Pham 4961


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 4961 Report

This analysis was run 04/05/24 on database version 557.
Pham number 4961 has 14 members, 2 are drafts.
Phages represented in each track:

- Track 1 : Abscondus_152, PhinkBoden_151
- Track 2 : Norvs_151, ClubL_154, Bachita_156, Lozinak_153, Cucurbita_152,

Toniann_153

- Track $\overline{3}$ : Miskis_151, Aphelion_152
- Track 4 : WilliamBoone_155
- Track 5 : Smoothie_154
- Track 6 : Engineer-155
- Track 7 : Culver_153


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

The start number called the most often in the published annotations is 6 , it was called in 8 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bachita_156, ClubL_154, Cucurbita_152, Culver_153, Lozinak_153, Norvs_151, Toniann_153, WilliamBoone_155,

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

- Abscondus_152, Engineer_155, PhinkBoden_151,

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

- Aphelion_152, Miskis_151, Smoothie_154,


## Summary by start number:

Start 6:

- Found in 11 of 14 (78.6\%) of genes in pham
- Manual Annotations of this start: 8 of 12
- Called $72.7 \%$ of time when present
- Phage (with cluster) where this start called: Bachita 156 (CQ1), ClubL 154 (CQ1), Cucurbita_152 (CQ1), Culver_153 (CQ1), Lozinak_153 (CQ1), Norvs_151 (CQ), Toniann_153 (CQ1), WilliamBoone_155 (CQ1),

Start 7:

- Found in 2 of 14 ( $14.3 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called $50.0 \%$ of time when present
- Phage (with cluster) where this start called: Smoothie_154 (CQ1),

Start 8:

- Found in 9 of 14 ( $64.3 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called $22.2 \%$ of time when present
- Phage (with cluster) where this start called: Abscondus_152 (CQ), PhinkBoden_151 (CQ1),

Start 9:

- Found in 1 of 14 ( $7.1 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Engineer_155 (CQ1),

Start 10:

- Found in 2 of 14 ( $14.3 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Aphelion_152 (CQ1), Miskis_151 (CQ),


## Summary by clusters:

There are 2 clusters represented in this pham: CQ, CQ1,
Info for manual annotations of cluster CQ:
-Start number 6 was manually annotated 1 time for cluster CQ.
Info for manual annotations of cluster CQ1:

- Start number 6 was manually annotated 7 times for cluster CQ1.
- Start number 7 was manually annotated 1 time for cluster CQ1.
-Start number 8 was manually annotated 1 time for cluster CQ1.
-Start number 9 was manually annotated 1 time for cluster CQ1.
-Start number 10 was manually annotated 1 time for cluster CQ1.


## Gene Information:

Gene: Abscondus_152 Start: 82121, Stop: 81795, Start Num: 8
Candidate Starts for Abscondus_152:
(Start: 6 @82136 has 8 MA's), (Start: 8 @82121 has 1 MA's), (11, 82082), (12, 82067), (13, 82034), (14, 82016), (15, 81992), (16, 81989), (17, 81959), (19, 81854),

Gene: Aphelion_152 Start: 83014, Stop: 82688, Start Num: 10
Candidate Starts for Aphelion_152:
(2, 83116), (3, 83095), (4, 83071), (5, 83056), (Start: 10 @83014 has 1 MA's), (14, 82909), (16,
82882), (17, 82852), (19, 82747), (20, 82741),

Gene: Bachita_156 Start: 83176, Stop: 82835, Start Num: 6
Candidate Starts for Bachita_156:
(Start: 6 @83176 has 8 MA's), (Start: 8 @83161 has 1 MA's), (11, 83122), (12, 83107), (13, 83074), (14, 83056), (15, 83032), (16, 83029), (17, 82999), (19, 82894),

Gene: ClubL_154 Start: 82428, Stop: 82087, Start Num: 6 Candidate Starts for ClubL_154:
(Start: 6 @82428 has 8 MA's), (Start: 8 @82413 has 1 MA's), (11, 82374), (12, 82359), (13, 82326), (14, 82308), (15, 82284), (16, 82281), (17, 82251), (19, 82146),

Gene: Cucurbita_152 Start: 83489, Stop: 83148, Start Num: 6 Candidate Starts for Cucurbita_152:
(Start: 6 @83489 has 8 MA's), (Start: 8 @83474 has 1 MA's), (11, 83435), (12, 83420), (13, 83387), (14, 83369), (15, 83345), (16, 83342), (17, 83312), (19, 83207),

Gene: Culver_153 Start: 81756, Stop: 81412, Start Num: 6 Candidate Starts for Culver_153:
(Start: 6 @81756 has 8 MA's), (Start: 7 @81741 has 1 MA's), (11, 81699), (12, 81684), (13, 81651), (14, 81633), ( 15,81609 ), ( 16,81606 ), ( 17,81576 ), ( 19,81471 ),

Gene: Engineer_155 Start: 82997, Stop: 82671, Start Num: 9
Candidate Starts for Engineer_155:
(Start: 6 @83012 has 8 MA's), (Start: 9 @82997 has 1 MA's), (11, 82958), (12, 82943), (14, 82892), $(15,82868),(16,82865),(17,82835),(19,82730)$,

Gene: Lozinak_153 Start: 83017, Stop: 82676, Start Num: 6 Candidate Starts for Lozinak_153:
(Start: 6 @83017 has 8 MA's), (Start: 8 @83002 has 1 MA's), (11, 82963), (12, 82948), (13, 82915), (14, 82897), ( 15,82873 ), ( 16,82870 ), ( 17,82840 ), ( 19,82735 ),

Gene: Miskis_151 Start: 81763, Stop: 81437, Start Num: 10 Candidate Starts for Miskis_151:
(2, 81865), (3, 81844), (4, 81820), (5, 81805), (Start: 10 @81763 has 1 MA's), (14, 81658), (16, 81631), (17, 81601), (19, 81496), (20, 81490),

Gene: Norvs_151 Start: 82208, Stop: 81867, Start Num: 6
Candidate Starts for Norvs_151:
(Start: 6 @82208 has 8 MA's), (Start: 8 @82193 has 1 MA's), (11, 82154), (12, 82139), (13, 82106), (14, 82088), (15, 82064), (16, 82061), (17, 82031), (19, 81926),

Gene: PhinkBoden_151 Start: 82591, Stop: 82265, Start Num: 8 Candidate Starts for PhinkBoden_151:
(Start: 6 @82606 has 8 MA's), (Start: 8 @82591 has 1 MA's), (11, 82552), (12, 82537), (13, 82504), (14, 82486), (15, 82462), (16, 82459), (17, 82429), (19, 82324),

Gene: Smoothie_154 Start: 82581, Stop: 82252, Start Num: 7
Candidate Starts for Smoothie_154:
(1, 82707), (Start: 7 @82581 has 1 MA's), (11, 82539), (12, 82524), (14, 82473), (15, 82449), (16, 82446), (17, 82416), (19, 82311),

Gene: Toniann_153 Start: 82349, Stop: 82008, Start Num: 6 Candidate Starts for Toniann_153:
(Start: 6 @82349 has 8 MA's), (Start: 8 @82334 has 1 MA's), (11, 82295), (12, 82280), (13, 82247), (14, 82229), (15, 82205), (16, 82202), (17, 82172), (19, 82067),

Gene: WilliamBoone_155 Start: 80809, Stop: 80468, Start Num: 6 Candidate Starts for WilliamBoone_155:
(Start: 6 @80809 has 8 MA's), (Start: 8 @80794 has 1 MA's), (11, 80755), (12, 80740), (14, 80689), $(15,80665),(18,80548),(19,80527),(21,80476)$,

