



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 311648 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311648 has 56 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Canowicakte\_31, Suppi\_31, Wayne\_31, PartyCup\_31, Litotes\_31, CallieOMalley\_31, Graynor\_34, AppleCider\_31, MrBoss\_33
- Track 2 : Rozby\_31, Riverdale\_31, MrGloopy\_31, Beethoven\_31, Carpal\_31, Dino\_31, TattModd\_31, Fluke\_31, Jumboset\_31, Glenn\_31, RAP15\_31, Scuttle\_31, Zorro\_31, Savage2526\_31
- Track 3 : Potatoes\_31, Cholula\_31, Immaculata\_31
- Track 4 : DrRobert\_27, Lucy\_27, Makoto\_27
- Track 5 : Bodacious\_27, Lasagna\_27, Nancia\_27, LilStuart\_27, Christian\_27, Lennox\_27, CristinaYang\_27, ChewChew\_27, Pterodactyl\_27, PitaDog\_27
- Track 6 : Preamble\_27, DreamTeam\_27, Kittykat\_27, Gisselle\_27, Huckleberry\_27, BigMack\_27, Bennie\_27, HeadNerd\_27, Moki\_27, Urla\_28
- Track 7 : OurGirlNessie\_27
- Track 8 : MamaPearl\_28, EstebanJulior\_28
- Track 9 : Kalizoi\_31, BrotherBLo\_31
- Track 10 : Vallejo\_31
- Track 11 : Wawa\_31

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

The start number called the most often in the published annotations is 5, it was called in 54 of the 54 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AppleCider\_31, Beethoven\_31, Bennie\_27, BigMack\_27, Bodacious\_27, BrotherBLo\_31, CallieOMalley\_31, Canowicakte\_31, Carpal\_31, ChewChew\_27, Cholula\_31, Christian\_27, CristinaYang\_27, Dino\_31, DrRobert\_27, DreamTeam\_27, EstebanJulior\_28, Fluke\_31, Gisselle\_27, Glenn\_31, Graynor\_34, HeadNerd\_27, Huckleberry\_27, Immaculata\_31, Jumboset\_31, Kalizoi\_31, Kittykat\_27, Lasagna\_27, Lennox\_27, LilStuart\_27, Litotes\_31, Lucy\_27, Makoto\_27, MamaPearl\_28, Moki\_27, MrBoss\_33, MrGloopy\_31, Nancia\_27, OurGirlNessie\_27, PartyCup\_31, PitaDog\_27, Potatoes\_31, Preamble\_27, Pterodactyl\_27, RAP15\_31, Riverdale\_31, Rozby\_31, Savage2526\_31, Scuttle\_31, Suppi\_31, TattModd\_31, Urla\_28, Vallejo\_31, Wawa\_31, Wayne\_31, Zorro\_31,

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 5:

- Found in 56 of 56 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 54 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AppleCider\_31 (AK), Beethoven\_31 (AK), Bennie\_27 (AK), BigMack\_27 (AK), Bodacious\_27 (AK), BrotherBLo\_31 (AK), CallieOMalley\_31 (AK), Canowicakte\_31 (AK), Carpal\_31 (AK), ChewChew\_27 (AK), Cholula\_31 (AK), Christian\_27 (AK), CristinaYang\_27 (AK), Dino\_31 (AK), DrRobert\_27 (AK), DreamTeam\_27 (AK), EstebanJulior\_28 (AK), Fluke\_31 (AK), Gisselle\_27 (AK), Glenn\_31 (AK), Graynor\_34 (AK), HeadNerd\_27 (AK), Huckleberry\_27 (AK), Immaculata\_31 (AK), Jumboset\_31 (AK), Kalizoi\_31 (AK), Kittykat\_27 (AK), Lasagna\_27 (AK), Lennox\_27 (AK), LilStuart\_27 (AK), Litotes\_31 (AK), Lucy\_27 (AK), Makoto\_27 (AK), MamaPearl\_28 (AK), Moki\_27 (AK), MrBoss\_33 (AK), MrGloopy\_31 (AK), Nancia\_27 (AK), OurGirlNessie\_27 (AK), PartyCup\_31 (AK), PitaDog\_27 (AK), Potatoes\_31 (AK), Preamble\_27 (AK), Pterodactyl\_27 (AK), RAP15\_31 (AK), Riverdale\_31 (AK), Rozby\_31 (AK), Savage2526\_31 (AK), Scuttle\_31 (AK), Suppi\_31 (AK), TattModd\_31 (AK), Urla\_28 (AK), Vallejo\_31 (AK), Wawa\_31 (AK), Wayne\_31 (AK), Zorro\_31 (AK),

### Summary by clusters:

There is one cluster represented in this pham: AK

Info for manual annotations of cluster AK:

- Start number 5 was manually annotated 54 times for cluster AK.

### Gene Information:

Gene: AppleCider\_31 Start: 23828, Stop: 24055, Start Num: 5

Candidate Starts for AppleCider\_31:

(Start: 5 @23828 has 54 MA's), (8, 23930),

Gene: Beethoven\_31 Start: 23839, Stop: 24072, Start Num: 5

Candidate Starts for Beethoven\_31:

(Start: 5 @23839 has 54 MA's), (8, 23941),

Gene: Bennie\_27 Start: 22254, Stop: 22493, Start Num: 5

Candidate Starts for Bennie\_27:

(Start: 5 @22254 has 54 MA's),

Gene: BigMack\_27 Start: 22299, Stop: 22529, Start Num: 5

Candidate Starts for BigMack\_27:

(Start: 5 @22299 has 54 MA's),

Gene: Bodacious\_27 Start: 22315, Stop: 22542, Start Num: 5  
Candidate Starts for Bodacious\_27:  
(3, 22075), (Start: 5 @22315 has 54 MA's), (9, 22501),

Gene: BrotherBLo\_31 Start: 23845, Stop: 24078, Start Num: 5  
Candidate Starts for BrotherBLo\_31:  
(Start: 5 @23845 has 54 MA's), (6, 23893),

Gene: CallieOMalley\_31 Start: 23828, Stop: 24055, Start Num: 5  
Candidate Starts for CallieOMalley\_31:  
(Start: 5 @23828 has 54 MA's), (8, 23930),

Gene: Canowicakte\_31 Start: 23863, Stop: 24090, Start Num: 5  
Candidate Starts for Canowicakte\_31:  
(Start: 5 @23863 has 54 MA's), (8, 23965),

Gene: Carpal\_31 Start: 23846, Stop: 24079, Start Num: 5  
Candidate Starts for Carpal\_31:  
(Start: 5 @23846 has 54 MA's), (8, 23948),

Gene: ChewChew\_27 Start: 22310, Stop: 22537, Start Num: 5  
Candidate Starts for ChewChew\_27:  
(3, 22070), (Start: 5 @22310 has 54 MA's), (9, 22496),

Gene: Cholula\_31 Start: 23892, Stop: 24125, Start Num: 5  
Candidate Starts for Cholula\_31:  
(Start: 5 @23892 has 54 MA's), (6, 23940), (8, 23994),

Gene: Christian\_27 Start: 22311, Stop: 22538, Start Num: 5  
Candidate Starts for Christian\_27:  
(3, 22071), (Start: 5 @22311 has 54 MA's), (9, 22497),

Gene: CristinaYang\_27 Start: 22315, Stop: 22542, Start Num: 5  
Candidate Starts for CristinaYang\_27:  
(3, 22075), (Start: 5 @22315 has 54 MA's), (9, 22501),

Gene: Dino\_31 Start: 23844, Stop: 24077, Start Num: 5  
Candidate Starts for Dino\_31:  
(Start: 5 @23844 has 54 MA's), (8, 23946),

Gene: DrRobert\_27 Start: 22311, Stop: 22538, Start Num: 5  
Candidate Starts for DrRobert\_27:  
(3, 22071), (Start: 5 @22311 has 54 MA's),

Gene: DreamTeam\_27 Start: 22357, Stop: 22593, Start Num: 5  
Candidate Starts for DreamTeam\_27:  
(Start: 5 @22357 has 54 MA's),

Gene: EstebanJulior\_28 Start: 23485, Stop: 23709, Start Num: 5  
Candidate Starts for EstebanJulior\_28:  
(4, 23251), (Start: 5 @23485 has 54 MA's), (7, 23575),

Gene: Fluke\_31 Start: 23887, Stop: 24120, Start Num: 5  
Candidate Starts for Fluke\_31:  
(Start: 5 @23887 has 54 MA's), (8, 23989),

Gene: Gisselle\_27 Start: 22357, Stop: 22593, Start Num: 5  
Candidate Starts for Gisselle\_27:  
(Start: 5 @22357 has 54 MA's),

Gene: Glenn\_31 Start: 23896, Stop: 24129, Start Num: 5  
Candidate Starts for Glenn\_31:  
(Start: 5 @23896 has 54 MA's), (8, 23998),

Gene: Graynor\_34 Start: 23849, Stop: 24076, Start Num: 5  
Candidate Starts for Graynor\_34:  
(Start: 5 @23849 has 54 MA's), (8, 23951),

Gene: HeadNerd\_27 Start: 22254, Stop: 22493, Start Num: 5  
Candidate Starts for HeadNerd\_27:  
(Start: 5 @22254 has 54 MA's),

Gene: Huckleberry\_27 Start: 22254, Stop: 22493, Start Num: 5  
Candidate Starts for Huckleberry\_27:  
(Start: 5 @22254 has 54 MA's),

Gene: Immaculata\_31 Start: 23891, Stop: 24124, Start Num: 5  
Candidate Starts for Immaculata\_31:  
(Start: 5 @23891 has 54 MA's), (6, 23939), (8, 23993),

Gene: Jumboset\_31 Start: 23839, Stop: 24072, Start Num: 5  
Candidate Starts for Jumboset\_31:  
(Start: 5 @23839 has 54 MA's), (8, 23941),

Gene: Kalizoi\_31 Start: 23838, Stop: 24071, Start Num: 5  
Candidate Starts for Kalizoi\_31:  
(Start: 5 @23838 has 54 MA's), (6, 23886),

Gene: Kittykat\_27 Start: 22342, Stop: 22575, Start Num: 5  
Candidate Starts for Kittykat\_27:  
(Start: 5 @22342 has 54 MA's),

Gene: Lasagna\_27 Start: 22311, Stop: 22538, Start Num: 5  
Candidate Starts for Lasagna\_27:  
(3, 22071), (Start: 5 @22311 has 54 MA's), (9, 22497),

Gene: Lennox\_27 Start: 22299, Stop: 22526, Start Num: 5  
Candidate Starts for Lennox\_27:  
(3, 22059), (Start: 5 @22299 has 54 MA's), (9, 22485),

Gene: LilStuart\_27 Start: 22303, Stop: 22530, Start Num: 5  
Candidate Starts for LilStuart\_27:  
(3, 22063), (Start: 5 @22303 has 54 MA's), (9, 22489),

Gene: Litotes\_31 Start: 23813, Stop: 24040, Start Num: 5

Candidate Starts for Litotes\_31:  
(Start: 5 @23813 has 54 MA's), (8, 23915),

Gene: Lucy\_27 Start: 22291, Stop: 22518, Start Num: 5  
Candidate Starts for Lucy\_27:  
(3, 22051), (Start: 5 @22291 has 54 MA's),

Gene: Makoto\_27 Start: 22311, Stop: 22538, Start Num: 5  
Candidate Starts for Makoto\_27:  
(3, 22071), (Start: 5 @22311 has 54 MA's),

Gene: MamaPearl\_28 Start: 23485, Stop: 23709, Start Num: 5  
Candidate Starts for MamaPearl\_28:  
(4, 23251), (Start: 5 @23485 has 54 MA's), (7, 23575),

Gene: Moki\_27 Start: 22254, Stop: 22493, Start Num: 5  
Candidate Starts for Moki\_27:  
(Start: 5 @22254 has 54 MA's),

Gene: MrBoss\_33 Start: 23813, Stop: 24040, Start Num: 5  
Candidate Starts for MrBoss\_33:  
(Start: 5 @23813 has 54 MA's), (8, 23915),

Gene: MrGloopy\_31 Start: 23830, Stop: 24063, Start Num: 5  
Candidate Starts for MrGloopy\_31:  
(Start: 5 @23830 has 54 MA's), (8, 23932),

Gene: Nancia\_27 Start: 22315, Stop: 22542, Start Num: 5  
Candidate Starts for Nancia\_27:  
(3, 22075), (Start: 5 @22315 has 54 MA's), (9, 22501),

Gene: OurGirlNessie\_27 Start: 22292, Stop: 22519, Start Num: 5  
Candidate Starts for OurGirlNessie\_27:  
(4, 22055), (Start: 5 @22292 has 54 MA's),

Gene: PartyCup\_31 Start: 23860, Stop: 24087, Start Num: 5  
Candidate Starts for PartyCup\_31:  
(Start: 5 @23860 has 54 MA's), (8, 23962),

Gene: PitaDog\_27 Start: 22302, Stop: 22529, Start Num: 5  
Candidate Starts for PitaDog\_27:  
(3, 22062), (Start: 5 @22302 has 54 MA's), (9, 22488),

Gene: Potatoes\_31 Start: 23892, Stop: 24125, Start Num: 5  
Candidate Starts for Potatoes\_31:  
(Start: 5 @23892 has 54 MA's), (6, 23940), (8, 23994),

Gene: Preamble\_27 Start: 22319, Stop: 22549, Start Num: 5  
Candidate Starts for Preamble\_27:  
(Start: 5 @22319 has 54 MA's),

Gene: Pterodactyl\_27 Start: 22293, Stop: 22520, Start Num: 5  
Candidate Starts for Pterodactyl\_27:

(3, 22053), (Start: 5 @22293 has 54 MA's), (9, 22479),

Gene: RAP15\_31 Start: 23896, Stop: 24129, Start Num: 5  
Candidate Starts for RAP15\_31:  
(Start: 5 @23896 has 54 MA's), (8, 23998),

Gene: Riverdale\_31 Start: 23826, Stop: 24059, Start Num: 5  
Candidate Starts for Riverdale\_31:  
(Start: 5 @23826 has 54 MA's), (8, 23928),

Gene: Rozby\_31 Start: 23827, Stop: 24060, Start Num: 5  
Candidate Starts for Rozby\_31:  
(Start: 5 @23827 has 54 MA's), (8, 23929),

Gene: Savage2526\_31 Start: 23890, Stop: 24123, Start Num: 5  
Candidate Starts for Savage2526\_31:  
(Start: 5 @23890 has 54 MA's), (8, 23992),

Gene: Scuttle\_31 Start: 23895, Stop: 24128, Start Num: 5  
Candidate Starts for Scuttle\_31:  
(Start: 5 @23895 has 54 MA's), (8, 23997),

Gene: Suppi\_31 Start: 23863, Stop: 24090, Start Num: 5  
Candidate Starts for Suppi\_31:  
(Start: 5 @23863 has 54 MA's), (8, 23965),

Gene: TattModd\_31 Start: 23889, Stop: 24122, Start Num: 5  
Candidate Starts for TattModd\_31:  
(Start: 5 @23889 has 54 MA's), (8, 23991),

Gene: Urla\_28 Start: 23481, Stop: 23732, Start Num: 5  
Candidate Starts for Urla\_28:  
(Start: 5 @23481 has 54 MA's),

Gene: Vallejo\_31 Start: 23829, Stop: 24062, Start Num: 5  
Candidate Starts for Vallejo\_31:  
(1, 23553), (2, 23577), (Start: 5 @23829 has 54 MA's), (8, 23931),

Gene: Wawa\_31 Start: 23865, Stop: 24098, Start Num: 5  
Candidate Starts for Wawa\_31:  
(Start: 5 @23865 has 54 MA's),

Gene: Wayne\_31 Start: 23909, Stop: 24136, Start Num: 5  
Candidate Starts for Wayne\_31:  
(Start: 5 @23909 has 54 MA's), (8, 24011),

Gene: Zorro\_31 Start: 23844, Stop: 24077, Start Num: 5  
Candidate Starts for Zorro\_31:  
(Start: 5 @23844 has 54 MA's), (8, 23946),