



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 291429 Report

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

Pham number 291429 has 28 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Hutc2\_58, Snape\_58, Ebony\_58, Kimba\_58, TinyTimmy\_58, Munch\_59, Fibonacci\_58, Petersenfast\_57, Aneem\_59, Bud\_58, Gilberta\_59, Joselito\_59, Mabel\_58, Salz\_57, Flaverint\_59, Lucivia\_59, Orange\_58, Bowtie\_59, Saskia\_59, Et2Brutus\_57, Bachome\_60, Insomnia\_59, Wolpertinger\_57, MaCh\_59, Jabith\_59, Timothy\_58, Mulciber\_58, Sham4\_58

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

The start number called the most often in the published annotations is 1, it was called in 24 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aneem\_59, Bachome\_60, Bowtie\_59, Bud\_58, Ebony\_58, Et2Brutus\_57, Fibonacci\_58, Flaverint\_59, Gilberta\_59, Hutc2\_58, Insomnia\_59, Jabith\_59, Joselito\_59, Kimba\_58, Lucivia\_59, MaCh\_59, Mabel\_58, Mulciber\_58, Munch\_59, Orange\_58, Petersenfast\_57, Salz\_57, Saskia\_59, Sham4\_58, Snape\_58, Timothy\_58, TinyTimmy\_58, Wolpertinger\_57,

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

- 

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

- 

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

Start 1:

- Found in 28 of 28 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 24 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aneem\_59 (A11), Bachome\_60 (A11), Bowtie\_59 (A11), Bud\_58 (A11), Ebony\_58 (A11), Et2Brutus\_57 (A11), Fibonacci\_58 (A11), Flaverint\_59 (A11), Gilberta\_59 (A11), Hutc2\_58 (A11), Insomnia\_59 (A11), Jabith\_59 (A11), Joselito\_59 (A11), Kimba\_58 (A11), Lucivia\_59 (A11), MaCh\_59

(A11), Mabel\_58 (A11), Mulciber\_58 (A11), Munch\_59 (A11), Orange\_58 (A11), Petersenfast\_57 (A11), Salz\_57 (A11), Saskia\_59 (A11), Sham4\_58 (A11), Snape\_58 (A11), Timothy\_58 (A11), TinyTimmy\_58 (A11), Wolpertinger\_57 (A11),

### **Summary by clusters:**

There is one cluster represented in this pham: A11

Info for manual annotations of cluster A11:

•Start number 1 was manually annotated 24 times for cluster A11.

### **Gene Information:**

Gene: Aneem\_59 Start: 38016, Stop: 37783, Start Num: 1

Candidate Starts for Aneem\_59:

(Start: 1 @38016 has 24 MA's), (2, 37908), (3, 37905), (4, 37869), (5, 37863),

Gene: Bachome\_60 Start: 37996, Stop: 37763, Start Num: 1

Candidate Starts for Bachome\_60:

(Start: 1 @37996 has 24 MA's), (2, 37888), (3, 37885), (4, 37849), (5, 37843),

Gene: Bowtie\_59 Start: 38023, Stop: 37790, Start Num: 1

Candidate Starts for Bowtie\_59:

(Start: 1 @38023 has 24 MA's), (2, 37915), (3, 37912), (4, 37876), (5, 37870),

Gene: Bud\_58 Start: 37570, Stop: 37337, Start Num: 1

Candidate Starts for Bud\_58:

(Start: 1 @37570 has 24 MA's), (2, 37462), (3, 37459), (4, 37423), (5, 37417),

Gene: Ebony\_58 Start: 37587, Stop: 37354, Start Num: 1

Candidate Starts for Ebony\_58:

(Start: 1 @37587 has 24 MA's), (2, 37479), (3, 37476), (4, 37440), (5, 37434),

Gene: Et2Brutus\_57 Start: 37550, Stop: 37317, Start Num: 1

Candidate Starts for Et2Brutus\_57:

(Start: 1 @37550 has 24 MA's), (2, 37442), (3, 37439), (4, 37403), (5, 37397),

Gene: Fibonacci\_58 Start: 37556, Stop: 37323, Start Num: 1

Candidate Starts for Fibonacci\_58:

(Start: 1 @37556 has 24 MA's), (2, 37448), (3, 37445), (4, 37409), (5, 37403),

Gene: Flaverint\_59 Start: 38014, Stop: 37781, Start Num: 1

Candidate Starts for Flaverint\_59:

(Start: 1 @38014 has 24 MA's), (2, 37906), (3, 37903), (4, 37867), (5, 37861),

Gene: Gilberta\_59 Start: 38007, Stop: 37774, Start Num: 1

Candidate Starts for Gilberta\_59:

(Start: 1 @38007 has 24 MA's), (2, 37899), (3, 37896), (4, 37860), (5, 37854),

Gene: Hutc2\_58 Start: 37556, Stop: 37323, Start Num: 1

Candidate Starts for Hutc2\_58:

(Start: 1 @37556 has 24 MA's), (2, 37448), (3, 37445), (4, 37409), (5, 37403),

Gene: Insomnia\_59 Start: 38067, Stop: 37834, Start Num: 1

Candidate Starts for Insomnia\_59:

(Start: 1 @38067 has 24 MA's), (2, 37959), (3, 37956), (4, 37920), (5, 37914),

Gene: Jabith\_59 Start: 38068, Stop: 37835, Start Num: 1

Candidate Starts for Jabith\_59:

(Start: 1 @38068 has 24 MA's), (2, 37960), (3, 37957), (4, 37921), (5, 37915),

Gene: Joselito\_59 Start: 38016, Stop: 37783, Start Num: 1

Candidate Starts for Joselito\_59:

(Start: 1 @38016 has 24 MA's), (2, 37908), (3, 37905), (4, 37869), (5, 37863),

Gene: Kimba\_58 Start: 37588, Stop: 37355, Start Num: 1

Candidate Starts for Kimba\_58:

(Start: 1 @37588 has 24 MA's), (2, 37480), (3, 37477), (4, 37441), (5, 37435),

Gene: Lucivia\_59 Start: 38065, Stop: 37832, Start Num: 1

Candidate Starts for Lucivia\_59:

(Start: 1 @38065 has 24 MA's), (2, 37957), (3, 37954), (4, 37918), (5, 37912),

Gene: MaCh\_59 Start: 37995, Stop: 37762, Start Num: 1

Candidate Starts for MaCh\_59:

(Start: 1 @37995 has 24 MA's), (2, 37887), (3, 37884), (4, 37848), (5, 37842),

Gene: Mabel\_58 Start: 37597, Stop: 37364, Start Num: 1

Candidate Starts for Mabel\_58:

(Start: 1 @37597 has 24 MA's), (2, 37489), (3, 37486), (4, 37450), (5, 37444),

Gene: Mulciber\_58 Start: 37553, Stop: 37320, Start Num: 1

Candidate Starts for Mulciber\_58:

(Start: 1 @37553 has 24 MA's), (2, 37445), (3, 37442), (4, 37406), (5, 37400),

Gene: Munch\_59 Start: 38016, Stop: 37783, Start Num: 1

Candidate Starts for Munch\_59:

(Start: 1 @38016 has 24 MA's), (2, 37908), (3, 37905), (4, 37869), (5, 37863),

Gene: Orange\_58 Start: 37565, Stop: 37332, Start Num: 1

Candidate Starts for Orange\_58:

(Start: 1 @37565 has 24 MA's), (2, 37457), (3, 37454), (4, 37418), (5, 37412),

Gene: Petersenfast\_57 Start: 37564, Stop: 37331, Start Num: 1

Candidate Starts for Petersenfast\_57:

(Start: 1 @37564 has 24 MA's), (2, 37456), (3, 37453), (4, 37417), (5, 37411),

Gene: Salz\_57 Start: 37535, Stop: 37302, Start Num: 1

Candidate Starts for Salz\_57:

(Start: 1 @37535 has 24 MA's), (2, 37427), (3, 37424), (4, 37388), (5, 37382),

Gene: Saskia\_59 Start: 37563, Stop: 37330, Start Num: 1

Candidate Starts for Saskia\_59:

(Start: 1 @37563 has 24 MA's), (2, 37455), (3, 37452), (4, 37416), (5, 37410),

Gene: Sham4\_58 Start: 37563, Stop: 37330, Start Num: 1  
Candidate Starts for Sham4\_58:  
(Start: 1 @37563 has 24 MA's), (2, 37455), (3, 37452), (4, 37416), (5, 37410),

Gene: Snape\_58 Start: 37555, Stop: 37322, Start Num: 1  
Candidate Starts for Snape\_58:  
(Start: 1 @37555 has 24 MA's), (2, 37447), (3, 37444), (4, 37408), (5, 37402),

Gene: Timothy\_58 Start: 37532, Stop: 37299, Start Num: 1  
Candidate Starts for Timothy\_58:  
(Start: 1 @37532 has 24 MA's), (2, 37424), (3, 37421), (4, 37385), (5, 37379),

Gene: TinyTimmy\_58 Start: 37581, Stop: 37348, Start Num: 1  
Candidate Starts for TinyTimmy\_58:  
(Start: 1 @37581 has 24 MA's), (2, 37473), (3, 37470), (4, 37434), (5, 37428),

Gene: Wolpertinger\_57 Start: 37564, Stop: 37331, Start Num: 1  
Candidate Starts for Wolpertinger\_57:  
(Start: 1 @37564 has 24 MA's), (2, 37456), (3, 37453), (4, 37417), (5, 37411),