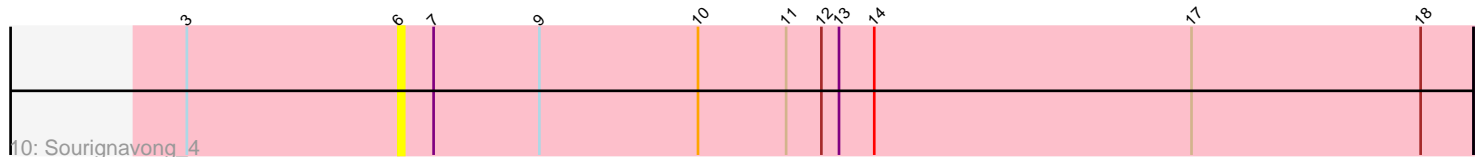
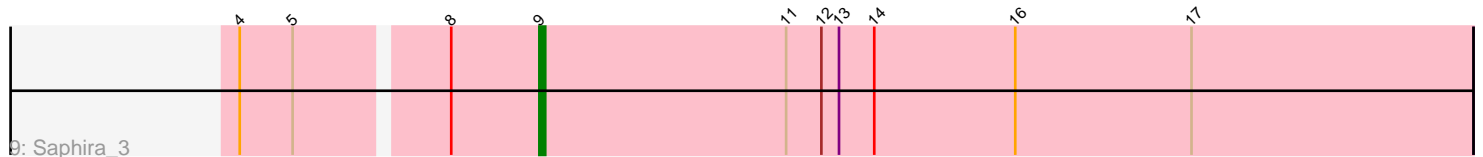
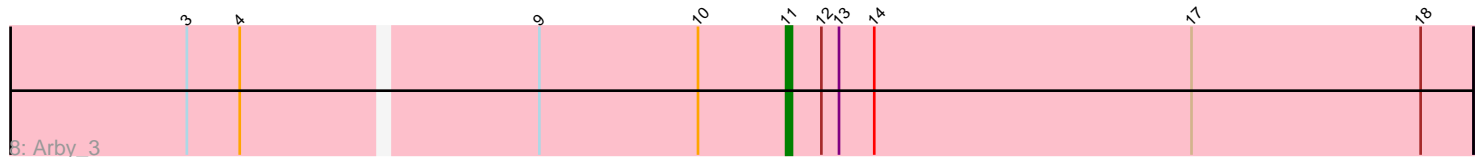
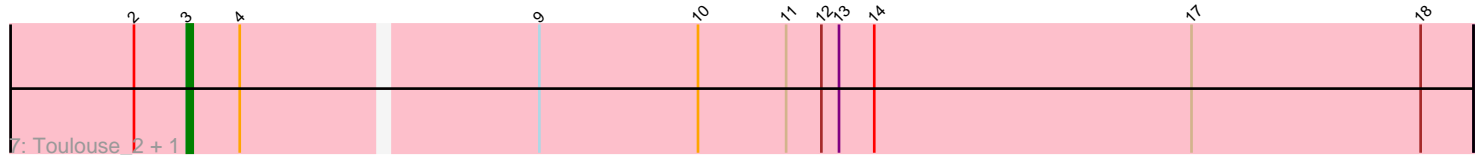
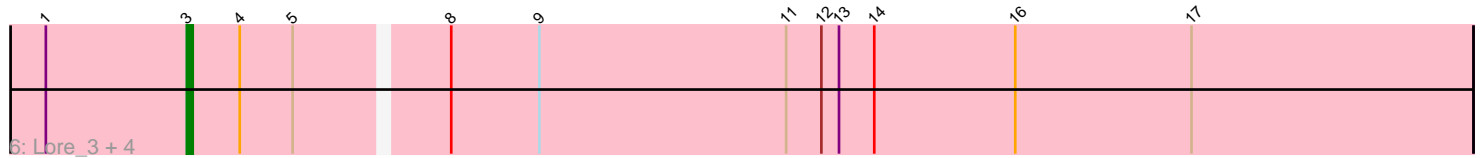
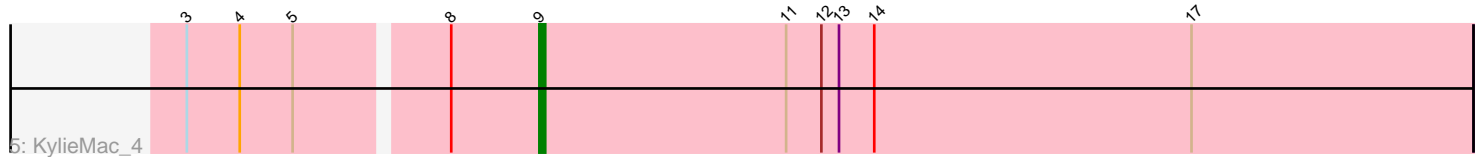
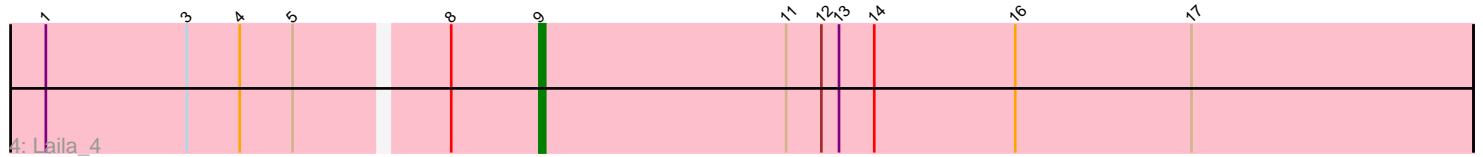
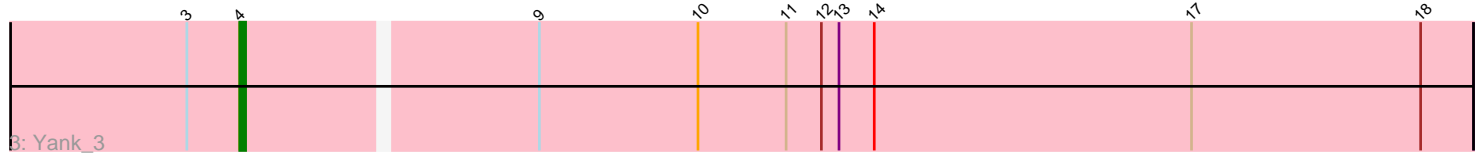
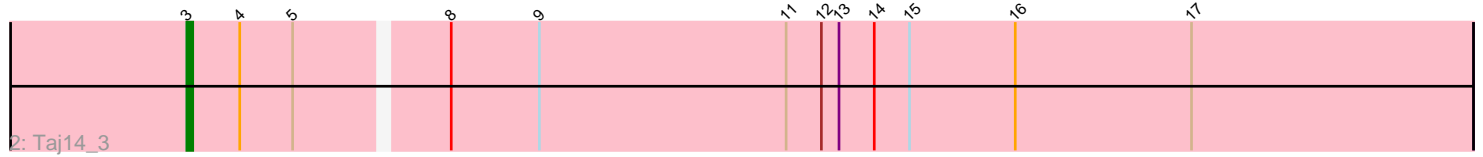
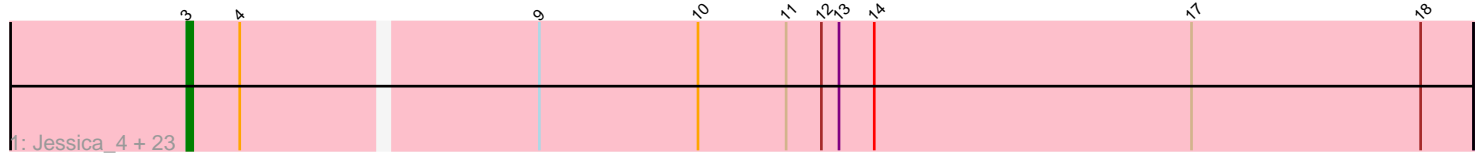


# Pham 72253



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 72253 Report

This analysis was run 04/28/24 on database version 559.

Pham number 72253 has 38 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Jessica\_4, Guntur\_3, Inspire2\_3, LouisXIV\_3, Sandman\_3, TinoCrisci\_3, Muttie\_3, Moloch\_3, CGermain\_3, TymAbreu\_3, Hunnie\_3, Courtney3\_3, Ronnie\_3, Maggie\_3, Chestnut\_3, Stratus\_3, Decurro\_3, Azathoth\_3, Mariposa\_3, Link\_3, Copper\_3, Massimo\_3, Prospero\_3, Dewayne\_3
- Track 2 : Taj14\_3
- Track 3 : Yank\_3
- Track 4 : Laila\_4
- Track 5 : KylieMac\_4
- Track 6 : Lore\_3, Blair\_3, Swenson\_3, Elkhorn\_3, StewieGriff\_3
- Track 7 : Toulouse\_2, Seume\_3
- Track 8 : Arby\_3
- Track 9 : Saphira\_3
- Track 10 : Sourignavong\_4

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

The start number called the most often in the published annotations is 3, it was called in 32 of the 37 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Azathoth\_3, Blair\_3, CGermain\_3, Chestnut\_3, Copper\_3, Courtney3\_3, Decurro\_3, Dewayne\_3, Elkhorn\_3, Guntur\_3, Hunnie\_3, Inspire2\_3, Jessica\_4, Link\_3, Lore\_3, LouisXIV\_3, Maggie\_3, Mariposa\_3, Massimo\_3, Moloch\_3, Muttie\_3, Prospero\_3, Ronnie\_3, Sandman\_3, Seume\_3, StewieGriff\_3, Stratus\_3, Swenson\_3, Taj14\_3, TinoCrisci\_3, Toulouse\_2, TymAbreu\_3,

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

- Arby\_3, KylieMac\_4, Laila\_4, Sourignavong\_4, Yank\_3,

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

- Saphira\_3,

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

#### Start 3:

- Found in 37 of 38 ( 97.4% ) of genes in pham
- Manual Annotations of this start: 32 of 37
- Called 86.5% of time when present
- Phage (with cluster) where this start called: Azathoth\_3 (AN), Blair\_3 (AN), CGermain\_3 (AN), Chestnut\_3 (AN), Copper\_3 (AN), Courtney3\_3 (AN), Decurro\_3 (AN), Dewayne\_3 (AN), Elkhorn\_3 (AN), Guntur\_3 (AN), Hunnie\_3 (AN), Inspire2\_3 (AN), Jessica\_4 (AN), Link\_3 (AN), Lore\_3 (AN), LouisXIV\_3 (AN), Maggie\_3 (AN), Mariposa\_3 (AN), Massimo\_3 (AN), Moloch\_3 (AN), Muttie\_3 (AN), Prospero\_3 (AN), Ronnie\_3 (AN), Sandman\_3 (AN), Seume\_3 (AN), StewieGriff\_3 (AN), Stratus\_3 (AN), Swenson\_3 (AN), Taj14\_3 (AN), TinoCrisci\_3 (AN), Toulouse\_2 (AN), TymAbreu\_3 (AN),

#### Start 4:

- Found in 37 of 38 ( 97.4% ) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 2.7% of time when present
- Phage (with cluster) where this start called: Yank\_3 (AN),

#### Start 6:

- Found in 1 of 38 ( 2.6% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sourignavong\_4 (AN),

#### Start 9:

- Found in 38 of 38 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 3 of 37
- Called 7.9% of time when present
- Phage (with cluster) where this start called: KylieMac\_4 (AN), Laila\_4 (AN), Saphira\_3 (AN),

#### Start 11:

- Found in 38 of 38 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 2.6% of time when present
- Phage (with cluster) where this start called: Arby\_3 (AN),

### Summary by clusters:

There is one cluster represented in this pham: AN

Info for manual annotations of cluster AN:

- Start number 3 was manually annotated 32 times for cluster AN.
- Start number 4 was manually annotated 1 time for cluster AN.
- Start number 9 was manually annotated 3 times for cluster AN.
- Start number 11 was manually annotated 1 time for cluster AN.

### Gene Information:

Gene: Arby\_3 Start: 690, Stop: 806, Start Num: 11

Candidate Starts for Arby\_3:

(Start: 3 @591 has 32 MA's), (Start: 4 @600 has 1 MA's), (Start: 9 @648 has 3 MA's), (10, 675),  
(Start: 11 @690 has 1 MA's), (12, 696), (13, 699), (14, 705), (17, 759), (18, 798),

Gene: Azathoth\_3 Start: 591, Stop: 806, Start Num: 3

Candidate Starts for Azathoth\_3:

(Start: 3 @591 has 32 MA's), (Start: 4 @600 has 1 MA's), (Start: 9 @648 has 3 MA's), (10, 675),  
(Start: 11 @690 has 1 MA's), (12, 696), (13, 699), (14, 705), (17, 759), (18, 798),

Gene: Blair\_3 Start: 591, Stop: 806, Start Num: 3

Candidate Starts for Blair\_3:

(1, 567), (Start: 3 @591 has 32 MA's), (Start: 4 @600 has 1 MA's), (5, 609), (8, 633), (Start: 9 @648  
has 3 MA's), (Start: 11 @690 has 1 MA's), (12, 696), (13, 699), (14, 705), (16, 729), (17, 759),

Gene: CGermain\_3 Start: 591, Stop: 806, Start Num: 3

Candidate Starts for CGermain\_3:

(Start: 3 @591 has 32 MA's), (Start: 4 @600 has 1 MA's), (Start: 9 @648 has 3 MA's), (10, 675),  
(Start: 11 @690 has 1 MA's), (12, 696), (13, 699), (14, 705), (17, 759), (18, 798),

Gene: Chestnut\_3 Start: 591, Stop: 806, Start Num: 3

Candidate Starts for Chestnut\_3:

(Start: 3 @591 has 32 MA's), (Start: 4 @600 has 1 MA's), (Start: 9 @648 has 3 MA's), (10, 675),  
(Start: 11 @690 has 1 MA's), (12, 696), (13, 699), (14, 705), (17, 759), (18, 798),

Gene: Copper\_3 Start: 591, Stop: 806, Start Num: 3

Candidate Starts for Copper\_3:

(Start: 3 @591 has 32 MA's), (Start: 4 @600 has 1 MA's), (Start: 9 @648 has 3 MA's), (10, 675),  
(Start: 11 @690 has 1 MA's), (12, 696), (13, 699), (14, 705), (17, 759), (18, 798),

Gene: Courtney3\_3 Start: 591, Stop: 806, Start Num: 3

Candidate Starts for Courtney3\_3:

(Start: 3 @591 has 32 MA's), (Start: 4 @600 has 1 MA's), (Start: 9 @648 has 3 MA's), (10, 675),  
(Start: 11 @690 has 1 MA's), (12, 696), (13, 699), (14, 705), (17, 759), (18, 798),

Gene: Decurro\_3 Start: 591, Stop: 806, Start Num: 3

Candidate Starts for Decurro\_3:

(Start: 3 @591 has 32 MA's), (Start: 4 @600 has 1 MA's), (Start: 9 @648 has 3 MA's), (10, 675),  
(Start: 11 @690 has 1 MA's), (12, 696), (13, 699), (14, 705), (17, 759), (18, 798),

Gene: Dewayne\_3 Start: 591, Stop: 806, Start Num: 3

Candidate Starts for Dewayne\_3:

(Start: 3 @591 has 32 MA's), (Start: 4 @600 has 1 MA's), (Start: 9 @648 has 3 MA's), (10, 675),  
(Start: 11 @690 has 1 MA's), (12, 696), (13, 699), (14, 705), (17, 759), (18, 798),

Gene: Elkhorn\_3 Start: 591, Stop: 806, Start Num: 3

Candidate Starts for Elkhorn\_3:

(1, 567), (Start: 3 @591 has 32 MA's), (Start: 4 @600 has 1 MA's), (5, 609), (8, 633), (Start: 9 @648  
has 3 MA's), (Start: 11 @690 has 1 MA's), (12, 696), (13, 699), (14, 705), (16, 729), (17, 759),

Gene: Guntur\_3 Start: 591, Stop: 806, Start Num: 3

Candidate Starts for Guntur\_3:

(Start: 3 @591 has 32 MA's), (Start: 4 @600 has 1 MA's), (Start: 9 @648 has 3 MA's), (10, 675),  
(Start: 11 @690 has 1 MA's), (12, 696), (13, 699), (14, 705), (17, 759), (18, 798),

Gene: Hunnie\_3 Start: 591, Stop: 806, Start Num: 3

Candidate Starts for Hunnie\_3:

(Start: 3 @591 has 32 MA's), (Start: 4 @600 has 1 MA's), (Start: 9 @648 has 3 MA's), (10, 675),  
(Start: 11 @690 has 1 MA's), (12, 696), (13, 699), (14, 705), (17, 759), (18, 798),

Gene: Inspire2\_3 Start: 591, Stop: 806, Start Num: 3

Candidate Starts for Inspire2\_3:

(Start: 3 @591 has 32 MA's), (Start: 4 @600 has 1 MA's), (Start: 9 @648 has 3 MA's), (10, 675),  
(Start: 11 @690 has 1 MA's), (12, 696), (13, 699), (14, 705), (17, 759), (18, 798),

Gene: Jessica\_4 Start: 591, Stop: 806, Start Num: 3

Candidate Starts for Jessica\_4:

(Start: 3 @591 has 32 MA's), (Start: 4 @600 has 1 MA's), (Start: 9 @648 has 3 MA's), (10, 675),  
(Start: 11 @690 has 1 MA's), (12, 696), (13, 699), (14, 705), (17, 759), (18, 798),

Gene: KylieMac\_4 Start: 635, Stop: 793, Start Num: 9

Candidate Starts for KylieMac\_4:

(Start: 3 @578 has 32 MA's), (Start: 4 @587 has 1 MA's), (5, 596), (8, 620), (Start: 9 @635 has 3  
MA's), (Start: 11 @677 has 1 MA's), (12, 683), (13, 686), (14, 692), (17, 746),

Gene: Laila\_4 Start: 648, Stop: 806, Start Num: 9

Candidate Starts for Laila\_4:

(1, 567), (Start: 3 @591 has 32 MA's), (Start: 4 @600 has 1 MA's), (5, 609), (8, 633), (Start: 9 @648  
has 3 MA's), (Start: 11 @690 has 1 MA's), (12, 696), (13, 699), (14, 705), (16, 729), (17, 759),

Gene: Link\_3 Start: 591, Stop: 806, Start Num: 3

Candidate Starts for Link\_3:

(Start: 3 @591 has 32 MA's), (Start: 4 @600 has 1 MA's), (Start: 9 @648 has 3 MA's), (10, 675),  
(Start: 11 @690 has 1 MA's), (12, 696), (13, 699), (14, 705), (17, 759), (18, 798),

Gene: Lore\_3 Start: 591, Stop: 806, Start Num: 3

Candidate Starts for Lore\_3:

(1, 567), (Start: 3 @591 has 32 MA's), (Start: 4 @600 has 1 MA's), (5, 609), (8, 633), (Start: 9 @648  
has 3 MA's), (Start: 11 @690 has 1 MA's), (12, 696), (13, 699), (14, 705), (16, 729), (17, 759),

Gene: LouisXIV\_3 Start: 591, Stop: 806, Start Num: 3

Candidate Starts for LouisXIV\_3:

(Start: 3 @591 has 32 MA's), (Start: 4 @600 has 1 MA's), (Start: 9 @648 has 3 MA's), (10, 675),  
(Start: 11 @690 has 1 MA's), (12, 696), (13, 699), (14, 705), (17, 759), (18, 798),

Gene: Maggie\_3 Start: 591, Stop: 806, Start Num: 3

Candidate Starts for Maggie\_3:

(Start: 3 @591 has 32 MA's), (Start: 4 @600 has 1 MA's), (Start: 9 @648 has 3 MA's), (10, 675),  
(Start: 11 @690 has 1 MA's), (12, 696), (13, 699), (14, 705), (17, 759), (18, 798),

Gene: Mariposa\_3 Start: 591, Stop: 806, Start Num: 3

Candidate Starts for Mariposa\_3:

(Start: 3 @591 has 32 MA's), (Start: 4 @600 has 1 MA's), (Start: 9 @648 has 3 MA's), (10, 675),  
(Start: 11 @690 has 1 MA's), (12, 696), (13, 699), (14, 705), (17, 759), (18, 798),

Gene: Massimo\_3 Start: 591, Stop: 806, Start Num: 3

Candidate Starts for Massimo\_3:

(Start: 3 @591 has 32 MA's), (Start: 4 @600 has 1 MA's), (Start: 9 @648 has 3 MA's), (10, 675),  
(Start: 11 @690 has 1 MA's), (12, 696), (13, 699), (14, 705), (17, 759), (18, 798),

Gene: Moloch\_3 Start: 665, Stop: 880, Start Num: 3

Candidate Starts for Moloch\_3:

(Start: 3 @665 has 32 MA's), (Start: 4 @674 has 1 MA's), (Start: 9 @722 has 3 MA's), (10, 749),  
(Start: 11 @764 has 1 MA's), (12, 770), (13, 773), (14, 779), (17, 833), (18, 872),

Gene: Muttlie\_3 Start: 591, Stop: 806, Start Num: 3

Candidate Starts for Muttlie\_3:

(Start: 3 @591 has 32 MA's), (Start: 4 @600 has 1 MA's), (Start: 9 @648 has 3 MA's), (10, 675),  
(Start: 11 @690 has 1 MA's), (12, 696), (13, 699), (14, 705), (17, 759), (18, 798),

Gene: Prospero\_3 Start: 591, Stop: 806, Start Num: 3

Candidate Starts for Prospero\_3:

(Start: 3 @591 has 32 MA's), (Start: 4 @600 has 1 MA's), (Start: 9 @648 has 3 MA's), (10, 675),  
(Start: 11 @690 has 1 MA's), (12, 696), (13, 699), (14, 705), (17, 759), (18, 798),

Gene: Ronnie\_3 Start: 591, Stop: 806, Start Num: 3

Candidate Starts for Ronnie\_3:

(Start: 3 @591 has 32 MA's), (Start: 4 @600 has 1 MA's), (Start: 9 @648 has 3 MA's), (10, 675),  
(Start: 11 @690 has 1 MA's), (12, 696), (13, 699), (14, 705), (17, 759), (18, 798),

Gene: Sandman\_3 Start: 665, Stop: 880, Start Num: 3

Candidate Starts for Sandman\_3:

(Start: 3 @665 has 32 MA's), (Start: 4 @674 has 1 MA's), (Start: 9 @722 has 3 MA's), (10, 749),  
(Start: 11 @764 has 1 MA's), (12, 770), (13, 773), (14, 779), (17, 833), (18, 872),

Gene: Saphira\_3 Start: 648, Stop: 806, Start Num: 9

Candidate Starts for Saphira\_3:

(Start: 4 @600 has 1 MA's), (5, 609), (8, 633), (Start: 9 @648 has 3 MA's), (Start: 11 @690 has 1  
MA's), (12, 696), (13, 699), (14, 705), (16, 729), (17, 759),

Gene: Seume\_3 Start: 387, Stop: 602, Start Num: 3

Candidate Starts for Seume\_3:

(2, 378), (Start: 3 @387 has 32 MA's), (Start: 4 @396 has 1 MA's), (Start: 9 @444 has 3 MA's), (10,  
471), (Start: 11 @486 has 1 MA's), (12, 492), (13, 495), (14, 501), (17, 555), (18, 594),

Gene: Sourignavong\_4 Start: 725, Stop: 907, Start Num: 6

Candidate Starts for Sourignavong\_4:

(Start: 3 @689 has 32 MA's), (6, 725), (7, 731), (Start: 9 @749 has 3 MA's), (10, 776), (Start: 11 @791  
has 1 MA's), (12, 797), (13, 800), (14, 806), (17, 860), (18, 899),

Gene: StewieGriff\_3 Start: 591, Stop: 806, Start Num: 3

Candidate Starts for StewieGriff\_3:

(1, 567), (Start: 3 @591 has 32 MA's), (Start: 4 @600 has 1 MA's), (5, 609), (8, 633), (Start: 9 @648  
has 3 MA's), (Start: 11 @690 has 1 MA's), (12, 696), (13, 699), (14, 705), (16, 729), (17, 759),

Gene: Stratus\_3 Start: 665, Stop: 880, Start Num: 3

Candidate Starts for Stratus\_3:

(Start: 3 @665 has 32 MA's), (Start: 4 @674 has 1 MA's), (Start: 9 @722 has 3 MA's), (10, 749),  
(Start: 11 @764 has 1 MA's), (12, 770), (13, 773), (14, 779), (17, 833), (18, 872),

Gene: Swenson\_3 Start: 714, Stop: 929, Start Num: 3

Candidate Starts for Swenson\_3:

(1, 690), (Start: 3 @714 has 32 MA's), (Start: 4 @723 has 1 MA's), (5, 732), (8, 756), (Start: 9 @771 has 3 MA's), (Start: 11 @813 has 1 MA's), (12, 819), (13, 822), (14, 828), (16, 852), (17, 882),

Gene: Taj14\_3 Start: 569, Stop: 784, Start Num: 3

Candidate Starts for Taj14\_3:

(Start: 3 @569 has 32 MA's), (Start: 4 @578 has 1 MA's), (5, 587), (8, 611), (Start: 9 @626 has 3 MA's), (Start: 11 @668 has 1 MA's), (12, 674), (13, 677), (14, 683), (15, 689), (16, 707), (17, 737),

Gene: TinoCrisci\_3 Start: 591, Stop: 806, Start Num: 3

Candidate Starts for TinoCrisci\_3:

(Start: 3 @591 has 32 MA's), (Start: 4 @600 has 1 MA's), (Start: 9 @648 has 3 MA's), (10, 675), (Start: 11 @690 has 1 MA's), (12, 696), (13, 699), (14, 705), (17, 759), (18, 798),

Gene: Toulouse\_2 Start: 387, Stop: 602, Start Num: 3

Candidate Starts for Toulouse\_2:

(2, 378), (Start: 3 @387 has 32 MA's), (Start: 4 @396 has 1 MA's), (Start: 9 @444 has 3 MA's), (10, 471), (Start: 11 @486 has 1 MA's), (12, 492), (13, 495), (14, 501), (17, 555), (18, 594),

Gene: TymAbreu\_3 Start: 591, Stop: 806, Start Num: 3

Candidate Starts for TymAbreu\_3:

(Start: 3 @591 has 32 MA's), (Start: 4 @600 has 1 MA's), (Start: 9 @648 has 3 MA's), (10, 675), (Start: 11 @690 has 1 MA's), (12, 696), (13, 699), (14, 705), (17, 759), (18, 798),

Gene: Yank\_3 Start: 600, Stop: 806, Start Num: 4

Candidate Starts for Yank\_3:

(Start: 3 @591 has 32 MA's), (Start: 4 @600 has 1 MA's), (Start: 9 @648 has 3 MA's), (10, 675), (Start: 11 @690 has 1 MA's), (12, 696), (13, 699), (14, 705), (17, 759), (18, 798),