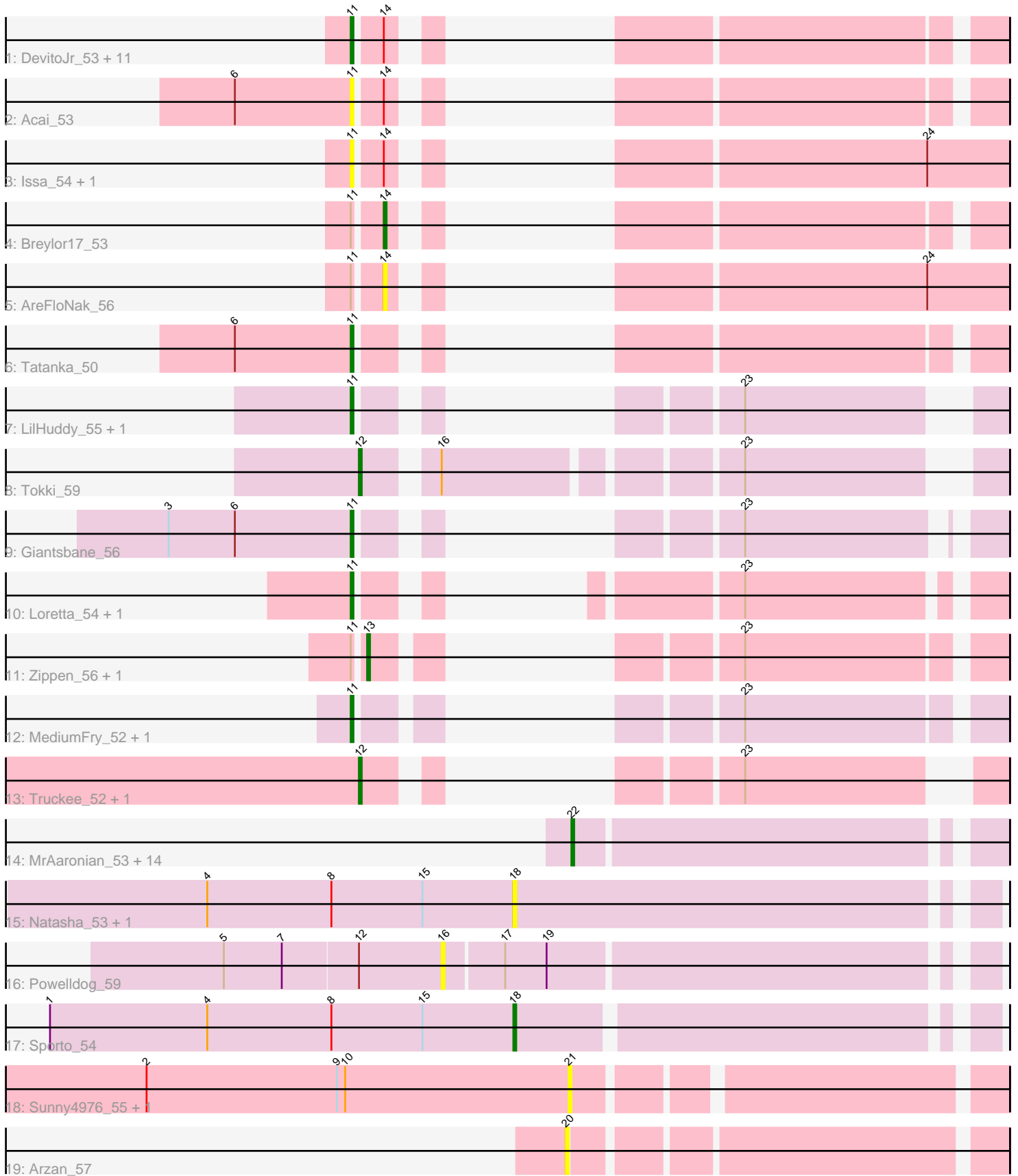


Pham 202997



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 202997 Report

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

Pham number 202997 has 52 members, 14 are drafts.

Phages represented in each track:

- Track 1 : DevitoJr\_53, Trustiboi\_53, LucySwiss\_54, Nightmare\_55, Synepsis\_52, Niktson\_53, ScienceWizSam\_54, ElephantMan\_53, Brunswick\_54, CastorTray\_56, Tenno\_54, Darby\_52
- Track 2 : Acai\_53
- Track 3 : Issa\_54, Nivinsha\_55
- Track 4 : Breylor17\_53
- Track 5 : AreFloNak\_56
- Track 6 : Tatanka\_50
- Track 7 : LilHuddy\_55, Shepard\_56
- Track 8 : Tokki\_59
- Track 9 : Giantsbane\_56
- Track 10 : Loretta\_54, Ingrid\_57
- Track 11 : Zippen\_56, Inked\_58
- Track 12 : MediumFry\_52, Caterpillar\_51
- Track 13 : Truckee\_52, Makai\_54
- Track 14 : MrAaronian\_53, DoctorPepper\_52, Djungelskog\_52, Salk\_53, Egad\_53, Stayer\_53, Sloopyjoe\_53, Raunak\_56, Linda\_53, Boog\_54, BronxBay\_53, StarLord\_53, Shiba\_52, Michelle\_53, ProfFrink\_53
- Track 15 : Natasha\_53, RustyBoy\_53
- Track 16 : Powelldog\_59
- Track 17 : Sporto\_54
- Track 18 : Sunny4976\_55, Jazzy4900\_56
- Track 19 : Arzan\_57

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

The start number called the most often in the published annotations is 11, it was called in 19 of the 38 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acai\_53, Brunswick\_54, CastorTray\_56, Caterpillar\_51, Darby\_52, DevitoJr\_53, ElephantMan\_53, Giantsbane\_56, Ingrid\_57, Issa\_54, LilHuddy\_55, Loretta\_54, LucySwiss\_54, MediumFry\_52, Nightmare\_55, Niktson\_53, Nivinsha\_55, ScienceWizSam\_54, Shepard\_56, Synepsis\_52, Tatanka\_50, Tenno\_54,

Trustiboi\_53,

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

- AreFloNak\_56, Breylor17\_53, Inked\_58, Zippen\_56,

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

- Arzan\_57, Boog\_54, BronxBay\_53, Djungelskog\_52, DoctorPepper\_52, Egad\_53, Jazzy4900\_56, Linda\_53, Makai\_54, Michelle\_53, MrAaronian\_53, Natasha\_53, Powellldog\_59, ProfFrink\_53, Raunak\_56, RustyBoy\_53, Salk\_53, Shiba\_52, Sloopyjoe\_53, Sporto\_54, StarLord\_53, Stayer\_53, Sunny4976\_55, Tokki\_59, Truckee\_52,

### Summary by start number:

Start 11:

- Found in 27 of 52 ( 51.9% ) of genes in pham
- Manual Annotations of this start: 19 of 38
- Called 85.2% of time when present
- Phage (with cluster) where this start called: Acai\_53 (AU1), Brunswick\_54 (AU1), CastorTray\_56 (AU1), Caterpillar\_51 (AU4), Darby\_52 (AU1), DevitoJr\_53 (AU1), ElephantMan\_53 (AU1), Giantsbane\_56 (AU2), Ingrid\_57 (AU3), Issa\_54 (AU1), LilHuddy\_55 (AU2), Loretta\_54 (AU3), LucySwiss\_54 (AU1), MediumFry\_52 (AU4), Nightmare\_55 (AU1), Niktson\_53 (AU1), Nivinsha\_55 (AU1), ScienceWizSam\_54 (AU1), Shepard\_56 (AU2), Synopsis\_52 (AU1), Tatanka\_50 (AU1), Tenno\_54 (AU1), Trustiboi\_53 (AU1),

Start 12:

- Found in 4 of 52 ( 7.7% ) of genes in pham
- Manual Annotations of this start: 3 of 38
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Makai\_54 (AU5), Tokki\_59 (AU2), Truckee\_52 (AU5),

Start 13:

- Found in 2 of 52 ( 3.8% ) 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: Inked\_58 (AU), Zippen\_56 (AU3),

Start 14:

- Found in 17 of 52 ( 32.7% ) of genes in pham
- Manual Annotations of this start: 1 of 38
- Called 11.8% of time when present
- Phage (with cluster) where this start called: AreFloNak\_56 (AU1), Breylor17\_53 (AU1),

Start 16:

- Found in 2 of 52 ( 3.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Powellldog\_59 (AW),

Start 18:

- Found in 3 of 52 ( 5.8% ) 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: Natasha\_53 (AW), RustyBoy\_53 (AW), Sporto\_54 (AW),

Start 20:

- Found in 1 of 52 ( 1.9% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arzan\_57 (FI),

Start 21:

- Found in 2 of 52 ( 3.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jazzy4900\_56 (FI), Sunny4976\_55 (FI),

Start 22:

- Found in 15 of 52 ( 28.8% ) of genes in pham
- Manual Annotations of this start: 13 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Boog\_54 (AW), BronxBay\_53 (AW), Djungelskog\_52 (AW), DoctorPepper\_52 (AW), Egad\_53 (AW), Linda\_53 (AW), Michelle\_53 (AW), MrAaronian\_53 (AW), ProfFrink\_53 (AW), Raunak\_56 (AW), Salk\_53 (AW), Shiba\_52 (AW), Sloopyjoe\_53 (AW), StarLord\_53 (AW), Stayer\_53 (AW),

### **Summary by clusters:**

There are 8 clusters represented in this pham: AU1, AU3, AU2, AU5, AU4, AW, FI, AU,

Info for manual annotations of cluster AU:

- Start number 13 was manually annotated 1 time for cluster AU.

Info for manual annotations of cluster AU1:

- Start number 11 was manually annotated 12 times for cluster AU1.
- Start number 14 was manually annotated 1 time for cluster AU1.

Info for manual annotations of cluster AU2:

- Start number 11 was manually annotated 3 times for cluster AU2.
- Start number 12 was manually annotated 1 time for cluster AU2.

Info for manual annotations of cluster AU3:

- Start number 11 was manually annotated 2 times for cluster AU3.

Info for manual annotations of cluster AU4:

- Start number 11 was manually annotated 2 times for cluster AU4.

Info for manual annotations of cluster AU5:

- Start number 12 was manually annotated 2 times for cluster AU5.

Info for manual annotations of cluster AW:

- Start number 18 was manually annotated 1 time for cluster AW.
- Start number 22 was manually annotated 13 times for cluster AW.

**Gene Information:**

Gene: Acai\_53 Start: 37148, Stop: 37300, Start Num: 11

Candidate Starts for Acai\_53:

(6, 37106), (Start: 11 @37148 has 19 MA's), (Start: 14 @37157 has 1 MA's),

Gene: AreFloNak\_56 Start: 37115, Stop: 37267, Start Num: 14

Candidate Starts for AreFloNak\_56:

(Start: 11 @37106 has 19 MA's), (Start: 14 @37115 has 1 MA's), (24, 37238),

Gene: Arzan\_57 Start: 36656, Stop: 36799, Start Num: 20

Candidate Starts for Arzan\_57:

(20, 36656),

Gene: Boog\_54 Start: 34544, Stop: 34687, Start Num: 22

Candidate Starts for Boog\_54:

(Start: 22 @34544 has 13 MA's),

Gene: Breylor17\_53 Start: 37706, Stop: 37849, Start Num: 14

Candidate Starts for Breylor17\_53:

(Start: 11 @37697 has 19 MA's), (Start: 14 @37706 has 1 MA's),

Gene: BronxBay\_53 Start: 34842, Stop: 34985, Start Num: 22

Candidate Starts for BronxBay\_53:

(Start: 22 @34842 has 13 MA's),

Gene: Brunswick\_54 Start: 36988, Stop: 37140, Start Num: 11

Candidate Starts for Brunswick\_54:

(Start: 11 @36988 has 19 MA's), (Start: 14 @36997 has 1 MA's),

Gene: CastorTray\_56 Start: 37761, Stop: 37913, Start Num: 11

Candidate Starts for CastorTray\_56:

(Start: 11 @37761 has 19 MA's), (Start: 14 @37770 has 1 MA's),

Gene: Caterpillar\_51 Start: 36250, Stop: 36402, Start Num: 11

Candidate Starts for Caterpillar\_51:

(Start: 11 @36250 has 19 MA's), (23, 36316),

Gene: Darby\_52 Start: 36935, Stop: 37087, Start Num: 11

Candidate Starts for Darby\_52:

(Start: 11 @36935 has 19 MA's), (Start: 14 @36944 has 1 MA's),

Gene: DevitoJr\_53 Start: 37327, Stop: 37479, Start Num: 11

Candidate Starts for DevitoJr\_53:

(Start: 11 @37327 has 19 MA's), (Start: 14 @37336 has 1 MA's),

Gene: Djungelskog\_52 Start: 34841, Stop: 34984, Start Num: 22  
Candidate Starts for Djungelskog\_52:  
(Start: 22 @34841 has 13 MA's),

Gene: DoctorPepper\_52 Start: 34546, Stop: 34689, Start Num: 22  
Candidate Starts for DoctorPepper\_52:  
(Start: 22 @34546 has 13 MA's),

Gene: Egad\_53 Start: 34843, Stop: 34986, Start Num: 22  
Candidate Starts for Egad\_53:  
(Start: 22 @34843 has 13 MA's),

Gene: ElephantMan\_53 Start: 37611, Stop: 37763, Start Num: 11  
Candidate Starts for ElephantMan\_53:  
(Start: 11 @37611 has 19 MA's), (Start: 14 @37620 has 1 MA's),

Gene: Giantsbane\_56 Start: 36218, Stop: 36361, Start Num: 11  
Candidate Starts for Giantsbane\_56:  
(3, 36152), (6, 36176), (Start: 11 @36218 has 19 MA's), (23, 36281),

Gene: Ingrid\_57 Start: 37031, Stop: 37186, Start Num: 11  
Candidate Starts for Ingrid\_57:  
(Start: 11 @37031 has 19 MA's), (23, 37103),

Gene: Inked\_58 Start: 38160, Stop: 38309, Start Num: 13  
Candidate Starts for Inked\_58:  
(Start: 11 @38157 has 19 MA's), (Start: 13 @38160 has 1 MA's), (23, 38223),

Gene: Issa\_54 Start: 36978, Stop: 37139, Start Num: 11  
Candidate Starts for Issa\_54:  
(Start: 11 @36978 has 19 MA's), (Start: 14 @36987 has 1 MA's), (24, 37110),

Gene: Jazzy4900\_56 Start: 37435, Stop: 37575, Start Num: 21  
Candidate Starts for Jazzy4900\_56:  
(2, 37282), (9, 37351), (10, 37354), (21, 37435),

Gene: LilHuddy\_55 Start: 37156, Stop: 37296, Start Num: 11  
Candidate Starts for LilHuddy\_55:  
(Start: 11 @37156 has 19 MA's), (23, 37219),

Gene: Linda\_53 Start: 34839, Stop: 34982, Start Num: 22  
Candidate Starts for Linda\_53:  
(Start: 22 @34839 has 13 MA's),

Gene: Loretta\_54 Start: 37031, Stop: 37186, Start Num: 11  
Candidate Starts for Loretta\_54:  
(Start: 11 @37031 has 19 MA's), (23, 37103),

Gene: LucySwiss\_54 Start: 36780, Stop: 36932, Start Num: 11  
Candidate Starts for LucySwiss\_54:  
(Start: 11 @36780 has 19 MA's), (Start: 14 @36789 has 1 MA's),

Gene: Makai\_54 Start: 37254, Stop: 37394, Start Num: 12

Candidate Starts for Makai\_54:  
(Start: 12 @37254 has 3 MA's), (23, 37317),

Gene: MediumFry\_52 Start: 36539, Stop: 36691, Start Num: 11  
Candidate Starts for MediumFry\_52:  
(Start: 11 @36539 has 19 MA's), (23, 36605),

Gene: Michelle\_53 Start: 34841, Stop: 34984, Start Num: 22  
Candidate Starts for Michelle\_53:  
(Start: 22 @34841 has 13 MA's),

Gene: MrAaronian\_53 Start: 34841, Stop: 34984, Start Num: 22  
Candidate Starts for MrAaronian\_53:  
(Start: 22 @34841 has 13 MA's),

Gene: Natasha\_53 Start: 34649, Stop: 34813, Start Num: 18  
Candidate Starts for Natasha\_53:  
(4, 34538), (8, 34583), (15, 34616), (Start: 18 @34649 has 1 MA's),

Gene: Nightmare\_55 Start: 38169, Stop: 38321, Start Num: 11  
Candidate Starts for Nightmare\_55:  
(Start: 11 @38169 has 19 MA's), (Start: 14 @38178 has 1 MA's),

Gene: Niktson\_53 Start: 37611, Stop: 37763, Start Num: 11  
Candidate Starts for Niktson\_53:  
(Start: 11 @37611 has 19 MA's), (Start: 14 @37620 has 1 MA's),

Gene: Nivinsha\_55 Start: 37106, Stop: 37267, Start Num: 11  
Candidate Starts for Nivinsha\_55:  
(Start: 11 @37106 has 19 MA's), (Start: 14 @37115 has 1 MA's), (24, 37238),

Gene: Powelldog\_59 Start: 36020, Stop: 36205, Start Num: 16  
Candidate Starts for Powelldog\_59:  
(5, 35942), (7, 35963), (Start: 12 @35990 has 3 MA's), (16, 36020), (17, 36041), (19, 36056),

Gene: ProfFrink\_53 Start: 34842, Stop: 34985, Start Num: 22  
Candidate Starts for ProfFrink\_53:  
(Start: 22 @34842 has 13 MA's),

Gene: Raunak\_56 Start: 34539, Stop: 34682, Start Num: 22  
Candidate Starts for Raunak\_56:  
(Start: 22 @34539 has 13 MA's),

Gene: RustyBoy\_53 Start: 34630, Stop: 34794, Start Num: 18  
Candidate Starts for RustyBoy\_53:  
(4, 34519), (8, 34564), (15, 34597), (Start: 18 @34630 has 1 MA's),

Gene: Salk\_53 Start: 34839, Stop: 34982, Start Num: 22  
Candidate Starts for Salk\_53:  
(Start: 22 @34839 has 13 MA's),

Gene: ScienceWizSam\_54 Start: 37214, Stop: 37375, Start Num: 11  
Candidate Starts for ScienceWizSam\_54:

(Start: 11 @37214 has 19 MA's), (Start: 14 @37223 has 1 MA's),

Gene: Shepard\_56 Start: 36997, Stop: 37137, Start Num: 11

Candidate Starts for Shepard\_56:

(Start: 11 @36997 has 19 MA's), (23, 37060),

Gene: Shiba\_52 Start: 34539, Stop: 34682, Start Num: 22

Candidate Starts for Shiba\_52:

(Start: 22 @34539 has 13 MA's),

Gene: Sloopyjoe\_53 Start: 34843, Stop: 34986, Start Num: 22

Candidate Starts for Sloopyjoe\_53:

(Start: 22 @34843 has 13 MA's),

Gene: Sporto\_54 Start: 36328, Stop: 36486, Start Num: 18

Candidate Starts for Sporto\_54:

(1, 36160), (4, 36217), (8, 36262), (15, 36295), (Start: 18 @36328 has 1 MA's),

Gene: StarLord\_53 Start: 34842, Stop: 34985, Start Num: 22

Candidate Starts for StarLord\_53:

(Start: 22 @34842 has 13 MA's),

Gene: Stayer\_53 Start: 34839, Stop: 34982, Start Num: 22

Candidate Starts for Stayer\_53:

(Start: 22 @34839 has 13 MA's),

Gene: Sunny4976\_55 Start: 37435, Stop: 37575, Start Num: 21

Candidate Starts for Sunny4976\_55:

(2, 37282), (9, 37351), (10, 37354), (21, 37435),

Gene: Synopsis\_52 Start: 37282, Stop: 37434, Start Num: 11

Candidate Starts for Synopsis\_52:

(Start: 11 @37282 has 19 MA's), (Start: 14 @37291 has 1 MA's),

Gene: Tatanka\_50 Start: 37414, Stop: 37566, Start Num: 11

Candidate Starts for Tatanka\_50:

(6, 37372), (Start: 11 @37414 has 19 MA's),

Gene: Tenno\_54 Start: 37945, Stop: 38097, Start Num: 11

Candidate Starts for Tenno\_54:

(Start: 11 @37945 has 19 MA's), (Start: 14 @37954 has 1 MA's),

Gene: Tokki\_59 Start: 37333, Stop: 37527, Start Num: 12

Candidate Starts for Tokki\_59:

(Start: 12 @37333 has 3 MA's), (16, 37354), (23, 37450),

Gene: Truckee\_52 Start: 37044, Stop: 37184, Start Num: 12

Candidate Starts for Truckee\_52:

(Start: 12 @37044 has 3 MA's), (23, 37107),

Gene: Trustiboi\_53 Start: 37483, Stop: 37635, Start Num: 11

Candidate Starts for Trustiboi\_53:

(Start: 11 @37483 has 19 MA's), (Start: 14 @37492 has 1 MA's),



Gene: Zippen\_56 Start: 37860, Stop: 38009, Start Num: 13

Candidate Starts for Zippen\_56:

(Start: 11 @37857 has 19 MA's), (Start: 13 @37860 has 1 MA's), (23, 37923),