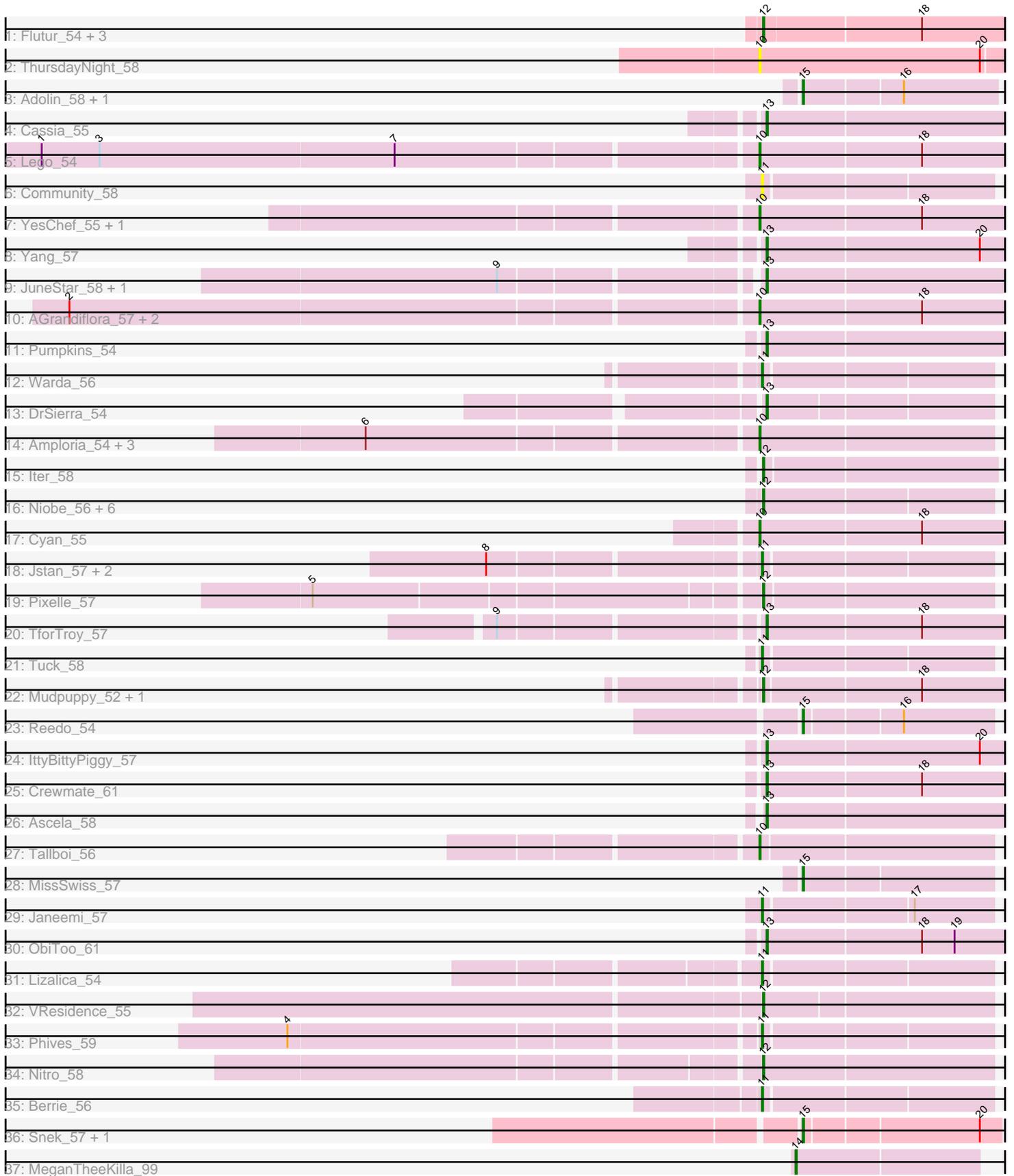


Pham 289435



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 289435 Report

This analysis was run 03/28/26 on database version 641.

Pham number 289435 has 58 members, 12 are drafts.

Phages represented in each track:

- Track 1 : Flutur\_54, Tutumahutu\_56, Kaylissa\_56, JohnDoe\_55
- Track 2 : ThursdayNight\_58
- Track 3 : Adolin\_58, DrManhattan\_58
- Track 4 : Cassia\_55
- Track 5 : Lego\_54
- Track 6 : Community\_58
- Track 7 : YesChef\_55, Powerpuff\_57
- Track 8 : Yang\_57
- Track 9 : JuneStar\_58, Schaffner\_55
- Track 10 : AGrandiflora\_57, Joemato\_55, Simpson\_57
- Track 11 : Pumpkins\_54
- Track 12 : Warda\_56
- Track 13 : DrSierra\_54
- Track 14 : Amploria\_54, Turab\_53, Adumb2043\_53, AEgle\_52
- Track 15 : lter\_58
- Track 16 : Niobe\_56, Tian\_56, Skelbel\_57, Asa16\_56, Eraser\_56, London\_56, Amyev\_57
- Track 17 : Cyan\_55
- Track 18 : Jstan\_57, Elezi\_55, Subaru\_56
- Track 19 : Pixelle\_57
- Track 20 : TforTroy\_57
- Track 21 : Tuck\_58
- Track 22 : Mudpuppy\_52, Tbone\_55
- Track 23 : Reedo\_54
- Track 24 : IttyBittyPiggy\_57
- Track 25 : Crewmate\_61
- Track 26 : Ascela\_58
- Track 27 : Tallboi\_56
- Track 28 : MissSwiss\_57
- Track 29 : Janeemi\_57
- Track 30 : ObiToo\_61
- Track 31 : Lizalica\_54
- Track 32 : VResidence\_55
- Track 33 : Phives\_59
- Track 34 : Nitro\_58
- Track 35 : Berrie\_56
- Track 36 : Snek\_57, Tweety19\_58

- Track 37 : MeganTheeKilla\_99

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

The start number called the most often in the published annotations is 12, it was called in 14 of the 46 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amyev\_57, Asa16\_56, Eraser\_56, Flutur\_54, Iter\_58, JohnDoe\_55, Kaylissa\_56, London\_56, Mudpuppy\_52, Niobe\_56, Nitro\_58, Pixelle\_57, Skelbel\_57, Tbone\_55, Tian\_56, Tutumahutu\_56, VResidence\_55,

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

- 

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

- AEgle\_52, AGrandiflora\_57, Adolin\_58, Adumb2043\_53, Amploria\_54, Ascela\_58, Berrie\_56, Cassia\_55, Community\_58, Crewmate\_61, Cyan\_55, DrManhattan\_58, DrSierra\_54, Elezi\_55, IttyBittyPiggy\_57, Janeemi\_57, Joemato\_55, Jstan\_57, JuneStar\_58, Lego\_54, Lizalica\_54, MeganTheeKilla\_99, MissSwiss\_57, ObiToo\_61, Phives\_59, Powerpuff\_57, Pumpkins\_54, Reedo\_54, Schaffner\_55, Simpson\_57, Snek\_57, Subaru\_56, Tallboi\_56, TforTroy\_57, ThursdayNight\_58, Tuck\_58, Turab\_53, Tweety19\_58, Warda\_56, Yang\_57, YesChef\_55,

### **Summary by start number:**

Start 10:

- Found in 13 of 58 ( 22.4% ) of genes in pham
- Manual Annotations of this start: 7 of 46
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AEgle\_52 (AZ1), AGrandiflora\_57 (AZ1), Adumb2043\_53 (AZ1), Amploria\_54 (AZ1), Cyan\_55 (AZ1), Joemato\_55 (AZ1), Lego\_54 (AZ1), Powerpuff\_57 (AZ1), Simpson\_57 (AZ1), Tallboi\_56 (AZ1), ThursdayNight\_58 (AZ), Turab\_53 (AZ1), YesChef\_55 (AZ1),

Start 11:

- Found in 10 of 58 ( 17.2% ) of genes in pham
- Manual Annotations of this start: 7 of 46
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Berrie\_56 (AZ1), Community\_58 (AZ1), Elezi\_55 (AZ1), Janeemi\_57 (AZ1), Jstan\_57 (AZ1), Lizalica\_54 (AZ1), Phives\_59 (AZ1), Subaru\_56 (AZ1), Tuck\_58 (AZ1), Warda\_56 (AZ1),

Start 12:

- Found in 17 of 58 ( 29.3% ) of genes in pham
- Manual Annotations of this start: 14 of 46
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amyev\_57 (AZ1), Asa16\_56 (AZ1), Eraser\_56 (AZ1), Flutur\_54 (AZ), Iter\_58 (AZ1), JohnDoe\_55 (AZ1), Kaylissa\_56 (AZ1), London\_56 (AZ1), Mudpuppy\_52 (AZ1), Niobe\_56 (AZ1), Nitro\_58 (AZ1),

Pixelle\_57 (AZ1), Skelbel\_57 (AZ1), Tbone\_55 (AZ1), Tian\_56 (AZ1), Tutumahutu\_56 (AZ1), VResidence\_55 (AZ1),

Start 13:

- Found in 11 of 58 ( 19.0% ) of genes in pham
- Manual Annotations of this start: 11 of 46
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ascela\_58 (AZ1), Cassia\_55 (AZ1), Crewmate\_61 (AZ1), DrSierra\_54 (AZ1), IttyBittyPiggy\_57 (AZ1), JuneStar\_58 (AZ1), ObiToo\_61 (AZ1), Pumpkins\_54 (AZ1), Schaffner\_55 (AZ1), TforTroy\_57 (AZ1), Yang\_57 (AZ1),

Start 14:

- Found in 1 of 58 ( 1.7% ) of genes in pham
- Manual Annotations of this start: 1 of 46
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MeganTheeKilla\_99 (BK1),

Start 15:

- Found in 6 of 58 ( 10.3% ) of genes in pham
- Manual Annotations of this start: 6 of 46
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adolin\_58 (AZ1), DrManhattan\_58 (AZ1), MissSwiss\_57 (AZ1), Reedo\_54 (AZ1), Snek\_57 (AZ3), Tweety19\_58 (AZ3),

### **Summary by clusters:**

There are 4 clusters represented in this pham: AZ1, AZ3, BK1, AZ,

Info for manual annotations of cluster AZ1:

- Start number 10 was manually annotated 7 times for cluster AZ1.
- Start number 11 was manually annotated 7 times for cluster AZ1.
- Start number 12 was manually annotated 14 times for cluster AZ1.
- Start number 13 was manually annotated 11 times for cluster AZ1.
- Start number 15 was manually annotated 4 times for cluster AZ1.

Info for manual annotations of cluster AZ3:

- Start number 15 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster BK1:

- Start number 14 was manually annotated 1 time for cluster BK1.

### **Gene Information:**

Gene: AEgle\_52 Start: 37591, Stop: 37782, Start Num: 10

Candidate Starts for AEgle\_52:

(6, 37285), (Start: 10 @37591 has 7 MA's),

Gene: AGrandiflora\_57 Start: 38760, Stop: 38960, Start Num: 10

Candidate Starts for AGrandiflora\_57:

(2, 38211), (Start: 10 @38760 has 7 MA's), (18, 38892),

Gene: Adolin\_58 Start: 37478, Stop: 37633, Start Num: 15  
Candidate Starts for Adolin\_58:  
(Start: 15 @37478 has 6 MA's), (16, 37556),

Gene: Adumb2043\_53 Start: 37614, Stop: 37805, Start Num: 10  
Candidate Starts for Adumb2043\_53:  
(6, 37308), (Start: 10 @37614 has 7 MA's),

Gene: Amploria\_54 Start: 37795, Stop: 37986, Start Num: 10  
Candidate Starts for Amploria\_54:  
(6, 37489), (Start: 10 @37795 has 7 MA's),

Gene: Amyev\_57 Start: 40846, Stop: 41031, Start Num: 12  
Candidate Starts for Amyev\_57:  
(Start: 12 @40846 has 14 MA's),

Gene: Asa16\_56 Start: 39543, Stop: 39728, Start Num: 12  
Candidate Starts for Asa16\_56:  
(Start: 12 @39543 has 14 MA's),

Gene: Ascela\_58 Start: 39002, Stop: 39196, Start Num: 13  
Candidate Starts for Ascela\_58:  
(Start: 13 @39002 has 11 MA's),

Gene: Berrie\_56 Start: 38817, Stop: 38999, Start Num: 11  
Candidate Starts for Berrie\_56:  
(Start: 11 @38817 has 7 MA's),

Gene: Cassia\_55 Start: 38504, Stop: 38698, Start Num: 13  
Candidate Starts for Cassia\_55:  
(Start: 13 @38504 has 11 MA's),

Gene: Community\_58 Start: 40395, Stop: 40577, Start Num: 11  
Candidate Starts for Community\_58:  
(Start: 11 @40395 has 7 MA's),

Gene: Crewmate\_61 Start: 40124, Stop: 40318, Start Num: 13  
Candidate Starts for Crewmate\_61:  
(Start: 13 @40124 has 11 MA's), (18, 40250),

Gene: Cyan\_55 Start: 38301, Stop: 38501, Start Num: 10  
Candidate Starts for Cyan\_55:  
(Start: 10 @38301 has 7 MA's), (18, 38433),

Gene: DrManhattan\_58 Start: 37046, Stop: 37201, Start Num: 15  
Candidate Starts for DrManhattan\_58:  
(Start: 15 @37046 has 6 MA's), (16, 37124),

Gene: DrSierra\_54 Start: 37220, Stop: 37399, Start Num: 13  
Candidate Starts for DrSierra\_54:  
(Start: 13 @37220 has 11 MA's),

Gene: Elezi\_55 Start: 39303, Stop: 39485, Start Num: 11  
Candidate Starts for Elezi\_55:  
(8, 39096), (Start: 11 @39303 has 7 MA's),

Gene: Eraser\_56 Start: 39550, Stop: 39735, Start Num: 12  
Candidate Starts for Eraser\_56:  
(Start: 12 @39550 has 14 MA's),

Gene: Flutur\_54 Start: 38613, Stop: 38807, Start Num: 12  
Candidate Starts for Flutur\_54:  
(Start: 12 @38613 has 14 MA's), (18, 38739),

Gene: Iter\_58 Start: 38994, Stop: 39182, Start Num: 12  
Candidate Starts for Iter\_58:  
(Start: 12 @38994 has 14 MA's),

Gene: IttyBittyPiggy\_57 Start: 38132, Stop: 38326, Start Num: 13  
Candidate Starts for IttyBittyPiggy\_57:  
(Start: 13 @38132 has 11 MA's), (20, 38306),

Gene: Janeemi\_57 Start: 39872, Stop: 40054, Start Num: 11  
Candidate Starts for Janeemi\_57:  
(Start: 11 @39872 has 7 MA's), (17, 39989),

Gene: Joemato\_55 Start: 38382, Stop: 38582, Start Num: 10  
Candidate Starts for Joemato\_55:  
(2, 37833), (Start: 10 @38382 has 7 MA's), (18, 38514),

Gene: JohnDoe\_55 Start: 38368, Stop: 38562, Start Num: 12  
Candidate Starts for JohnDoe\_55:  
(Start: 12 @38368 has 14 MA's), (18, 38494),

Gene: Jstan\_57 Start: 39307, Stop: 39489, Start Num: 11  
Candidate Starts for Jstan\_57:  
(8, 39100), (Start: 11 @39307 has 7 MA's),

Gene: JuneStar\_58 Start: 41416, Stop: 41610, Start Num: 13  
Candidate Starts for JuneStar\_58:  
(9, 41221), (Start: 13 @41416 has 11 MA's),

Gene: Kaylissa\_56 Start: 38763, Stop: 38960, Start Num: 12  
Candidate Starts for Kaylissa\_56:  
(Start: 12 @38763 has 14 MA's), (18, 38892),

Gene: Lego\_54 Start: 38079, Stop: 38279, Start Num: 10  
Candidate Starts for Lego\_54:  
(1, 37506), (3, 37554), (7, 37797), (Start: 10 @38079 has 7 MA's), (18, 38211),

Gene: Lizalica\_54 Start: 37826, Stop: 38008, Start Num: 11  
Candidate Starts for Lizalica\_54:  
(Start: 11 @37826 has 7 MA's),

Gene: London\_56 Start: 39541, Stop: 39726, Start Num: 12  
Candidate Starts for London\_56:  
(Start: 12 @39541 has 14 MA's),

Gene: MeganTheeKilla\_99 Start: 66705, Stop: 66854, Start Num: 14  
Candidate Starts for MeganTheeKilla\_99:  
(Start: 14 @66705 has 1 MA's),

Gene: MissSwiss\_57 Start: 37199, Stop: 37351, Start Num: 15  
Candidate Starts for MissSwiss\_57:  
(Start: 15 @37199 has 6 MA's),

Gene: Mudpuppy\_52 Start: 38242, Stop: 38436, Start Num: 12  
Candidate Starts for Mudpuppy\_52:  
(Start: 12 @38242 has 14 MA's), (18, 38368),

Gene: Niobe\_56 Start: 39544, Stop: 39729, Start Num: 12  
Candidate Starts for Niobe\_56:  
(Start: 12 @39544 has 14 MA's),

Gene: Nitro\_58 Start: 40465, Stop: 40653, Start Num: 12  
Candidate Starts for Nitro\_58:  
(Start: 12 @40465 has 14 MA's),

Gene: ObiToo\_61 Start: 39721, Stop: 39915, Start Num: 13  
Candidate Starts for ObiToo\_61:  
(Start: 13 @39721 has 11 MA's), (18, 39847), (19, 39874),

Gene: Phives\_59 Start: 40511, Stop: 40693, Start Num: 11  
Candidate Starts for Phives\_59:  
(4, 40142), (Start: 11 @40511 has 7 MA's),

Gene: Pixelle\_57 Start: 40947, Stop: 41132, Start Num: 12  
Candidate Starts for Pixelle\_57:  
(5, 40599), (Start: 12 @40947 has 14 MA's),

Gene: Powerpuff\_57 Start: 39483, Stop: 39683, Start Num: 10  
Candidate Starts for Powerpuff\_57:  
(Start: 10 @39483 has 7 MA's), (18, 39615),

Gene: Pumpkins\_54 Start: 39127, Stop: 39321, Start Num: 13  
Candidate Starts for Pumpkins\_54:  
(Start: 13 @39127 has 11 MA's),

Gene: Reedo\_54 Start: 36267, Stop: 36416, Start Num: 15  
Candidate Starts for Reedo\_54:  
(Start: 15 @36267 has 6 MA's), (16, 36342),

Gene: Schaffner\_55 Start: 38968, Stop: 39162, Start Num: 13  
Candidate Starts for Schaffner\_55:  
(9, 38773), (Start: 13 @38968 has 11 MA's),

Gene: Simpson\_57 Start: 38386, Stop: 38586, Start Num: 10

Candidate Starts for Simpson\_57:  
(2, 37837), (Start: 10 @38386 has 7 MA's), (18, 38518),

Gene: Skelbel\_57 Start: 39544, Stop: 39729, Start Num: 12  
Candidate Starts for Skelbel\_57:  
(Start: 12 @39544 has 14 MA's),

Gene: Snek\_57 Start: 37403, Stop: 37558, Start Num: 15  
Candidate Starts for Snek\_57:  
(Start: 15 @37403 has 6 MA's), (20, 37541),

Gene: Subaru\_56 Start: 39303, Stop: 39485, Start Num: 11  
Candidate Starts for Subaru\_56:  
(8, 39096), (Start: 11 @39303 has 7 MA's),

Gene: Tallboi\_56 Start: 39686, Stop: 39874, Start Num: 10  
Candidate Starts for Tallboi\_56:  
(Start: 10 @39686 has 7 MA's),

Gene: Tbone\_55 Start: 38934, Stop: 39128, Start Num: 12  
Candidate Starts for Tbone\_55:  
(Start: 12 @38934 has 14 MA's), (18, 39060),

Gene: TforTroy\_57 Start: 39052, Stop: 39246, Start Num: 13  
Candidate Starts for TforTroy\_57:  
(9, 38854), (Start: 13 @39052 has 11 MA's), (18, 39178),

Gene: ThursdayNight\_58 Start: 39681, Stop: 39881, Start Num: 10  
Candidate Starts for ThursdayNight\_58:  
(Start: 10 @39681 has 7 MA's), (20, 39864),

Gene: Tian\_56 Start: 40845, Stop: 41030, Start Num: 12  
Candidate Starts for Tian\_56:  
(Start: 12 @40845 has 14 MA's),

Gene: Tuck\_58 Start: 40300, Stop: 40482, Start Num: 11  
Candidate Starts for Tuck\_58:  
(Start: 11 @40300 has 7 MA's),

Gene: Turab\_53 Start: 37635, Stop: 37826, Start Num: 10  
Candidate Starts for Turab\_53:  
(6, 37329), (Start: 10 @37635 has 7 MA's),

Gene: Tutumahutu\_56 Start: 38356, Stop: 38553, Start Num: 12  
Candidate Starts for Tutumahutu\_56:  
(Start: 12 @38356 has 14 MA's), (18, 38485),

Gene: Tweety19\_58 Start: 37403, Stop: 37558, Start Num: 15  
Candidate Starts for Tweety19\_58:  
(Start: 15 @37403 has 6 MA's), (20, 37541),

Gene: VResidence\_55 Start: 37492, Stop: 37677, Start Num: 12  
Candidate Starts for VResidence\_55:

(Start: 12 @37492 has 14 MA's),

Gene: Warda\_56 Start: 38671, Stop: 38853, Start Num: 11

Candidate Starts for Warda\_56:

(Start: 11 @38671 has 7 MA's),

Gene: Yang\_57 Start: 39052, Stop: 39246, Start Num: 13

Candidate Starts for Yang\_57:

(Start: 13 @39052 has 11 MA's), (20, 39226),

Gene: YesChef\_55 Start: 38342, Stop: 38542, Start Num: 10

Candidate Starts for YesChef\_55:

(Start: 10 @38342 has 7 MA's), (18, 38474),