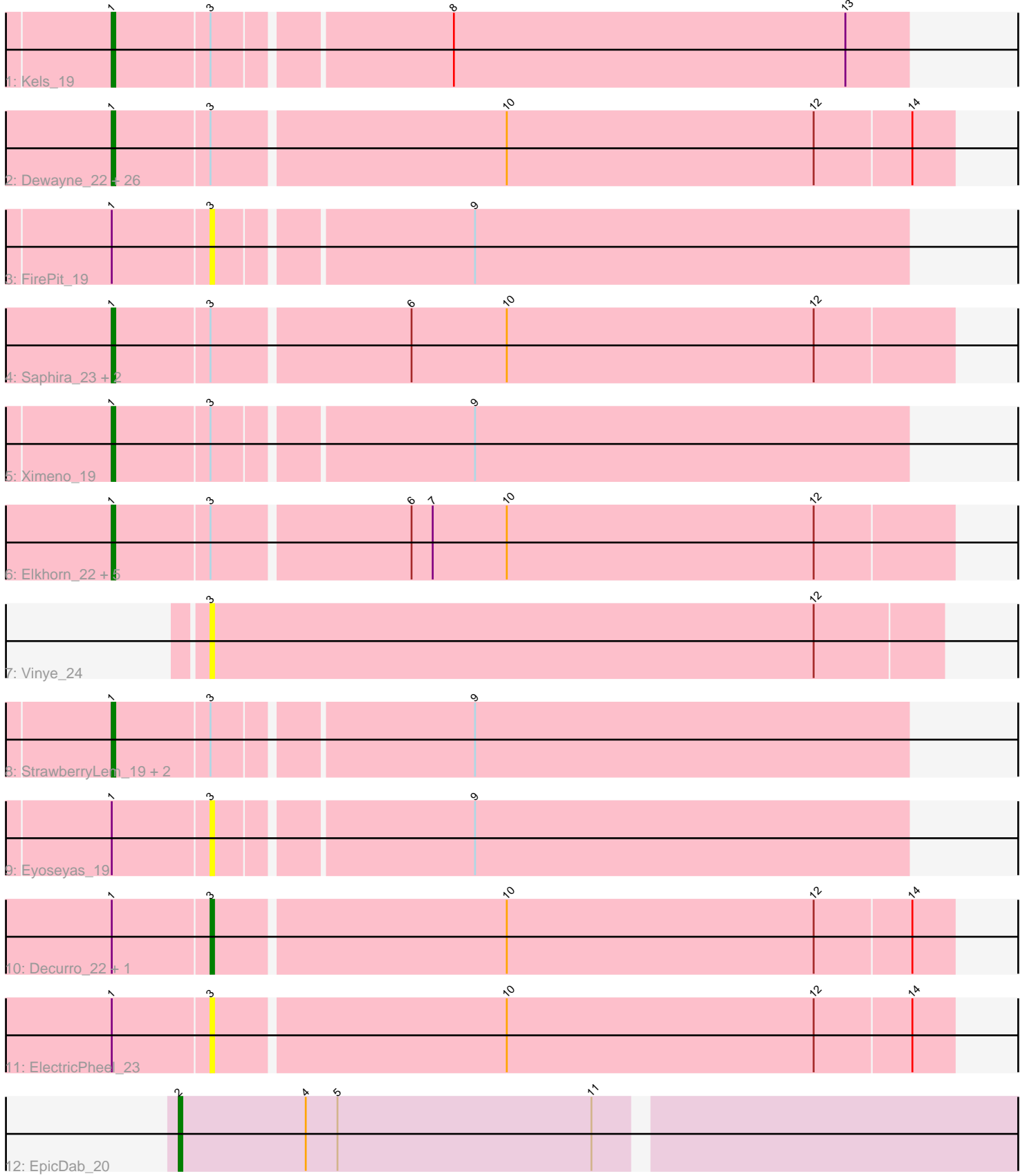


Pham 305093



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 305093 Report

This analysis was run 06/08/26 on database version 649.

Pham number 305093 has 48 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Kels\_19
- Track 2 : Dewayne\_22, Hunnie\_22, Ronnie\_22, LouisXIV\_22, Inspire2\_22, Sandman\_22, Azathoth\_22, Courtney3\_22, Muttie\_22, TinoCrisci\_22, Arby\_22, Moloch\_22, Stratus\_22, TymAbreu\_22, CGermain\_22, Prospero\_22, Massimo\_22, Yank\_22, Mariposa\_22, Guntur\_22, Maggie\_22, Sourignavong\_23, Copper\_22, Chestnut\_22, Link\_22, Seume\_22, Toulouse\_21
- Track 3 : FirePit\_19
- Track 4 : Saphira\_23, Taj14\_22, Swenson\_22
- Track 5 : Ximeno\_19
- Track 6 : Elkhorn\_22, StewieGriff\_22, Blair\_22, Lore\_22, KylieMac\_23, Laila\_24
- Track 7 : Vinye\_24
- Track 8 : StrawberryLem\_19, Arielagos\_19, SerialPhiller\_19
- Track 9 : Eyoseyas\_19
- Track 10 : Decurro\_22, Jessica\_23
- Track 11 : ElectricPheel\_23
- Track 12 : EpicDab\_20

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

The start number called the most often in the published annotations is 1, it was called in 41 of the 44 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arby\_22, Arielagos\_19, Azathoth\_22, Blair\_22, CGermain\_22, Chestnut\_22, Copper\_22, Courtney3\_22, Dewayne\_22, Elkhorn\_22, Guntur\_22, Hunnie\_22, Inspire2\_22, Kels\_19, KylieMac\_23, Laila\_24, Link\_22, Lore\_22, LouisXIV\_22, Maggie\_22, Mariposa\_22, Massimo\_22, Moloch\_22, Muttie\_22, Prospero\_22, Ronnie\_22, Sandman\_22, Saphira\_23, SerialPhiller\_19, Seume\_22, Sourignavong\_23, StewieGriff\_22, Stratus\_22, StrawberryLem\_19, Swenson\_22, Taj14\_22, TinoCrisci\_22, Toulouse\_21, TymAbreu\_22, Ximeno\_19, Yank\_22,

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

- Decurro\_22, ElectricPheel\_23, Eyoseyas\_19, FirePit\_19, Jessica\_23,

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

- EpicDab\_20, Vinye\_24,

### Summary by start number:

Start 1:

- Found in 46 of 48 ( 95.8% ) of genes in pham
- Manual Annotations of this start: 41 of 44
- Called 89.1% of time when present
- Phage (with cluster) where this start called: Arby\_22 (AN), Arielagos\_19 (AN), Azathoth\_22 (AN), Blair\_22 (AN), CGermain\_22 (AN), Chestnut\_22 (AN), Copper\_22 (AN), Courtney3\_22 (AN), Dewayne\_22 (AN), Elkhorn\_22 (AN), Guntur\_22 (AN), Hunnie\_22 (AN), Inspire2\_22 (AN), Kels\_19 (AN), KylieMac\_23 (AN), Laila\_24 (AN), Link\_22 (AN), Lore\_22 (AN), LouisXIV\_22 (AN), Maggie\_22 (AN), Mariposa\_22 (AN), Massimo\_22 (AN), Moloch\_22 (AN), Muttie\_22 (AN), Prospero\_22 (AN), Ronnie\_22 (AN), Sandman\_22 (AN), Saphira\_23 (AN), SerialPhiller\_19 (AN), Seume\_22 (AN), Sourignavong\_23 (AN), StewieGriff\_22 (AN), Stratus\_22 (AN), StrawberryLem\_19 (AN), Swenson\_22 (AN), Taj14\_22 (AN), TinoCrisci\_22 (AN), Toulouse\_21 (AN), TymAbreu\_22 (AN), Ximeno\_19 (AN), Yank\_22 (AN),

Start 2:

- Found in 1 of 48 ( 2.1% ) of genes in pham
- Manual Annotations of this start: 1 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EpicDab\_20 (DM),

Start 3:

- Found in 47 of 48 ( 97.9% ) of genes in pham
- Manual Annotations of this start: 2 of 44
- Called 12.8% of time when present
- Phage (with cluster) where this start called: Decurro\_22 (AN), ElectricPheel\_23 (AN), Eyoseyas\_19 (AN), FirePit\_19 (AN), Jessica\_23 (AN), Vinye\_24 (AN),

### Summary by clusters:

There are 2 clusters represented in this pham: DM, AN,

Info for manual annotations of cluster AN:

- Start number 1 was manually annotated 41 times for cluster AN.
- Start number 3 was manually annotated 2 times for cluster AN.

Info for manual annotations of cluster DM:

- Start number 2 was manually annotated 1 time for cluster DM.

### Gene Information:

Gene: Arby\_22 Start: 13886, Stop: 14119, Start Num: 1

Candidate Starts for Arby\_22:

(Start: 1 @13886 has 41 MA's), (Start: 3 @13913 has 2 MA's), (10, 13994), (12, 14081), (14, 14108),

Gene: Arielagos\_19 Start: 13063, Stop: 13281, Start Num: 1

Candidate Starts for Arielagos\_19:

(Start: 1 @13063 has 41 MA's), (Start: 3 @13090 has 2 MA's), (9, 13159),

Gene: Azathoth\_22 Start: 13886, Stop: 14119, Start Num: 1

Candidate Starts for Azathoth\_22:

(Start: 1 @13886 has 41 MA's), (Start: 3 @13913 has 2 MA's), (10, 13994), (12, 14081), (14, 14108),

Gene: Blair\_22 Start: 13883, Stop: 14116, Start Num: 1

Candidate Starts for Blair\_22:

(Start: 1 @13883 has 41 MA's), (Start: 3 @13910 has 2 MA's), (6, 13964), (7, 13970), (10, 13991), (12, 14078),

Gene: CGermain\_22 Start: 13886, Stop: 14119, Start Num: 1

Candidate Starts for CGermain\_22:

(Start: 1 @13886 has 41 MA's), (Start: 3 @13913 has 2 MA's), (10, 13994), (12, 14081), (14, 14108),

Gene: Chestnut\_22 Start: 13886, Stop: 14119, Start Num: 1

Candidate Starts for Chestnut\_22:

(Start: 1 @13886 has 41 MA's), (Start: 3 @13913 has 2 MA's), (10, 13994), (12, 14081), (14, 14108),

Gene: Copper\_22 Start: 13886, Stop: 14119, Start Num: 1

Candidate Starts for Copper\_22:

(Start: 1 @13886 has 41 MA's), (Start: 3 @13913 has 2 MA's), (10, 13994), (12, 14081), (14, 14108),

Gene: Courtney3\_22 Start: 13886, Stop: 14119, Start Num: 1

Candidate Starts for Courtney3\_22:

(Start: 1 @13886 has 41 MA's), (Start: 3 @13913 has 2 MA's), (10, 13994), (12, 14081), (14, 14108),

Gene: Decurro\_22 Start: 13881, Stop: 14087, Start Num: 3

Candidate Starts for Decurro\_22:

(Start: 1 @13854 has 41 MA's), (Start: 3 @13881 has 2 MA's), (10, 13962), (12, 14049), (14, 14076),

Gene: Dewayne\_22 Start: 13886, Stop: 14119, Start Num: 1

Candidate Starts for Dewayne\_22:

(Start: 1 @13886 has 41 MA's), (Start: 3 @13913 has 2 MA's), (10, 13994), (12, 14081), (14, 14108),

Gene: ElectricPheel\_23 Start: 13954, Stop: 14160, Start Num: 3

Candidate Starts for ElectricPheel\_23:

(Start: 1 @13927 has 41 MA's), (Start: 3 @13954 has 2 MA's), (10, 14035), (12, 14122), (14, 14149),

Gene: Elkhorn\_22 Start: 13883, Stop: 14116, Start Num: 1

Candidate Starts for Elkhorn\_22:

(Start: 1 @13883 has 41 MA's), (Start: 3 @13910 has 2 MA's), (6, 13964), (7, 13970), (10, 13991), (12, 14078),

Gene: EpicDab\_20 Start: 14839, Stop: 15075, Start Num: 2

Candidate Starts for EpicDab\_20:

(Start: 2 @14839 has 1 MA's), (4, 14875), (5, 14884), (11, 14956),

Gene: Eyoseyas\_19 Start: 13090, Stop: 13281, Start Num: 3

Candidate Starts for Eyoseyas\_19:

(Start: 1 @13063 has 41 MA's), (Start: 3 @13090 has 2 MA's), (9, 13159),

Gene: FirePit\_19 Start: 13103, Stop: 13294, Start Num: 3  
Candidate Starts for FirePit\_19:  
(Start: 1 @13076 has 41 MA's), (Start: 3 @13103 has 2 MA's), (9, 13172),

Gene: Guntur\_22 Start: 13886, Stop: 14119, Start Num: 1  
Candidate Starts for Guntur\_22:  
(Start: 1 @13886 has 41 MA's), (Start: 3 @13913 has 2 MA's), (10, 13994), (12, 14081), (14, 14108),

Gene: Hunnie\_22 Start: 13886, Stop: 14119, Start Num: 1  
Candidate Starts for Hunnie\_22:  
(Start: 1 @13886 has 41 MA's), (Start: 3 @13913 has 2 MA's), (10, 13994), (12, 14081), (14, 14108),

Gene: Inspire2\_22 Start: 13886, Stop: 14119, Start Num: 1  
Candidate Starts for Inspire2\_22:  
(Start: 1 @13886 has 41 MA's), (Start: 3 @13913 has 2 MA's), (10, 13994), (12, 14081), (14, 14108),

Gene: Jessica\_23 Start: 13913, Stop: 14119, Start Num: 3  
Candidate Starts for Jessica\_23:  
(Start: 1 @13886 has 41 MA's), (Start: 3 @13913 has 2 MA's), (10, 13994), (12, 14081), (14, 14108),

Gene: Kels\_19 Start: 13001, Stop: 13219, Start Num: 1  
Candidate Starts for Kels\_19:  
(Start: 1 @13001 has 41 MA's), (Start: 3 @13028 has 2 MA's), (8, 13091), (13, 13202),

Gene: KylieMac\_23 Start: 13870, Stop: 14103, Start Num: 1  
Candidate Starts for KylieMac\_23:  
(Start: 1 @13870 has 41 MA's), (Start: 3 @13897 has 2 MA's), (6, 13951), (7, 13957), (10, 13978), (12, 14065),

Gene: Laila\_24 Start: 13883, Stop: 14116, Start Num: 1  
Candidate Starts for Laila\_24:  
(Start: 1 @13883 has 41 MA's), (Start: 3 @13910 has 2 MA's), (6, 13964), (7, 13970), (10, 13991), (12, 14078),

Gene: Link\_22 Start: 13851, Stop: 14084, Start Num: 1  
Candidate Starts for Link\_22:  
(Start: 1 @13851 has 41 MA's), (Start: 3 @13878 has 2 MA's), (10, 13959), (12, 14046), (14, 14073),

Gene: Lore\_22 Start: 13883, Stop: 14116, Start Num: 1  
Candidate Starts for Lore\_22:  
(Start: 1 @13883 has 41 MA's), (Start: 3 @13910 has 2 MA's), (6, 13964), (7, 13970), (10, 13991), (12, 14078),

Gene: LouisXIV\_22 Start: 13886, Stop: 14119, Start Num: 1  
Candidate Starts for LouisXIV\_22:  
(Start: 1 @13886 has 41 MA's), (Start: 3 @13913 has 2 MA's), (10, 13994), (12, 14081), (14, 14108),

Gene: Maggie\_22 Start: 13886, Stop: 14119, Start Num: 1  
Candidate Starts for Maggie\_22:  
(Start: 1 @13886 has 41 MA's), (Start: 3 @13913 has 2 MA's), (10, 13994), (12, 14081), (14, 14108),

Gene: Mariposa\_22 Start: 13886, Stop: 14119, Start Num: 1  
Candidate Starts for Mariposa\_22:

(Start: 1 @13886 has 41 MA's), (Start: 3 @13913 has 2 MA's), (10, 13994), (12, 14081), (14, 14108),

Gene: Massimo\_22 Start: 13886, Stop: 14119, Start Num: 1

Candidate Starts for Massimo\_22:

(Start: 1 @13886 has 41 MA's), (Start: 3 @13913 has 2 MA's), (10, 13994), (12, 14081), (14, 14108),

Gene: Moloch\_22 Start: 13960, Stop: 14193, Start Num: 1

Candidate Starts for Moloch\_22:

(Start: 1 @13960 has 41 MA's), (Start: 3 @13987 has 2 MA's), (10, 14068), (12, 14155), (14, 14182),

Gene: Muttlie\_22 Start: 13854, Stop: 14087, Start Num: 1

Candidate Starts for Muttlie\_22:

(Start: 1 @13854 has 41 MA's), (Start: 3 @13881 has 2 MA's), (10, 13962), (12, 14049), (14, 14076),

Gene: Prospero\_22 Start: 13886, Stop: 14119, Start Num: 1

Candidate Starts for Prospero\_22:

(Start: 1 @13886 has 41 MA's), (Start: 3 @13913 has 2 MA's), (10, 13994), (12, 14081), (14, 14108),

Gene: Ronnie\_22 Start: 13886, Stop: 14119, Start Num: 1

Candidate Starts for Ronnie\_22:

(Start: 1 @13886 has 41 MA's), (Start: 3 @13913 has 2 MA's), (10, 13994), (12, 14081), (14, 14108),

Gene: Sandman\_22 Start: 13960, Stop: 14193, Start Num: 1

Candidate Starts for Sandman\_22:

(Start: 1 @13960 has 41 MA's), (Start: 3 @13987 has 2 MA's), (10, 14068), (12, 14155), (14, 14182),

Gene: Saphira\_23 Start: 13885, Stop: 14118, Start Num: 1

Candidate Starts for Saphira\_23:

(Start: 1 @13885 has 41 MA's), (Start: 3 @13912 has 2 MA's), (6, 13966), (10, 13993), (12, 14080),

Gene: SerialPhiller\_19 Start: 13063, Stop: 13281, Start Num: 1

Candidate Starts for SerialPhiller\_19:

(Start: 1 @13063 has 41 MA's), (Start: 3 @13090 has 2 MA's), (9, 13159),

Gene: Seume\_22 Start: 13649, Stop: 13882, Start Num: 1

Candidate Starts for Seume\_22:

(Start: 1 @13649 has 41 MA's), (Start: 3 @13676 has 2 MA's), (10, 13757), (12, 13844), (14, 13871),

Gene: Sourignavong\_23 Start: 13955, Stop: 14188, Start Num: 1

Candidate Starts for Sourignavong\_23:

(Start: 1 @13955 has 41 MA's), (Start: 3 @13982 has 2 MA's), (10, 14063), (12, 14150), (14, 14177),

Gene: StewieGriff\_22 Start: 13883, Stop: 14116, Start Num: 1

Candidate Starts for StewieGriff\_22:

(Start: 1 @13883 has 41 MA's), (Start: 3 @13910 has 2 MA's), (6, 13964), (7, 13970), (10, 13991), (12, 14078),

Gene: Stratus\_22 Start: 13960, Stop: 14193, Start Num: 1

Candidate Starts for Stratus\_22:

(Start: 1 @13960 has 41 MA's), (Start: 3 @13987 has 2 MA's), (10, 14068), (12, 14155), (14, 14182),

Gene: StrawberryLem\_19 Start: 12988, Stop: 13206, Start Num: 1

Candidate Starts for StrawberryLem\_19:

(Start: 1 @12988 has 41 MA's), (Start: 3 @13015 has 2 MA's), (9, 13084),

Gene: Swenson\_22 Start: 14007, Stop: 14240, Start Num: 1

Candidate Starts for Swenson\_22:

(Start: 1 @14007 has 41 MA's), (Start: 3 @14034 has 2 MA's), (6, 14088), (10, 14115), (12, 14202),

Gene: Taj14\_22 Start: 13882, Stop: 14115, Start Num: 1

Candidate Starts for Taj14\_22:

(Start: 1 @13882 has 41 MA's), (Start: 3 @13909 has 2 MA's), (6, 13963), (10, 13990), (12, 14077),

Gene: TinoCrisci\_22 Start: 13886, Stop: 14119, Start Num: 1

Candidate Starts for TinoCrisci\_22:

(Start: 1 @13886 has 41 MA's), (Start: 3 @13913 has 2 MA's), (10, 13994), (12, 14081), (14, 14108),

Gene: Toulouse\_21 Start: 13649, Stop: 13882, Start Num: 1

Candidate Starts for Toulouse\_21:

(Start: 1 @13649 has 41 MA's), (Start: 3 @13676 has 2 MA's), (10, 13757), (12, 13844), (14, 13871),

Gene: TymAbreu\_22 Start: 13886, Stop: 14119, Start Num: 1

Candidate Starts for TymAbreu\_22:

(Start: 1 @13886 has 41 MA's), (Start: 3 @13913 has 2 MA's), (10, 13994), (12, 14081), (14, 14108),

Gene: Vinye\_24 Start: 14391, Stop: 14597, Start Num: 3

Candidate Starts for Vinye\_24:

(Start: 3 @14391 has 2 MA's), (12, 14562),

Gene: Ximeno\_19 Start: 13076, Stop: 13294, Start Num: 1

Candidate Starts for Ximeno\_19:

(Start: 1 @13076 has 41 MA's), (Start: 3 @13103 has 2 MA's), (9, 13172),

Gene: Yank\_22 Start: 13854, Stop: 14087, Start Num: 1

Candidate Starts for Yank\_22:

(Start: 1 @13854 has 41 MA's), (Start: 3 @13881 has 2 MA's), (10, 13962), (12, 14049), (14, 14076),