



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 164078 Report

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

Pham number 164078 has 11 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Kudefre\_45, Syleon\_46
- Track 2 : Octobien14\_47
- Track 3 : Sephiroth\_46
- Track 4 : Lupine\_106
- Track 5 : Pavlo\_109, PhillyPhilly\_106, Hubbs\_108, Roman\_110, DejaVu\_109
- Track 6 : VanLee\_135

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

The start number called the most often in the published annotations is 10, it was called in 6 of the 11 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- DejaVu\_109, Hubbs\_108, Lupine\_106, Pavlo\_109, PhillyPhilly\_106, Roman\_110,

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

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

- Kudefre\_45, Octobien14\_47, Sephiroth\_46, Syleon\_46, VanLee\_135,

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

Start 5:

- Found in 3 of 11 ( 27.3% ) of genes in pham
- Manual Annotations of this start: 3 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kudefre\_45 (DU1), Sephiroth\_46 (DU1), Syleon\_46 (DU1),

Start 6:

- Found in 4 of 11 ( 36.4% ) of genes in pham
- Manual Annotations of this start: 1 of 11
- Called 25.0% of time when present

- Phage (with cluster) where this start called: Octobien14\_47 (DU1),

Start 9:

- Found in 1 of 11 ( 9.1% ) of genes in pham
- Manual Annotations of this start: 1 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: VanLee\_135 (singleton),

Start 10:

- Found in 6 of 11 ( 54.5% ) of genes in pham
- Manual Annotations of this start: 6 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DejaVu\_109 (ED1), Hubbs\_108 (ED1), Lupine\_106 (ED1), Pavlo\_109 (ED1), PhillyPhilly\_106 (ED1), Roman\_110 (ED1),

### **Summary by clusters:**

There are 3 clusters represented in this pham: DU1, singleton, ED1,

Info for manual annotations of cluster DU1:

- Start number 5 was manually annotated 3 times for cluster DU1.
- Start number 6 was manually annotated 1 time for cluster DU1.

Info for manual annotations of cluster ED1:

- Start number 10 was manually annotated 6 times for cluster ED1.

### **Gene Information:**

Gene: DejaVu\_109 Start: 57612, Stop: 57202, Start Num: 10

Candidate Starts for DejaVu\_109:

(Start: 10 @57612 has 6 MA's), (11, 57570), (13, 57510), (15, 57450), (16, 57408), (21, 57306),

Gene: Hubbs\_108 Start: 57876, Stop: 57466, Start Num: 10

Candidate Starts for Hubbs\_108:

(Start: 10 @57876 has 6 MA's), (11, 57834), (13, 57774), (15, 57714), (16, 57672), (21, 57570),

Gene: Kudrefre\_45 Start: 34124, Stop: 34657, Start Num: 5

Candidate Starts for Kudrefre\_45:

(1, 33998), (2, 34007), (Start: 5 @34124 has 3 MA's), (Start: 6 @34136 has 1 MA's), (11, 34295), (14, 34397), (16, 34448), (18, 34490), (20, 34526),

Gene: Lupine\_106 Start: 57058, Stop: 56648, Start Num: 10

Candidate Starts for Lupine\_106:

(Start: 10 @57058 has 6 MA's), (11, 57016), (13, 56956), (15, 56896), (16, 56854), (21, 56752),

Gene: Octobien14\_47 Start: 34822, Stop: 35292, Start Num: 6

Candidate Starts for Octobien14\_47:

(3, 34765), (4, 34783), (Start: 6 @34822 has 1 MA's), (7, 34867), (8, 34879), (12, 34957), (16, 35053), (22, 35221),

Gene: Pavlo\_109 Start: 58271, Stop: 57861, Start Num: 10

Candidate Starts for Pavlo\_109:

(Start: 10 @58271 has 6 MA's), (11, 58229), (13, 58169), (15, 58109), (16, 58067), (21, 57965),

Gene: PhillyPhilly\_106 Start: 57260, Stop: 56850, Start Num: 10

Candidate Starts for PhillyPhilly\_106:

(Start: 10 @57260 has 6 MA's), (11, 57218), (13, 57158), (15, 57098), (16, 57056), (21, 56954),

Gene: Roman\_110 Start: 58320, Stop: 57910, Start Num: 10

Candidate Starts for Roman\_110:

(Start: 10 @58320 has 6 MA's), (11, 58278), (13, 58218), (15, 58158), (16, 58116), (21, 58014),

Gene: Sephiroth\_46 Start: 34293, Stop: 34826, Start Num: 5

Candidate Starts for Sephiroth\_46:

(1, 34167), (2, 34176), (Start: 5 @34293 has 3 MA's), (Start: 6 @34305 has 1 MA's), (11, 34464), (16, 34617), (17, 34644), (18, 34659), (20, 34695),

Gene: Syleon\_46 Start: 34218, Stop: 34751, Start Num: 5

Candidate Starts for Syleon\_46:

(1, 34092), (2, 34101), (Start: 5 @34218 has 3 MA's), (Start: 6 @34230 has 1 MA's), (11, 34389), (14, 34491), (16, 34542), (18, 34584), (20, 34620),

Gene: VanLee\_135 Start: 73104, Stop: 72706, Start Num: 9

Candidate Starts for VanLee\_135:

(Start: 9 @73104 has 1 MA's), (12, 73008), (19, 72846),