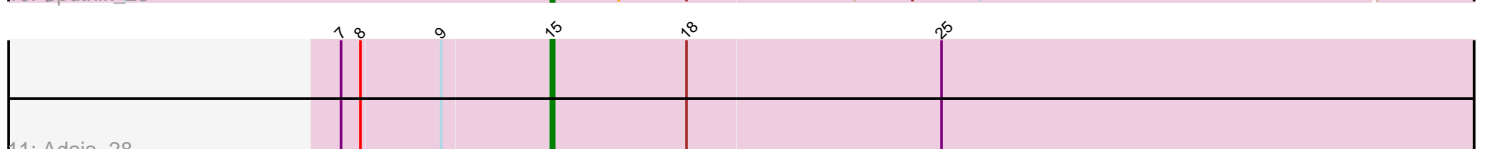
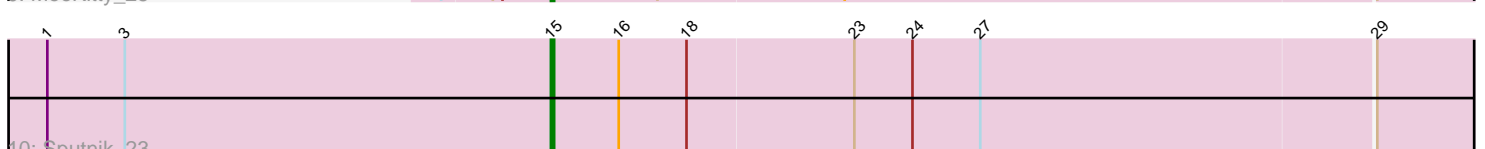
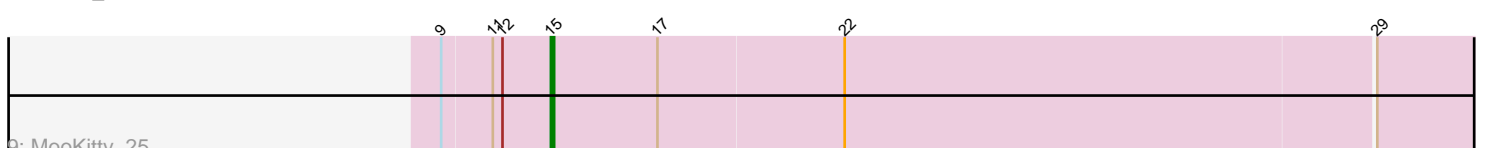
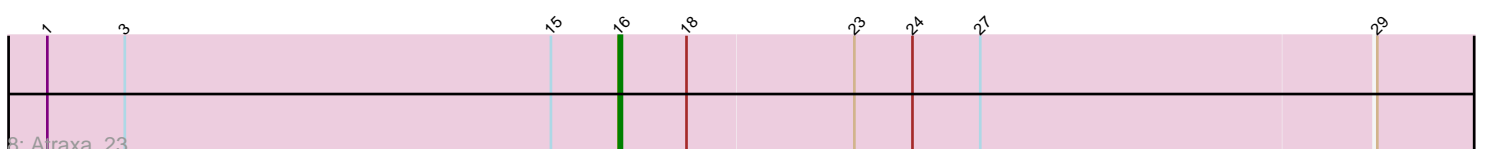
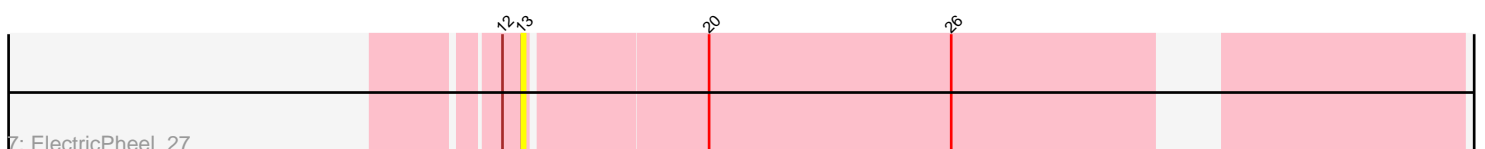
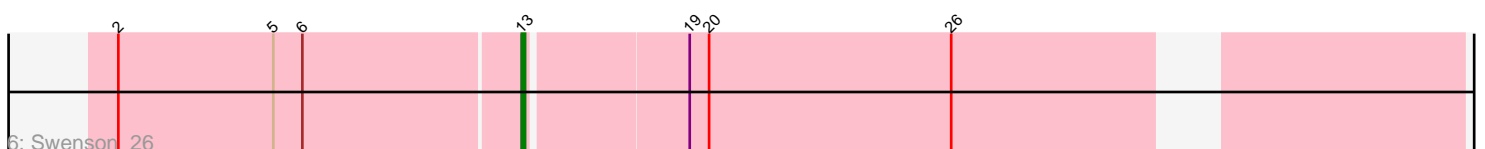
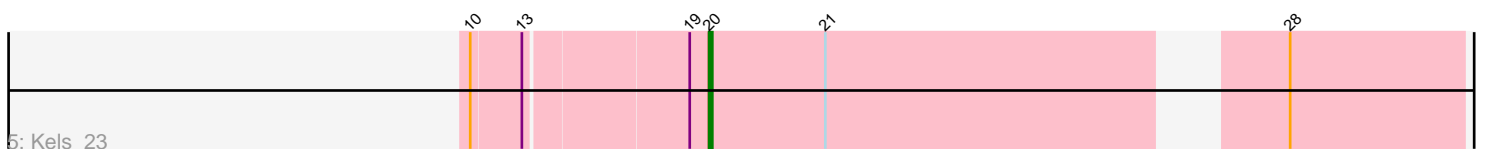
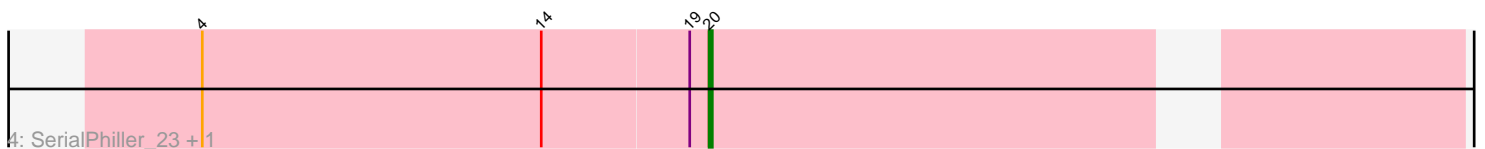
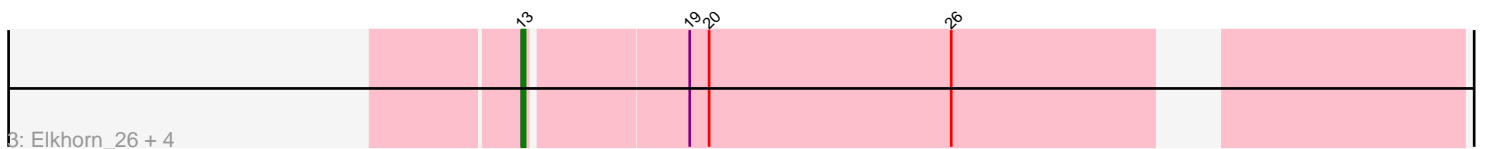
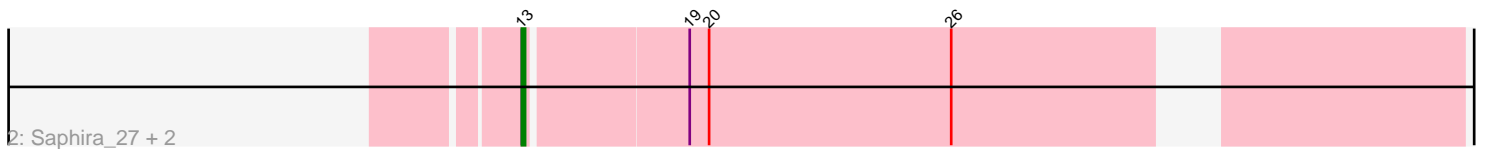


Pham 203053



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 203053 Report

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

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 203053 has 45 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Sandman\_26, Dewayne\_26, CGermain\_26, Ronnie\_26, LouisXIV\_26, Inspire2\_26, Hunnie\_26, Stratus\_26, Muttie\_26, Azathoth\_26, Courtney3\_26, TinoCrisci\_26, Arby\_26, Moloch\_26, TymAbreu\_26, Massimo\_26, Decurro\_26, Guntur\_26, Maggie\_26, Mariposa\_26, Prospero\_26, Copper\_26, Chestnut\_27, Yank\_26, Sourignavong\_27, Seume\_26, Link\_26, Toulouse\_25
- Track 2 : Saphira\_27, Taj14\_26, KylieMac\_27
- Track 3 : Elkhorn\_26, StewieGriff\_26, Blair\_26, Lore\_26, Laila\_28
- Track 4 : SerialPhiller\_23, Arielagos\_23
- Track 5 : Kels\_23
- Track 6 : Swenson\_26
- Track 7 : ElectricPheel\_27
- Track 8 : Atraxa\_23
- Track 9 : MooKitty\_25
- Track 10 : Sputnik\_23
- Track 11 : Adaia\_28

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

The start number called the most often in the published annotations is 13, it was called in 37 of the 44 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arby\_26, Azathoth\_26, Blair\_26, CGermain\_26, Chestnut\_27, Copper\_26, Courtney3\_26, Decurro\_26, Dewayne\_26, ElectricPheel\_27, Elkhorn\_26, Guntur\_26, Hunnie\_26, Inspire2\_26, KylieMac\_27, Laila\_28, Link\_26, Lore\_26, LouisXIV\_26, Maggie\_26, Mariposa\_26, Massimo\_26, Moloch\_26, Muttie\_26, Prospero\_26, Ronnie\_26, Sandman\_26, Saphira\_27, Seume\_26, Sourignavong\_27, StewieGriff\_26, Stratus\_26, Swenson\_26, Taj14\_26, TinoCrisci\_26, Toulouse\_25, TymAbreu\_26, Yank\_26,

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

- Kels\_23,

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

- Adaia\_28, Arielagos\_23, Atraxa\_23, MooKitty\_25, SerialPhiller\_23, Sputnik\_23,

### Summary by start number:

Start 13:

- Found in 39 of 45 ( 86.7% ) of genes in pham
- Manual Annotations of this start: 37 of 44
- Called 97.4% of time when present
- Phage (with cluster) where this start called: Arby\_26 (AN), Azathoth\_26 (AN), Blair\_26 (AN), CGermain\_26 (AN), Chestnut\_27 (AN), Copper\_26 (AN), Courtney3\_26 (AN), Decurro\_26 (AN), Dewayne\_26 (AN), ElectricPheel\_27 (AN), Elkhorn\_26 (AN), Guntur\_26 (AN), Hunnie\_26 (AN), Inspire2\_26 (AN), KylieMac\_27 (AN), Laila\_28 (AN), Link\_26 (AN), Lore\_26 (AN), LouisXIV\_26 (AN), Maggie\_26 (AN), Mariposa\_26 (AN), Massimo\_26 (AN), Moloch\_26 (AN), Muttie\_26 (AN), Prospero\_26 (AN), Ronnie\_26 (AN), Sandman\_26 (AN), Saphira\_27 (AN), Seume\_26 (AN), Sourignavong\_27 (AN), StewieGriff\_26 (AN), Stratus\_26 (AN), Swenson\_26 (AN), Taj14\_26 (AN), TinoCrisci\_26 (AN), Toulouse\_25 (AN), TymAbreu\_26 (AN), Yank\_26 (AN),

Start 15:

- Found in 4 of 45 ( 8.9% ) of genes in pham
- Manual Annotations of this start: 3 of 44
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Adaia\_28 (AX), MooKitty\_25 (AX), Sputnik\_23 (AX),

Start 16:

- Found in 2 of 45 ( 4.4% ) of genes in pham
- Manual Annotations of this start: 1 of 44
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Atraxa\_23 (AX),

Start 20:

- Found in 41 of 45 ( 91.1% ) of genes in pham
- Manual Annotations of this start: 3 of 44
- Called 7.3% of time when present
- Phage (with cluster) where this start called: Arielagos\_23 (AN), Kels\_23 (AN), SerialPhiller\_23 (AN),

### Summary by clusters:

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

Info for manual annotations of cluster AN:

- Start number 13 was manually annotated 37 times for cluster AN.
- Start number 20 was manually annotated 3 times for cluster AN.

Info for manual annotations of cluster AX:

- Start number 15 was manually annotated 3 times for cluster AX.

- Start number 16 was manually annotated 1 time for cluster AX.

**Gene Information:**

Gene: Adaia\_28 Start: 15533, Stop: 15820, Start Num: 15

Candidate Starts for Adaia\_28:

(7, 15470), (8, 15476), (9, 15500), (Start: 15 @15533 has 3 MA's), (18, 15575), (25, 15653),

Gene: Arby\_26 Start: 15263, Stop: 15529, Start Num: 13

Candidate Starts for Arby\_26:

(Start: 13 @15263 has 37 MA's), (Start: 20 @15317 has 3 MA's), (26, 15392), (28, 15476),

Gene: Arielagos\_23 Start: 15059, Stop: 15271, Start Num: 20

Candidate Starts for Arielagos\_23:

(4, 14903), (14, 15008), (19, 15053), (Start: 20 @15059 has 3 MA's),

Gene: Atraxa\_23 Start: 14644, Stop: 14904, Start Num: 16

Candidate Starts for Atraxa\_23:

(1, 14467), (3, 14491), (Start: 15 @14623 has 3 MA's), (Start: 16 @14644 has 1 MA's), (18, 14665), (23, 14716), (24, 14734), (27, 14755), (29, 14875),

Gene: Azathoth\_26 Start: 15263, Stop: 15529, Start Num: 13

Candidate Starts for Azathoth\_26:

(Start: 13 @15263 has 37 MA's), (Start: 20 @15317 has 3 MA's), (26, 15392), (28, 15476),

Gene: Blair\_26 Start: 15263, Stop: 15529, Start Num: 13

Candidate Starts for Blair\_26:

(Start: 13 @15263 has 37 MA's), (19, 15311), (Start: 20 @15317 has 3 MA's), (26, 15392),

Gene: CGermain\_26 Start: 15263, Stop: 15529, Start Num: 13

Candidate Starts for CGermain\_26:

(Start: 13 @15263 has 37 MA's), (Start: 20 @15317 has 3 MA's), (26, 15392), (28, 15476),

Gene: Chestnut\_27 Start: 15263, Stop: 15529, Start Num: 13

Candidate Starts for Chestnut\_27:

(Start: 13 @15263 has 37 MA's), (Start: 20 @15317 has 3 MA's), (26, 15392), (28, 15476),

Gene: Copper\_26 Start: 15263, Stop: 15529, Start Num: 13

Candidate Starts for Copper\_26:

(Start: 13 @15263 has 37 MA's), (Start: 20 @15317 has 3 MA's), (26, 15392), (28, 15476),

Gene: Courtney3\_26 Start: 15263, Stop: 15529, Start Num: 13

Candidate Starts for Courtney3\_26:

(Start: 13 @15263 has 37 MA's), (Start: 20 @15317 has 3 MA's), (26, 15392), (28, 15476),

Gene: Decurro\_26 Start: 15231, Stop: 15497, Start Num: 13

Candidate Starts for Decurro\_26:

(Start: 13 @15231 has 37 MA's), (Start: 20 @15285 has 3 MA's), (26, 15360), (28, 15444),

Gene: Dewayne\_26 Start: 15263, Stop: 15529, Start Num: 13

Candidate Starts for Dewayne\_26:

(Start: 13 @15263 has 37 MA's), (Start: 20 @15317 has 3 MA's), (26, 15392), (28, 15476),

Gene: ElectricPheel\_27 Start: 15304, Stop: 15570, Start Num: 13

Candidate Starts for ElectricPheel\_27:

(12, 15298), (Start: 13 @15304 has 37 MA's), (Start: 20 @15358 has 3 MA's), (26, 15433),

Gene: Elkhorn\_26 Start: 15263, Stop: 15529, Start Num: 13

Candidate Starts for Elkhorn\_26:

(Start: 13 @15263 has 37 MA's), (19, 15311), (Start: 20 @15317 has 3 MA's), (26, 15392),

Gene: Guntur\_26 Start: 15263, Stop: 15529, Start Num: 13

Candidate Starts for Guntur\_26:

(Start: 13 @15263 has 37 MA's), (Start: 20 @15317 has 3 MA's), (26, 15392), (28, 15476),

Gene: Hunnie\_26 Start: 15263, Stop: 15529, Start Num: 13

Candidate Starts for Hunnie\_26:

(Start: 13 @15263 has 37 MA's), (Start: 20 @15317 has 3 MA's), (26, 15392), (28, 15476),

Gene: Inspire2\_26 Start: 15263, Stop: 15529, Start Num: 13

Candidate Starts for Inspire2\_26:

(Start: 13 @15263 has 37 MA's), (Start: 20 @15317 has 3 MA's), (26, 15392), (28, 15476),

Gene: Kels\_23 Start: 14592, Stop: 14804, Start Num: 20

Candidate Starts for Kels\_23:

(10, 14523), (Start: 13 @14538 has 37 MA's), (19, 14586), (Start: 20 @14592 has 3 MA's), (21, 14628), (28, 14751),

Gene: KylieMac\_27 Start: 15247, Stop: 15513, Start Num: 13

Candidate Starts for KylieMac\_27:

(Start: 13 @15247 has 37 MA's), (19, 15295), (Start: 20 @15301 has 3 MA's), (26, 15376),

Gene: Laila\_28 Start: 15263, Stop: 15529, Start Num: 13

Candidate Starts for Laila\_28:

(Start: 13 @15263 has 37 MA's), (19, 15311), (Start: 20 @15317 has 3 MA's), (26, 15392),

Gene: Link\_26 Start: 15228, Stop: 15494, Start Num: 13

Candidate Starts for Link\_26:

(Start: 13 @15228 has 37 MA's), (Start: 20 @15282 has 3 MA's), (26, 15357), (28, 15441),

Gene: Lore\_26 Start: 15263, Stop: 15529, Start Num: 13

Candidate Starts for Lore\_26:

(Start: 13 @15263 has 37 MA's), (19, 15311), (Start: 20 @15317 has 3 MA's), (26, 15392),

Gene: LouisXIV\_26 Start: 15263, Stop: 15529, Start Num: 13

Candidate Starts for LouisXIV\_26:

(Start: 13 @15263 has 37 MA's), (Start: 20 @15317 has 3 MA's), (26, 15392), (28, 15476),

Gene: Maggie\_26 Start: 15263, Stop: 15529, Start Num: 13

Candidate Starts for Maggie\_26:

(Start: 13 @15263 has 37 MA's), (Start: 20 @15317 has 3 MA's), (26, 15392), (28, 15476),

Gene: Mariposa\_26 Start: 15263, Stop: 15529, Start Num: 13

Candidate Starts for Mariposa\_26:

(Start: 13 @15263 has 37 MA's), (Start: 20 @15317 has 3 MA's), (26, 15392), (28, 15476),

Gene: Massimo\_26 Start: 15263, Stop: 15529, Start Num: 13

Candidate Starts for Massimo\_26:

(Start: 13 @15263 has 37 MA's), (Start: 20 @15317 has 3 MA's), (26, 15392), (28, 15476),

Gene: Moloch\_26 Start: 15337, Stop: 15603, Start Num: 13

Candidate Starts for Moloch\_26:

(Start: 13 @15337 has 37 MA's), (Start: 20 @15391 has 3 MA's), (26, 15466), (28, 15550),

Gene: MooKitty\_25 Start: 15668, Stop: 15949, Start Num: 15

Candidate Starts for MooKitty\_25:

(9, 15635), (11, 15650), (12, 15653), (Start: 15 @15668 has 3 MA's), (17, 15701), (22, 15758), (29, 15920),

Gene: Muttie\_26 Start: 15231, Stop: 15497, Start Num: 13

Candidate Starts for Muttie\_26:

(Start: 13 @15231 has 37 MA's), (Start: 20 @15285 has 3 MA's), (26, 15360), (28, 15444),

Gene: Prospero\_26 Start: 15263, Stop: 15529, Start Num: 13

Candidate Starts for Prospero\_26:

(Start: 13 @15263 has 37 MA's), (Start: 20 @15317 has 3 MA's), (26, 15392), (28, 15476),

Gene: Ronnie\_26 Start: 15263, Stop: 15529, Start Num: 13

Candidate Starts for Ronnie\_26:

(Start: 13 @15263 has 37 MA's), (Start: 20 @15317 has 3 MA's), (26, 15392), (28, 15476),

Gene: Sandman\_26 Start: 15337, Stop: 15603, Start Num: 13

Candidate Starts for Sandman\_26:

(Start: 13 @15337 has 37 MA's), (Start: 20 @15391 has 3 MA's), (26, 15466), (28, 15550),

Gene: Saphira\_27 Start: 15256, Stop: 15522, Start Num: 13

Candidate Starts for Saphira\_27:

(Start: 13 @15256 has 37 MA's), (19, 15304), (Start: 20 @15310 has 3 MA's), (26, 15385),

Gene: SerialPhiller\_23 Start: 15059, Stop: 15271, Start Num: 20

Candidate Starts for SerialPhiller\_23:

(4, 14903), (14, 15008), (19, 15053), (Start: 20 @15059 has 3 MA's),

Gene: Seume\_26 Start: 15026, Stop: 15292, Start Num: 13

Candidate Starts for Seume\_26:

(Start: 13 @15026 has 37 MA's), (Start: 20 @15080 has 3 MA's), (26, 15155), (28, 15239),

Gene: Sourignavong\_27 Start: 15332, Stop: 15598, Start Num: 13

Candidate Starts for Sourignavong\_27:

(Start: 13 @15332 has 37 MA's), (Start: 20 @15386 has 3 MA's), (26, 15461), (28, 15545),

Gene: Sputnik\_23 Start: 14623, Stop: 14904, Start Num: 15

Candidate Starts for Sputnik\_23:

(1, 14467), (3, 14491), (Start: 15 @14623 has 3 MA's), (Start: 16 @14644 has 1 MA's), (18, 14665), (23, 14716), (24, 14734), (27, 14755), (29, 14875),

Gene: StewieGriff\_26 Start: 15263, Stop: 15529, Start Num: 13

Candidate Starts for StewieGriff\_26:

(Start: 13 @15263 has 37 MA's), (19, 15311), (Start: 20 @15317 has 3 MA's), (26, 15392),

Gene: Stratus\_26 Start: 15337, Stop: 15603, Start Num: 13

Candidate Starts for Stratus\_26:

(Start: 13 @15337 has 37 MA's), (Start: 20 @15391 has 3 MA's), (26, 15466), (28, 15550),

Gene: Swenson\_26 Start: 15387, Stop: 15653, Start Num: 13

Candidate Starts for Swenson\_26:

(2, 15264), (5, 15312), (6, 15321), (Start: 13 @15387 has 37 MA's), (19, 15435), (Start: 20 @15441 has 3 MA's), (26, 15516),

Gene: Taj14\_26 Start: 15253, Stop: 15519, Start Num: 13

Candidate Starts for Taj14\_26:

(Start: 13 @15253 has 37 MA's), (19, 15301), (Start: 20 @15307 has 3 MA's), (26, 15382),

Gene: TinoCrisci\_26 Start: 15263, Stop: 15529, Start Num: 13

Candidate Starts for TinoCrisci\_26:

(Start: 13 @15263 has 37 MA's), (Start: 20 @15317 has 3 MA's), (26, 15392), (28, 15476),

Gene: Toulouse\_25 Start: 15026, Stop: 15292, Start Num: 13

Candidate Starts for Toulouse\_25:

(Start: 13 @15026 has 37 MA's), (Start: 20 @15080 has 3 MA's), (26, 15155), (28, 15239),

Gene: TymAbreu\_26 Start: 15263, Stop: 15529, Start Num: 13

Candidate Starts for TymAbreu\_26:

(Start: 13 @15263 has 37 MA's), (Start: 20 @15317 has 3 MA's), (26, 15392), (28, 15476),

Gene: Yank\_26 Start: 15231, Stop: 15497, Start Num: 13

Candidate Starts for Yank\_26:

(Start: 13 @15231 has 37 MA's), (Start: 20 @15285 has 3 MA's), (26, 15360), (28, 15444),