Pham 138543


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 138543 Report

This analysis was run 04/05/24 on database version 557.
Pham number 138543 has 7 members, 3 are drafts.
Phages represented in each track:

- Track 1 : Norvs_148
- Track 2 : Abscondus_149
- Track 3 : Miskis_148
- Track 4 : OneUp̄ 135
- Track 5 : BrutonḠaster 130
- Track 6 : JonJames_172, Cardigan_174


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

The start number called the most often in the published annotations is 4, it was called in 2 of the 4 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abscondus_149, BrutonGaster_130, Miskis_148, OneUp_135,

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

- Norvs_148,

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

- Cardigan_174, JonJames_172,


## Summary by start number:

Start 3:

- Found in 4 of 7 (57.1\%) of genes in pham
- Manual Annotations of this start: 1 of 4
- Called $25.0 \%$ of time when present
- Phage (with cluster) where this start called: Norvs_148 (CQ),

Start 4:

- Found in 5 of 7 ( $71.4 \%$ ) of genes in pham
- Manual Annotations of this start: 2 of 4
- Called $80.0 \%$ of time when present
- Phage (with cluster) where this start called: Abscondus_149 (CQ), BrutonGaster_130 (CQ2), Miskis_148 (CQ), OneUp_135 (CQ2),

Start 5:

- Found in 2 of 7 ( $28.6 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 4
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Cardigan_174 (DD), JonJames_172 (DD),


## Summary by clusters:

There are 3 clusters represented in this pham: CQ2, DD, CQ,
Info for manual annotations of cluster CQ:

- Start number 3 was manually annotated 1 time for cluster CQ.

Info for manual annotations of cluster CQ2:

- Start number 4 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster DD:

- Start number 5 was manually annotated 1 time for cluster DD.


## Gene Information:

Gene: Abscondus_149 Start: 80856, Stop: 81065, Start Num: 4
Candidate Starts for Abscondus_149:
(1, 80733), (2, 80787), (Start: 3 @80820 has 1 MA's), (Start: 4 @80856 has 2 MA's), (6, 80922), (9, 80985), (10, 81018),

Gene: BrutonGaster_130 Start: 77074, Stop: 77265, Start Num: 4
Candidate Starts for BrutonGaster_130:
(Start: 3 @ 77038 has 1 MA's), (Start: 4 @77074 has 2 MA's), (7, 77179), (12, 77257),
Gene: Cardigan_174 Start: 89051, Stop: 89269, Start Num: 5
Candidate Starts for Cardigan_174:
(Start: 5 @89051 has 1 MA's), (7, 89150), (8, 89159), (11, 89216), (13, 89246), (14, 89249), (15, 89255),

Gene: JonJames_172 Start: 90864, Stop: 91082, Start Num: 5
Candidate Starts for JonJames_172:
(Start: 5 @90864 has 1 MA's), (7, 90963), (8, 90972), (11, 91029), (13, 91059), (14, 91062), (15, 91068),

Gene: Miskis_148 Start: 80498, Stop: 80707, Start Num: 4
Candidate Starts for Miskis_148:
(1, 80375), (Start: 3 @80462 has 1 MA's), (Start: 4 @80498 has 2 MA's), (6, 80564), (10, 80660),
Gene: Norvs_148 Start: 80892, Stop: 81137, Start Num: 3
Candidate Starts for Norvs_148:
(1, 80805), (Start: 3 @80892 has 1 MA's), (Start: 4 @80928 has 2 MA's), (6, 80994), (9, 81057), (10, 81090),

Gene: OneUp_135 Start: 80483, Stop: 80674, Start Num: 4
Candidate Starts for OneUp_135:
(Start: 4 @80483 has 2 MA's), $(12,80666)$,

