Pham 87000


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 87000 Report

This analysis was run 04/05/24 on database version 557.
Pham number 87000 has 18 members, 2 are drafts.
Phages represented in each track:

- Track 1 : Aphelion_128, Culver_128, ClubL_128, Smoothie_129, Bachita_131, PhinkBoden_128, Norvs_127, A $\bar{b} s c o n d u s \_1 \overline{27}$, Toniann_12 $\overline{8}$, Lozinak_12 $\overline{8}$,
Engineer_130, Cucurbita_129
- Track 2 : WilliamBoone_127
- Track 3 : OneUp 113
- Track 4 : BrutonGaster_103
- Track 5 : Yvonnetastic 134
- Track 6 : JonJames_13̄7, Cardigan_141


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

The start number called the most often in the published annotations is 3, it was called in 15 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abscondus_127, Aphelion_128, Bachita_131, BrutonGaster_103, Cardigan_141, ClubL_128, C̄ucurbita_129, Culver_128, Ēngineer_130, JonJāmes_137, Lozināk_128, Norvs_127, OneUp_113, PhinkBodēn_128, Smoothie_129, Toniann_128, WilliamBoone_127,

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

- Yvonnetastic_134,

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

## Summary by start number:

Start 2:

- Found in 3 of 18 ( $16.7 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called $33.3 \%$ of time when present
- Phage (with cluster) where this start called: Yvonnetastic_134 (DD),

Start 3:

- Found in 18 of 18 ( $100.0 \%$ ) of genes in pham
- Manual Annotations of this start: 15 of 16
- Called $94.4 \%$ of time when present
- Phage (with cluster) where this start called: Abscondus_127 (CQ), Aphelion_128 (CQ1), Bachita 131 (CQ1), BrutonGaster_103 (CQ2), Cārdigan_141 (DD),
ClubL_128 (CQ1), Cucurbita_129 (CQ1), C̄ulver_128 (CQ1), Engineer_130 (CQ1), JonJames_137 (DD), Lozinak_128 (CQ1), Norvs_127 (CQ), OneUp_113 (CQ2), PhinkBoden_128 (CQ1), Smoōthie_129 (CQ1), Tōniann_128 (CQ1), WilliamBoone_127 (CQ1),


## Summary by clusters:

There are 4 clusters represented in this pham: CQ2, CQ1, CQ, DD,
Info for manual annotations of cluster CQ:

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

Info for manual annotations of cluster CQ1:

- Start number 3 was manually annotated 11 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 3 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster DD:

- Start number 2 was manually annotated 1 time for cluster DD.
- Start number 3 was manually annotated 1 time for cluster DD.


## Gene Information:

Gene: Abscondus_127 Start: 72077, Stop: 72358, Start Num: 3
Candidate Starts for Abscondus_127:
(Start: 3 @72077 has 15 MA's), (4, 72101), (6, 72206),
Gene: Aphelion_128 Start: 73170, Stop: 73454, Start Num: 3
Candidate Starts for Aphelion_128:
(Start: 3 @ 73170 has 15 MA's), ( 4,73194 ), ( 6,73299 ),
Gene: Bachita_131 Start: 73097, Stop: 73381, Start Num: 3
Candidate Starts for Bachita_131:
(Start: 3 @73097 has 15 MA's), (4, 73121), (6, 73226),
Gene: BrutonGaster_103 Start: 66443, Stop: 66757, Start Num: 3
Candidate Starts for BrutonGaster_103:
(Start: 3 @66443 has 15 MA's), (4, 66467), (6, 66572), (12, 66728),
Gene: Cardigan_141 Start: 78464, Stop: 78760, Start Num: 3
Candidate Starts for Cardigan_141:
(1, 78380), (Start: 2 @78431 has 1 MA's), (Start: 3 @78464 has 15 MA's), (7, 78659), (8, 78680), (9, 78683), (10, 78725), (11, 78731),

Gene: ClubL_128 Start: 71668, Stop: 71952, Start Num: 3
Candidate Starts for ClubL_128:
(Start: 3 @ 71668 has 15 MA's), ( 4,71692 ), ( 6,71797 ),
Gene: Cucurbita_129 Start: 73410, Stop: 73694, Start Num: 3
Candidate Starts for Cucurbita_129:
(Start: 3 @ 73410 has 15 MA's), (4, 73434), (6, 73539),
Gene: Culver_128 Start: 71428, Stop: 71712, Start Num: 3
Candidate Starts for Culver_128:
(Start: 3 @71428 has 15 MA's), (4, 71452), (6, 71557),
Gene: Engineer_130 Start: 73070, Stop: 73354, Start Num: 3
Candidate Starts for Engineer_130:
(Start: 3 @ 73070 has 15 MA's), (4, 73094), (6, 73199),
Gene: JonJames_137 Start: 78706, Stop: 79002, Start Num: 3 Candidate Starts for JonJames_137:
(1, 78622), (Start: 2 @78673 has 1 MA's), (Start: 3 @78706 has 15 MA's), (7, 78901), (8, 78922), (9, 78925), (10, 78967), (11, 78973),

Gene: Lozinak_128 Start: 72730, Stop: 73011, Start Num: 3
Candidate Starts for Lozinak_128:
(Start: 3 @72730 has 15 MA's), (4, 72754), (6, 72859),
Gene: Norvs_127 Start: 72150, Stop: 72434, Start Num: 3
Candidate Starts for Norvs_127:
(Start: 3 @72150 has 15 MA's), (4, 72174), (6, 72279),
Gene: OneUp_113 Start: 70430, Stop: 70744, Start Num: 3
Candidate Starts for OneUp_113:
(Start: 3 @ 070430 has 15 MA 's $),(4,70454),(6,70559),(7,70619),(8,70640),(12,70715)$,
Gene: PhinkBoden_128 Start: 73015, Stop: 73299, Start Num: 3
Candidate Starts for PhinkBoden_128:
(Start: 3 @ 73015 has 15 MA's), ( 4,73039 ), (6, 73144),
Gene: Smoothie_129 Start: 72730, Stop: 73011, Start Num: 3
Candidate Starts for Smoothie_129:
(Start: 3 @72730 has 15 MA's), (4, 72754), (6, 72859),
Gene: Toniann_128 Start: 72260, Stop: 72544, Start Num: 3
Candidate Starts for Toniann_128:
(Start: 3 @72260 has 15 MA's), (4, 72284), (6, 72389),
Gene: WilliamBoone_127 Start: 69951, Stop: 70235, Start Num: 3
Candidate Starts for WilliamBoone_127:
(Start: 3 @69951 has 15 MA's), (4, 69975), (5, 70077), (6, 70080),
Gene: Yvonnetastic_134 Start: 75307, Stop: 75636, Start Num: 2
Candidate Starts for Yvonnetastic_134:
(1, 75256), (Start: 2 @75307 has 1 MA's), (Start: 3 @75340 has 15 MA's), (7, 75535), (8, 75556), (9, 75559), (10, 75601), (11, 75607),

