



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 291387 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291387 has 32 members, 10 are drafts.

Phages represented in each track:

- Track 1 : Kinmap\_4
- Track 2 : Onglai\_4, ExplosioNervosa\_3, HortumSL17\_3, Lilleskat\_2, Hanray\_3, Holecx\_3, Ugenie5\_2, Phaeder\_3, Aliter\_3, Tubs\_3, Fayely\_3, Ayanochan\_4, Scherzo\_3, Catalina\_3, PackMan\_3, EdogawaKiddo\_2, Beemo\_3, Sachima\_2, Jiawan\_3, Pioneer\_3, RyeScarlet\_4, Phonnegut\_3, Myxus\_3
- Track 3 : Eidsmoe\_3, Priya\_3, Qobbit\_3, Alma\_3, Conquerage\_3, Spouty\_3, EmyBug\_3
- Track 4 : Toaka\_3

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

The start number called the most often in the published annotations is 2, it was called in 21 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aliter\_3, Alma\_3, Ayanochan\_4, Beemo\_3, Catalina\_3, Conquerage\_3, EdogawaKiddo\_2, Eidsmoe\_3, EmyBug\_3, ExplosioNervosa\_3, Fayely\_3, Hanray\_3, Holecx\_3, HortumSL17\_3, Jiawan\_3, Lilleskat\_2, Myxus\_3, Onglai\_4, PackMan\_3, Phaeder\_3, Phonnegut\_3, Pioneer\_3, Priya\_3, Qobbit\_3, RyeScarlet\_4, Sachima\_2, Scherzo\_3, Spouty\_3, Tubs\_3, Ugenie5\_2,

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:

- Kinmap\_4, Toaka\_3,

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

Start 1:

- Found in 2 of 32 ( 6.2% ) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kinmap\_4 (A21), Toaka\_3 (A9),

#### Start 2:

- Found in 30 of 32 ( 93.8% ) of genes in pham
- Manual Annotations of this start: 21 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aliter\_3 (A9), Alma\_3 (A9), Ayanochan\_4 (A9), Beemo\_3 (A9), Catalina\_3 (A9), Conquerage\_3 (A9), EdogawaKiddo\_2 (A9), Eidsmoe\_3 (A9), EmyBug\_3 (A9), ExplosioNervosa\_3 (A9), Fayely\_3 (A9), Hanray\_3 (A9), Hoxex\_3 (A9), HortumSL17\_3 (A9), Jiawan\_3 (A9), Lilleskat\_2 (A9), Myxus\_3 (A9), Onglai\_4 (A9), PackMan\_3 (A9), Phaeder\_3 (A9), Phonnegut\_3 (A9), Pioneer\_3 (A9), Priya\_3 (A9), Qobbit\_3 (A9), RyeScarlet\_4 (A9), Sachima\_2 (A9), Scherzo\_3 (A9), Spouty\_3 (A9), Tubs\_3 (A9), Ugenie5\_2 (A9),

#### Summary by clusters:

There are 2 clusters represented in this pham: A9, A21,

#### Info for manual annotations of cluster A9:

- Start number 1 was manually annotated 1 time for cluster A9.
- Start number 2 was manually annotated 21 times for cluster A9.

#### **Gene Information:**

Gene: Aliter\_3 Start: 2111, Stop: 2338, Start Num: 2

Candidate Starts for Aliter\_3:

(Start: 2 @2111 has 21 MA's), (6, 2255),

Gene: Alma\_3 Start: 2109, Stop: 2336, Start Num: 2

Candidate Starts for Alma\_3:

(Start: 2 @2109 has 21 MA's), (6, 2253),

Gene: Ayanochan\_4 Start: 2111, Stop: 2338, Start Num: 2

Candidate Starts for Ayanochan\_4:

(Start: 2 @2111 has 21 MA's), (6, 2255),

Gene: Beemo\_3 Start: 2112, Stop: 2339, Start Num: 2

Candidate Starts for Beemo\_3:

(Start: 2 @2112 has 21 MA's), (6, 2256),

Gene: Catalina\_3 Start: 2111, Stop: 2338, Start Num: 2

Candidate Starts for Catalina\_3:

(Start: 2 @2111 has 21 MA's), (6, 2255),

Gene: Conquerage\_3 Start: 2108, Stop: 2335, Start Num: 2

Candidate Starts for Conquerage\_3:

(Start: 2 @2108 has 21 MA's), (6, 2252),

Gene: EdogawaKiddo\_2 Start: 2111, Stop: 2338, Start Num: 2

Candidate Starts for EdogawaKiddo\_2:

(Start: 2 @2111 has 21 MA's), (6, 2255),

Gene: Eidsmoe\_3 Start: 2108, Stop: 2335, Start Num: 2  
Candidate Starts for Eidsmoe\_3:  
(Start: 2 @2108 has 21 MA's), (6, 2252),

Gene: EmyBug\_3 Start: 2108, Stop: 2335, Start Num: 2  
Candidate Starts for EmyBug\_3:  
(Start: 2 @2108 has 21 MA's), (6, 2252),

Gene: ExplosioNervosa\_3 Start: 2111, Stop: 2338, Start Num: 2  
Candidate Starts for ExplosioNervosa\_3:  
(Start: 2 @2111 has 21 MA's), (6, 2255),

Gene: Fayely\_3 Start: 2111, Stop: 2338, Start Num: 2  
Candidate Starts for Fayely\_3:  
(Start: 2 @2111 has 21 MA's), (6, 2255),

Gene: Hanray\_3 Start: 2111, Stop: 2338, Start Num: 2  
Candidate Starts for Hanray\_3:  
(Start: 2 @2111 has 21 MA's), (6, 2255),

Gene: Horex\_3 Start: 2111, Stop: 2338, Start Num: 2  
Candidate Starts for Horex\_3:  
(Start: 2 @2111 has 21 MA's), (6, 2255),

Gene: HortumSL17\_3 Start: 2111, Stop: 2338, Start Num: 2  
Candidate Starts for HortumSL17\_3:  
(Start: 2 @2111 has 21 MA's), (6, 2255),

Gene: Jiawan\_3 Start: 2111, Stop: 2338, Start Num: 2  
Candidate Starts for Jiawan\_3:  
(Start: 2 @2111 has 21 MA's), (6, 2255),

Gene: Kinmap\_4 Start: 2269, Stop: 2490, Start Num: 1  
Candidate Starts for Kinmap\_4:  
(Start: 1 @2269 has 1 MA's), (3, 2275), (5, 2314),

Gene: Lilleskat\_2 Start: 2111, Stop: 2338, Start Num: 2  
Candidate Starts for Lilleskat\_2:  
(Start: 2 @2111 has 21 MA's), (6, 2255),

Gene: Myxus\_3 Start: 2111, Stop: 2338, Start Num: 2  
Candidate Starts for Myxus\_3:  
(Start: 2 @2111 has 21 MA's), (6, 2255),

Gene: Onglai\_4 Start: 2111, Stop: 2338, Start Num: 2  
Candidate Starts for Onglai\_4:  
(Start: 2 @2111 has 21 MA's), (6, 2255),

Gene: PackMan\_3 Start: 2111, Stop: 2338, Start Num: 2  
Candidate Starts for PackMan\_3:  
(Start: 2 @2111 has 21 MA's), (6, 2255),

Gene: Phaeder\_3 Start: 2111, Stop: 2338, Start Num: 2  
Candidate Starts for Phaeder\_3:  
(Start: 2 @2111 has 21 MA's), (6, 2255),

Gene: Phonnegut\_3 Start: 2111, Stop: 2338, Start Num: 2  
Candidate Starts for Phonnegut\_3:  
(Start: 2 @2111 has 21 MA's), (6, 2255),

Gene: Pioneer\_3 Start: 2111, Stop: 2338, Start Num: 2  
Candidate Starts for Pioneer\_3:  
(Start: 2 @2111 has 21 MA's), (6, 2255),

Gene: Priya\_3 Start: 2108, Stop: 2335, Start Num: 2  
Candidate Starts for Priya\_3:  
(Start: 2 @2108 has 21 MA's), (6, 2252),

Gene: Qobbit\_3 Start: 2108, Stop: 2335, Start Num: 2  
Candidate Starts for Qobbit\_3:  
(Start: 2 @2108 has 21 MA's), (6, 2252),

Gene: RyeScarlet\_4 Start: 2111, Stop: 2338, Start Num: 2  
Candidate Starts for RyeScarlet\_4:  
(Start: 2 @2111 has 21 MA's), (6, 2255),

Gene: Sachima\_2 Start: 2111, Stop: 2338, Start Num: 2  
Candidate Starts for Sachima\_2:  
(Start: 2 @2111 has 21 MA's), (6, 2255),

Gene: Scherzo\_3 Start: 2111, Stop: 2338, Start Num: 2  
Candidate Starts for Scherzo\_3:  
(Start: 2 @2111 has 21 MA's), (6, 2255),

Gene: Spouty\_3 Start: 2108, Stop: 2335, Start Num: 2  
Candidate Starts for Spouty\_3:  
(Start: 2 @2108 has 21 MA's), (6, 2252),

Gene: Toaka\_3 Start: 2171, Stop: 2392, Start Num: 1  
Candidate Starts for Toaka\_3:  
(Start: 1 @2171 has 1 MA's), (4, 2189), (7, 2354),

Gene: Tubs\_3 Start: 2111, Stop: 2338, Start Num: 2  
Candidate Starts for Tubs\_3:  
(Start: 2 @2111 has 21 MA's), (6, 2255),

Gene: Ugenie5\_2 Start: 2111, Stop: 2338, Start Num: 2  
Candidate Starts for Ugenie5\_2:  
(Start: 2 @2111 has 21 MA's), (6, 2255),