

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 221736 Report

This analysis was run 03/28/25 on database version 593.

Pham number 221736 has 23 members, 0 are drafts.

Phages represented in each track:

Track 1 : ChipMunk\_40, KingCyrus\_40, EvilGenius\_40

Track 2 : Benvolio\_35, Echild\_37

• Track 3: Leviathan\_39, Agape74\_39, LilTurb\_38, Turbido\_38, Dignity\_39,

Whabigail7\_38, Smeagan\_40, AbbyPaige\_39, Jerm\_39

• Track 4 : Anselm\_39, Fameo\_38, Dalmatian\_39, QueenB2\_38, Retro23\_39,

Heffalump\_38, DudeLittle\_37

Track 5 : Herbertwm\_34Track 6 : JoshKayV\_39

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

The start number called the most often in the published annotations is 8, it was called in 20 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• AbbyPaige\_39, Agape74\_39, Anselm\_39, ChipMunk\_40, Dalmatian\_39, Dignity\_39, DudeLittle\_37, EvilGenius\_40, Fameo\_38, Heffalump\_38, Jerm\_39, JoshKayV\_39, KingCyrus\_40, Leviathan\_39, LilTurb\_38, QueenB2\_38, Retro23\_39, Smeagan\_40, Turbido\_38, Whabigail7\_38,

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

Herbertwm\_34,

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

Benvolio\_35, Echild\_37,

## Summary by start number:

## Start 7:

- Found in 1 of 23 (4.3%) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Herbertwm\_34 (A2),

#### Start 8:

- Found in 21 of 23 (91.3%) of genes in pham
- Manual Annotation's of this start: 20 of 23
- Called 95.2% of time when present
- Phage (with cluster) where this start called: AbbyPaige\_39 (A2), Agape74\_39 (A2), Anselm\_39 (A2), ChipMunk\_40 (A2), Dalmatian\_39 (A2), Dignity\_39 (A2), DudeLittle\_37 (A2), EvilGenius\_40 (A2), Fameo\_38 (A2), Heffalump\_38 (A2), Jerm\_39 (A2), JoshKayV\_39 (A2), KingCyrus\_40 (A2), Leviathan\_39 (A2), LilTurb\_38 (A2), QueenB2\_38 (A2), Retro23\_39 (A2), Smeagan\_40 (A2), Turbido\_38 (A2), Whabigail7\_38 (A2),

### Start 10:

- Found in 2 of 23 (8.7%) of genes in pham
- Manual Annotations of this start: 2 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Benvolio\_35 (A2), Echild\_37 (A2),

# Summary by clusters:

There is one cluster represented in this pham: A2

Info for manual annotations of cluster A2:

- •Start number 7 was manually annotated 1 time for cluster A2.
- •Start number 8 was manually annotated 20 times for cluster A2.
- •Start number 10 was manually annotated 2 times for cluster A2.

## Gene Information:

Gene: AbbyPaige\_39 Start: 28411, Stop: 28214, Start Num: 8 Candidate Starts for AbbyPaige\_39: (Start: 8 @28411 has 20 MA's),

Gene: Agape74\_39 Start: 28396, Stop: 28199, Start Num: 8 Candidate Starts for Agape74\_39: (Start: 8 @28396 has 20 MA's),

Gene: Anselm\_39 Start: 28514, Stop: 28317, Start Num: 8

Candidate Starts for Anselm\_39:

(Start: 8 @28514 has 20 MA's), (13, 28340),

Gene: Benvolio\_35 Start: 27475, Stop: 27290, Start Num: 10

Candidate Starts for Benvolio\_35:

(5, 27652), (Start: 10 @27475 has 2 MA's),

Gene: ChipMunk\_40 Start: 29841, Stop: 29644, Start Num: 8 Candidate Starts for ChipMunk\_40: (3, 30132), (6, 29946), (Start: 8 @29841 has 20 MA's),

Gene: Dalmatian\_39 Start: 28490, Stop: 28293, Start Num: 8

Candidate Starts for Dalmatian\_39:

(Start: 8 @28490 has 20 MA's), (13, 28316),

Gene: Dignity\_39 Start: 28476, Stop: 28279, Start Num: 8

Candidate Starts for Dignity\_39: (Start: 8 @28476 has 20 MA's),

Gene: DudeLittle 37 Start: 28156, Stop: 27959, Start Num: 8

Candidate Starts for DudeLittle\_37:

(Start: 8 @28156 has 20 MA's), (13, 27982),

Gene: Echild\_37 Start: 27499, Stop: 27314, Start Num: 10

Candidate Starts for Echild 37:

(5, 27676), (Start: 10 @27499 has 2 MA's),

Gene: EvilGenius\_40 Start: 29845, Stop: 29648, Start Num: 8

Candidate Starts for EvilGenius\_40:

(3, 30136), (6, 29950), (Start: 8 @29845 has 20 MA's),

Gene: Fameo\_38 Start: 28284, Stop: 28087, Start Num: 8

Candidate Starts for Fameo 38:

(Start: 8 @28284 has 20 MA's), (13, 28110),

Gene: Heffalump\_38 Start: 29016, Stop: 28819, Start Num: 8

Candidate Starts for Heffalump\_38:

(Start: 8 @ 29016 has 20 MA's), (13, 28842),

Gene: Herbertwm\_34 Start: 26537, Stop: 26337, Start Num: 7

Candidate Starts for Herbertwm\_34:

(Start: 7 @ 26537 has 1 MA's), (Start: 8 @ 26534 has 20 MA's), (9, 26525), (11, 26522), (12, 26423),

(14, 26354),

Gene: Jerm\_39 Start: 28469, Stop: 28272, Start Num: 8

Candidate Starts for Jerm\_39: (Start: 8 @28469 has 20 MA's),

Gene: JoshKayV\_39 Start: 28432, Stop: 28235, Start Num: 8

Candidate Starts for JoshKayV\_39:

(1, 28948), (2, 28765), (4, 28642), (Start: 8 @28432 has 20 MA's),

Gene: KingCyrus 40 Start: 29840, Stop: 29643, Start Num: 8

Candidate Starts for KingCyrus\_40:

(3, 30131), (6, 29945), (Start: 8 @29840 has 20 MA's),

Gene: Leviathan\_39 Start: 28525, Stop: 28328, Start Num: 8

Candidate Starts for Leviathan\_39: (Start: 8 @28525 has 20 MA's),

Gene: LilTurb\_38 Start: 28358, Stop: 28161, Start Num: 8

Candidate Starts for LilTurb\_38: (Start: 8 @28358 has 20 MA's),

Gene: QueenB2\_38 Start: 28202, Stop: 28005, Start Num: 8

Candidate Starts for QueenB2 38:

(Start: 8 @28202 has 20 MA's), (13, 28028),

Gene: Retro23\_39 Start: 28486, Stop: 28289, Start Num: 8

Candidate Starts for Retro23\_39:

(Start: 8 @28486 has 20 MA's), (13, 28312),

Gene: Smeagan\_40 Start: 28612, Stop: 28415, Start Num: 8

Candidate Starts for Smeagan\_40: (Start: 8 @28612 has 20 MA's),

Gene: Turbido\_38 Start: 28352, Stop: 28155, Start Num: 8

Candidate Starts for Turbido\_38: (Start: 8 @28352 has 20 MA's),

Gene: Whabigail7\_38 Start: 28340, Stop: 28143, Start Num: 8

Candidate Starts for Whabigail7\_38: (Start: 8 @28340 has 20 MA's),