: 46750, Start Num: 3

Candidate Starts for ScienceWizSam\_69:

(Start: 3 @46505 has 4 MA's), (Start: 6 @46544 has 25 MA's), (15, 46613), (16, 46622), (21, 46697),

Gene: Shepard\_73 Start: 46456, Stop: 46680, Start Num: 3

Candidate Starts for Shepard\_73:

(1, 46318), (Start: 3 @46456 has 4 MA's), (Start: 6 @46495 has 25 MA's), (Start: 9 @46507 has 3 MA's), (15, 46543), (16, 46552), (21, 46627),

Gene: Shiba\_69 Start: 44251, Stop: 44445, Start Num: 7

Candidate Starts for Shiba\_69:

(Start: 7 @44251 has 15 MA's), (14, 44293), (16, 44317), (17, 44326),

Gene: Sloopyjoe\_70 Start: 44597, Stop: 44791, Start Num: 7

Candidate Starts for Sloopyjoe\_70:

(Start: 7 @44597 has 15 MA's), (14, 44639), (16, 44663), (17, 44672),

Gene: Spain\_70 Start: 44661, Stop: 44789, Start Num: 16

Candidate Starts for Spain\_70:

(Start: 7 @44595 has 15 MA's), (14, 44637), (16, 44661), (17, 44670),

Gene: Sporto\_69 Start: 45691, Stop: 45870, Start Num: 11

Candidate Starts for Sporto\_69:

(10, 45688), (Start: 11 @45691 has 3 MA's), (14, 45712), (16, 45742), (17, 45751),



Gene: Sprinkle\_70 Start: 45048, Stop: 45230, Start Num: 11

Candidate Starts for Sprinkle\_70:

(Start: 11 @45048 has 3 MA's), (14, 45069), (16, 45099), (17, 45108), (21, 45174),

Gene: StarLord\_70 Start: 44590, Stop: 44784, Start Num: 7

Candidate Starts for StarLord\_70:

(Start: 7 @44590 has 15 MA's), (14, 44632), (16, 44656), (17, 44665),

Gene: Stayer\_70 Start: 44593, Stop: 44787, Start Num: 7

Candidate Starts for Stayer\_70:

(Start: 7 @44593 has 15 MA's), (14, 44635), (16, 44659), (17, 44668),

Gene: Synopsis\_65 Start: 46273, Stop: 46515, Start Num: 3

Candidate Starts for Synopsis\_65:

(Start: 3 @46273 has 4 MA's), (Start: 6 @46312 has 25 MA's), (15, 46381), (16, 46390), (21, 46465),

Gene: Tatanka\_62 Start: 46412, Stop: 46657, Start Num: 3

Candidate Starts for Tatanka\_62:

(Start: 3 @46412 has 4 MA's), (4, 46418), (Start: 6 @46451 has 25 MA's), (15, 46520), (16, 46529), (21, 46604),

Gene: Teacup\_69 Start: 46890, Stop: 47090, Start Num: 6

Candidate Starts for Teacup\_69:

(Start: 6 @46890 has 25 MA's),

Gene: Tenno\_68 Start: 46992, Stop: 47177, Start Num: 6

Candidate Starts for Tenno\_68:

(Start: 6 @46992 has 25 MA's), (15, 47043), (21, 47127),

Gene: Tipton\_73 Start: 47010, Stop: 47195, Start Num: 6

Candidate Starts for Tipton\_73:

(Start: 6 @47010 has 25 MA's), (Start: 9 @47022 has 3 MA's),

Gene: Tokki\_77 Start: 47041, Stop: 47226, Start Num: 6

Candidate Starts for Tokki\_77:

(Start: 6 @47041 has 25 MA's), (Start: 9 @47053 has 3 MA's),

Gene: Truckee\_70 Start: 46719, Stop: 46904, Start Num: 6

Candidate Starts for Truckee\_70:

(Start: 6 @46719 has 25 MA's), (Start: 9 @46728 has 3 MA's), (16, 46776),

Gene: Trustiboi\_67 Start: 46567, Stop: 46773, Start Num: 6

Candidate Starts for Trustiboi\_67:

(Start: 3 @46528 has 4 MA's), (Start: 6 @46567 has 25 MA's), (15, 46636), (16, 46645),

Gene: Zippen\_73 Start: 47301, Stop: 47489, Start Num: 6

Candidate Starts for Zippen\_73:

(Start: 3 @47262 has 4 MA's), (Start: 6 @47301 has 25 MA's), (Start: 9 @47310 has 3 MA's), (18, 47397),