

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 216668 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216668 has 15 members, 5 are drafts.

Phages represented in each track:

Track 1 : Carthage\_51Track 2 : Robyn\_52

• Track 3 : Olivio 50

• Track 4: PhlipPhlop\_80, Starcevich\_80, LilMoolah\_78, EmiMonkey\_80, Fastidio\_80, Totinger 82, GigiOuiOui 74, LittleShirley 86, Nivrat 76, Vivum 82

Track 5 : Che8\_83Track 6 : Violac 84

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

The start number called the most often in the published annotations is 7, it was called in 8 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Che8\_83, EmiMonkey\_80, Fastidio\_80, GigiOuiOui\_74, LilMoolah\_78, LittleShirley\_86, Nivrat\_76, PhlipPhlop\_80, Starcevich\_80, Totinger\_82, Violac\_84, Vivum\_82,

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

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

Carthage\_51, Olivio\_50, Robyn\_52,

## **Summary by start number:**

#### Start 5:

- Found in 2 of 15 (13.3%) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Carthage\_51 (B1),

# Start 7:

• Found in 12 of 15 (80.0%) of genes in pham

- Manual Annotations of this start: 8 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Che8\_83 (F1), EmiMonkey\_80 (F1), Fastidio\_80 (F1), GigiOuiOui\_74 (F1), LilMoolah\_78 (F1), LittleShirley\_86 (F1), Nivrat\_76 (F1), PhlipPhlop\_80 (F1), Starcevich\_80 (F1), Totinger\_82 (F1), Violac\_84 (F1), Vivum\_82 (F1),

#### Start 8:

- Found in 2 of 15 (13.3%) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Robyn\_52 (B1),

### Start 9:

- Found in 1 of 15 (6.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Olivio 50 (B3),

### **Summary by clusters:**

There are 3 clusters represented in this pham: F1, B1, B3,

Info for manual annotations of cluster B1:

- •Start number 5 was manually annotated 1 time for cluster B1.
- •Start number 8 was manually annotated 1 time for cluster B1.

Info for manual annotations of cluster F1:

•Start number 7 was manually annotated 8 times for cluster F1.

#### Gene Information:

Gene: Carthage\_51 Start: 46401, Stop: 46021, Start Num: 5

Candidate Starts for Carthage\_51:

(1, 46506), (4, 46449), (Start: 5 @46401 has 1 MA's), (6, 46395), (Start: 8 @46347 has 1 MA's), (12, 46278), (13, 46272), (15, 46191), (16, 46185), (17, 46053),

Gene: Che8 83 Start: 48984, Stop: 49319, Start Num: 7

Candidate Starts for Che8 83:

(Start: 7 @ 48984 has 8 MA's), (10, 49020), (15, 49134), (16, 49140), (17, 49272), (18, 49290),

Gene: EmiMonkey\_80 Start: 52533, Stop: 52862, Start Num: 7

Candidate Starts for EmiMonkey\_80:

(Start: 7 @52533 has 8 MA's), (12, 52608), (13, 52614), (15, 52683), (16, 52689), (17, 52821),

Gene: Fastidio 80 Start: 45795, Stop: 46124, Start Num: 7

Candidate Starts for Fastidio 80:

(Start: 7 @ 45795 has 8 MA's), (12, 45870), (13, 45876), (15, 45945), (16, 45951), (17, 46083),

Gene: GigiOuiOui\_74 Start: 47391, Stop: 47720, Start Num: 7

Candidate Starts for GigiOuiOui 74:

(Start: 7 @ 47391 has 8 MA's), (12, 47466), (13, 47472), (15, 47541), (16, 47547), (17, 47679),

Gene: LilMoolah\_78 Start: 48539, Stop: 48874, Start Num: 7

Candidate Starts for LilMoolah\_78:

(Start: 7 @48539 has 8 MA's), (12, 48614), (13, 48620), (15, 48689), (16, 48695), (17, 48827),

Gene: LittleShirley 86 Start: 49468, Stop: 49797, Start Num: 7

Candidate Starts for LittleShirley\_86:

(Start: 7 @ 49468 has 8 MA's), (12, 49543), (13, 49549), (15, 49618), (16, 49624), (17, 49756),

Gene: Nivrat\_76 Start: 48412, Stop: 48747, Start Num: 7

Candidate Starts for Nivrat\_76:

(Start: 7 @48412 has 8 MA's), (12, 48487), (13, 48493), (15, 48562), (16, 48568), (17, 48700),

Gene: Olivio\_50 Start: 45330, Stop: 45019, Start Num: 9

Candidate Starts for Olivio 50:

(2, 45462), (3, 45450), (9, 45330), (11, 45300), (14, 45240), (15, 45204), (16, 45198), (17, 45066),

Gene: PhlipPhlop\_80 Start: 52533, Stop: 52862, Start Num: 7

Candidate Starts for PhlipPhlop 80:

(Start: 7 @52533 has 8 MA's), (12, 52608), (13, 52614), (15, 52683), (16, 52689), (17, 52821),

Gene: Robyn\_52 Start: 47008, Stop: 46682, Start Num: 8

Candidate Starts for Robyn\_52:

(1, 47167), (4, 47110), (Start: 5 @ 47062 has 1 MA's), (6, 47056), (Start: 8 @ 47008 has 1 MA's), (12, 46939), (13, 46933), (15, 46852), (16, 46846), (17, 46714),

Gene: Starcevich\_80 Start: 49749, Stop: 50078, Start Num: 7

Candidate Starts for Starcevich\_80:

(Start: 7 @ 49749 has 8 MA's), (12, 49824), (13, 49830), (15, 49899), (16, 49905), (17, 50037),

Gene: Totinger\_82 Start: 48545, Stop: 48874, Start Num: 7

Candidate Starts for Totinger 82:

(Start: 7 @ 48545 has 8 MA's), (12, 48620), (13, 48626), (15, 48695), (16, 48701), (17, 48833),

Gene: Violac\_84 Start: 49810, Stop: 50139, Start Num: 7

Candidate Starts for Violac\_84:

(Start: 7 @49810 has 8 MA's), (10, 49846), (15, 49960), (16, 49966), (17, 50098),

Gene: Vivum\_82 Start: 50435, Stop: 50764, Start Num: 7

Candidate Starts for Vivum\_82:

(Start: 7 @ 50435 has 8 MA's), (12, 50510), (13, 50516), (15, 50585), (16, 50591), (17, 50723),