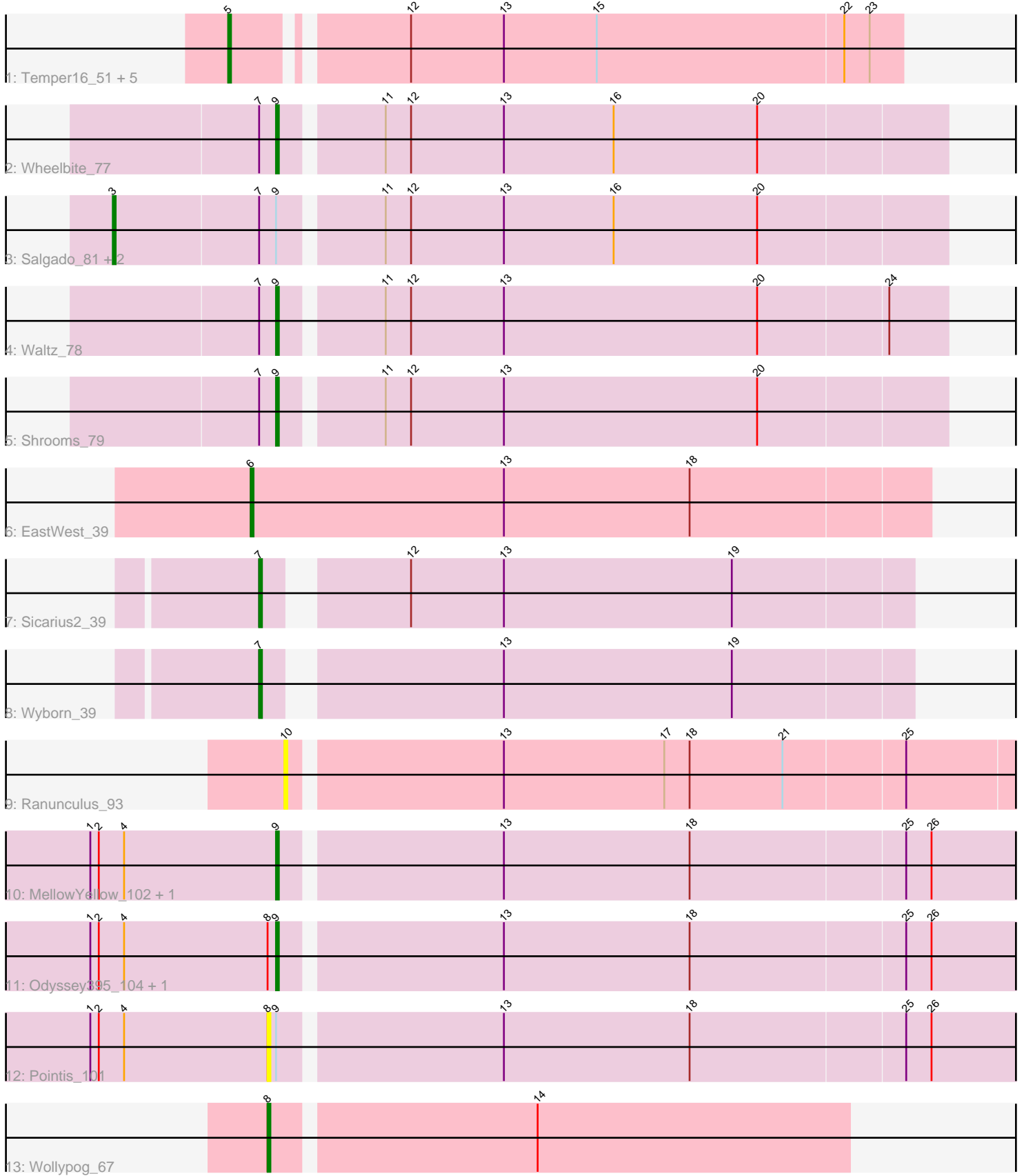


Pham 162159



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 162159 Report

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

Pham number 162159 has 22 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Temper16\_51, Sergei\_51, Maria1952\_50, Daiboju\_51, KingBob\_51, Herb\_51
- Track 2 : Wheelbite\_77
- Track 3 : Salgado\_81, LiSara\_78, Laroye\_81
- Track 4 : Waltz\_78
- Track 5 : Shrooms\_79
- Track 6 : EastWest\_39
- Track 7 : Sicarius2\_39
- Track 8 : Wyborn\_39
- Track 9 : Ranunculus\_93
- Track 10 : MellowYellow\_102, Pureglobe5\_104
- Track 11 : Odyssey395\_104, Beagle\_106
- Track 12 : Pointis\_101
- Track 13 : Wollypog\_67

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

The start number called the most often in the published annotations is 9, it was called in 6 of the 19 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Beagle\_106, MellowYellow\_102, Odyssey395\_104, Pureglobe5\_104, Shrooms\_79, Waltz\_78, Wheelbite\_77,

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

- Laroye\_81, LiSara\_78, Pointis\_101, Salgado\_81,

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

- Daiboju\_51, EastWest\_39, Herb\_51, KingBob\_51, Maria1952\_50, Ranunculus\_93, Sergei\_51, Sicarius2\_39, Temper16\_51, Wollypog\_67, Wyborn\_39,

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

Start 3:

- Found in 3 of 22 ( 13.6% ) of genes in pham
- Manual Annotations of this start: 3 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Laroye\_81 (AL), LiSara\_78 (AL), Salgado\_81 (AL),

#### Start 5:

- Found in 6 of 22 ( 27.3% ) of genes in pham
- Manual Annotations of this start: 6 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Daiboju\_51 (AK), Herb\_51 (AK), KingBob\_51 (AK), Maria1952\_50 (AK), Sergei\_51 (AK), Temper16\_51 (AK),

#### Start 6:

- Found in 1 of 22 ( 4.5% ) of genes in pham
- Manual Annotations of this start: 1 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EastWest\_39 (AO),

#### Start 7:

- Found in 8 of 22 ( 36.4% ) of genes in pham
- Manual Annotations of this start: 2 of 19
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Sicarius2\_39 (AO2), Wyborn\_39 (AO2),

#### Start 8:

- Found in 4 of 22 ( 18.2% ) of genes in pham
- Manual Annotations of this start: 1 of 19
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Pointis\_101 (AP2), Wollypog\_67 (singleton),

#### Start 9:

- Found in 11 of 22 ( 50.0% ) of genes in pham
- Manual Annotations of this start: 6 of 19
- Called 63.6% of time when present
- Phage (with cluster) where this start called: Beagle\_106 (AP2), MellowYellow\_102 (AP2), Odyssey395\_104 (AP2), Pureglobe5\_104 (AP2), Shrooms\_79 (AL), Waltz\_78 (AL), Wheelbite\_77 (AL),

#### Start 10:

- Found in 1 of 22 ( 4.5% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ranunculus\_93 (AP),

### Summary by clusters:

There are 7 clusters represented in this pham: singleton, AP2, AK, AL, AO, AP, AO2,

Info for manual annotations of cluster AK:

- Start number 5 was manually annotated 6 times for cluster AK.

Info for manual annotations of cluster AL:

- Start number 3 was manually annotated 3 times for cluster AL.
- Start number 9 was manually annotated 3 times for cluster AL.

Info for manual annotations of cluster AO:

- Start number 6 was manually annotated 1 time for cluster AO.

Info for manual annotations of cluster AO2:

- Start number 7 was manually annotated 2 times for cluster AO2.

Info for manual annotations of cluster AP2:

- Start number 9 was manually annotated 3 times for cluster AP2.

### **Gene Information:**

Gene: Beagle\_106 Start: 62400, Stop: 62143, Start Num: 9

Candidate Starts for Beagle\_106:

(1, 62466), (2, 62463), (4, 62454), (Start: 8 @62403 has 1 MA's), (Start: 9 @62400 has 6 MA's), (13, 62325), (18, 62259), (25, 62184), (26, 62175),

Gene: Daiboju\_51 Start: 39557, Stop: 39330, Start Num: 5

Candidate Starts for Daiboju\_51:

(Start: 5 @39557 has 6 MA's), (12, 39503), (13, 39470), (15, 39437), (22, 39350), (23, 39341),

Gene: EastWest\_39 Start: 30889, Stop: 31128, Start Num: 6

Candidate Starts for EastWest\_39:

(Start: 6 @30889 has 1 MA's), (13, 30979), (18, 31045),

Gene: Herb\_51 Start: 39556, Stop: 39329, Start Num: 5

Candidate Starts for Herb\_51:

(Start: 5 @39556 has 6 MA's), (12, 39502), (13, 39469), (15, 39436), (22, 39349), (23, 39340),

Gene: KingBob\_51 Start: 39557, Stop: 39330, Start Num: 5

Candidate Starts for KingBob\_51:

(Start: 5 @39557 has 6 MA's), (12, 39503), (13, 39470), (15, 39437), (22, 39350), (23, 39341),

Gene: Laroye\_81 Start: 47896, Stop: 48183, Start Num: 3

Candidate Starts for Laroye\_81:

(Start: 3 @47896 has 3 MA's), (Start: 7 @47947 has 2 MA's), (Start: 9 @47953 has 6 MA's), (11, 47986), (12, 47995), (13, 48028), (16, 48067), (20, 48118),

Gene: LiSara\_78 Start: 48030, Stop: 48317, Start Num: 3

Candidate Starts for LiSara\_78:

(Start: 3 @48030 has 3 MA's), (Start: 7 @48081 has 2 MA's), (Start: 9 @48087 has 6 MA's), (11, 48120), (12, 48129), (13, 48162), (16, 48201), (20, 48252),

Gene: Maria1952\_50 Start: 39556, Stop: 39329, Start Num: 5

Candidate Starts for Maria1952\_50:

(Start: 5 @39556 has 6 MA's), (12, 39502), (13, 39469), (15, 39436), (22, 39349), (23, 39340),

Gene: MellowYellow\_102 Start: 62019, Stop: 61762, Start Num: 9  
Candidate Starts for MellowYellow\_102:  
(1, 62085), (2, 62082), (4, 62073), (Start: 9 @62019 has 6 MA's), (13, 61944), (18, 61878), (25, 61803), (26, 61794),

Gene: Odyssey395\_104 Start: 61792, Stop: 61535, Start Num: 9  
Candidate Starts for Odyssey395\_104:  
(1, 61858), (2, 61855), (4, 61846), (Start: 8 @61795 has 1 MA's), (Start: 9 @61792 has 6 MA's), (13, 61717), (18, 61651), (25, 61576), (26, 61567),

Gene: Pointis\_101 Start: 61694, Stop: 61434, Start Num: 8  
Candidate Starts for Pointis\_101:  
(1, 61757), (2, 61754), (4, 61745), (Start: 8 @61694 has 1 MA's), (Start: 9 @61691 has 6 MA's), (13, 61616), (18, 61550), (25, 61475), (26, 61466),

Gene: Pureglobe5\_104 Start: 62350, Stop: 62093, Start Num: 9  
Candidate Starts for Pureglobe5\_104:  
(1, 62416), (2, 62413), (4, 62404), (Start: 9 @62350 has 6 MA's), (13, 62275), (18, 62209), (25, 62134), (26, 62125),

Gene: Ranunculus\_93 Start: 62669, Stop: 62394, Start Num: 10  
Candidate Starts for Ranunculus\_93:  
(10, 62669), (13, 62597), (17, 62540), (18, 62531), (21, 62498), (25, 62456),

Gene: Salgado\_81 Start: 47700, Stop: 47987, Start Num: 3  
Candidate Starts for Salgado\_81:  
(Start: 3 @47700 has 3 MA's), (Start: 7 @47751 has 2 MA's), (Start: 9 @47757 has 6 MA's), (11, 47790), (12, 47799), (13, 47832), (16, 47871), (20, 47922),

Gene: Sergei\_51 Start: 39557, Stop: 39330, Start Num: 5  
Candidate Starts for Sergei\_51:  
(Start: 5 @39557 has 6 MA's), (12, 39503), (13, 39470), (15, 39437), (22, 39350), (23, 39341),

Gene: Shrooms\_79 Start: 46206, Stop: 46436, Start Num: 9  
Candidate Starts for Shrooms\_79:  
(Start: 7 @46200 has 2 MA's), (Start: 9 @46206 has 6 MA's), (11, 46239), (12, 46248), (13, 46281), (20, 46371),

Gene: Sicarius2\_39 Start: 31113, Stop: 31331, Start Num: 7  
Candidate Starts for Sicarius2\_39:  
(Start: 7 @31113 has 2 MA's), (12, 31155), (13, 31188), (19, 31269),

Gene: Temper16\_51 Start: 39557, Stop: 39330, Start Num: 5  
Candidate Starts for Temper16\_51:  
(Start: 5 @39557 has 6 MA's), (12, 39503), (13, 39470), (15, 39437), (22, 39350), (23, 39341),

Gene: Waltz\_78 Start: 46221, Stop: 46451, Start Num: 9  
Candidate Starts for Waltz\_78:  
(Start: 7 @46215 has 2 MA's), (Start: 9 @46221 has 6 MA's), (11, 46254), (12, 46263), (13, 46296), (20, 46386), (24, 46431),

Gene: Wheelbite\_77 Start: 47915, Stop: 48145, Start Num: 9  
Candidate Starts for Wheelbite\_77:

(Start: 7 @47909 has 2 MA's), (Start: 9 @47915 has 6 MA's), (11, 47948), (12, 47957), (13, 47990), (16, 48029), (20, 48080),

Gene: Wollypog\_67 Start: 49672, Stop: 49872, Start Num: 8

Candidate Starts for Wollypog\_67:

(Start: 8 @49672 has 1 MA's), (14, 49762),

Gene: Wyborn\_39 Start: 31745, Stop: 31963, Start Num: 7

Candidate Starts for Wyborn\_39:

(Start: 7 @31745 has 2 MA's), (13, 31820), (19, 31901),