Pham 164004




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 164004 Report

This analysis was run 04/28/24 on database version 559.
Pham number 164004 has 15 members, 8 are drafts.
Phages represented in each track:

- Track 1 : Brunswick 86, Issa 84
- Track 2 : Argan_88, Uzumaki_88
- Track 3 : GantcherGoblin_87
- Track 4 : Leathea 85
- Track 5 : Jazzy49000_76, Sunny4976_75
- Track 6 : Arzan_78
- Track 7 : Paella_209, Elver_205, Qui_209
- Track 8 : Elver_206, Paella_210, Qui_210


## 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 2 of the 7 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Elver_205, Paella_209, Qui_209,

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

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

- Argan_88, Arzan_78, Brunswick_86, Elver_206, GantcherGoblin_87, Issa_84, Jazzy4900_76, Leāthea_85, Paella_210, Qūi_210, Sunny4976_75, Uzumaki_88,


## Summary by start number:

Start 3:

- Found in 2 of 15 ( $13.3 \%$ ) of genes in pham
- No Manual Annotations of this start.
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Brunswick_86 (AU1), Issa_84 (AU1),

Start 5:

- Found in 3 of 15 ( $20.0 \%$ ) of genes in pham
- Manual Annotations of this start: 2 of 7
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Elver_205 (FK), Paella_209 (FK),

Qui_209 (FK),
Start 6:

- Found in 3 of 15 ( $20.0 \%$ ) of genes in pham
- Manual Annotations of this start: 2 of 7
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Elver_206 (FK), Paella_210 (FK),

Qui_210 (FK),
Start 7:

- Found in 2 of 15 ( $13.3 \%$ ) of genes in pham
- Manual Annotations of this start: 2 of 7
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Argan_88 (AU6), Uzumaki_88 (AU6),

Start 8:

- Found in 2 of 15 ( $13.3 \%$ ) of genes in pham
- No Manual Annotations of this start.
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Jazzy4900_76 (FI), Sunny4976_75 (FI),

Start 9:

- Found in 1 of 15 ( $6.7 \%$ ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0\% of time when present
- Phage (with cluster) where this start called: Leathea_85 (AU6),

Start 10:

- Found in 1 of 15 ( $6.7 \%$ ) of genes in pham
- No Manual Annotations of this start.
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Arzan_78 (FI),

Start 11:

- Found in 2 of 15 ( $13.3 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 7
- Called $50.0 \%$ of time when present
- Phage (with cluster) where this start called: GantcherGoblin_87 (AU6),


## Summary by clusters:

There are 4 clusters represented in this pham: AU1, FI, FK, AU6,

Info for manual annotations of cluster AU6:

- Start number 7 was manually annotated 2 times for cluster AU6.
-Start number 11 was manually annotated 1 time for cluster AU6.

Info for manual annotations of cluster FK:
-Start number 5 was manually annotated 2 times for cluster FK.

- Start number 6 was manually annotated 2 times for cluster FK.


## Gene Information:

Gene: Argan_88 Start: 50665, Stop: 50889, Start Num: 7
Candidate Starts for Argan_88:
(Start: 7 @50665 has 2 MA's), $(18,50803),(20,50809),(26,50854),(27,50857)$,
Gene: Arzan_78 Start: 49144, Stop: 49362, Start Num: 10
Candidate Starts for Arzan_78:
(1, 49048), (2, 49087), (4, 49114), (10, 49144), (15, 49246),
Gene: Brunswick_86 Start: 53603, Stop: 53848, Start Num: 3
Candidate Starts for Brunswick_86:
$(3,53603),(13,53711)$,
Gene: Elver_205 Start: 97047, Stop: 97292, Start Num: 5
Candidate Starts for Elver_205:
(Start: 5 @97047 has 2 MA's), (16, 97179), (20, 97203), (21, 97221), (26, 97248), (28, 97272),
Gene: Elver_206 Start: 97289, Stop: 97528, Start Num: 6
Candidate Starts for Elver_206:
(Start: 6 @97289 has 2 MA's), (17, 97433), (23, 97478), (28, 97517),
Gene: GantcherGoblin_87 Start: 50825, Stop: 51037, Start Num: 11
Candidate Starts for GantcherGoblin_87:
(Start: 11 @50825 has 1 MA's), $(12,50867)$,
Gene: Issa_84 Start: 52854, Stop: 53099, Start Num: 3
Candidate Starts for Issa_84:
$(3,52854),(13,52962)$,
Gene: Jazzy4900_76 Start: 49976, Stop: 50197, Start Num: 8
Candidate Starts for Jazzy4900_76:
$(8,49976),(15,50078),(22,50147),(25,50156),(27,50168)$,
Gene: Leathea_85 Start: 48722, Stop: 48952, Start Num: 9
Candidate Starts for Leathea_85:
(9, 48722), (Start: 11 @48737 has 1 MA's), (14, 48821), (19, 48860), (24, 48896), (26, 48908),
Gene: Paella_209 Start: 97932, Stop: 98177, Start Num: 5
Candidate Starts for Paella_209:
(Start: 5 @97932 has 2 MA's), (16, 98064), (20, 98088), (21, 98106), (26, 98133), (28, 98157),
Gene: Paella_210 Start: 98174, Stop: 98413, Start Num: 6
Candidate Starts for Paella_210:
(Start: 6 @98174 has 2 MA's), (17, 98318), (23, 98363), (28, 98402),
Gene: Qui_209 Start: 97920, Stop: 98165, Start Num: 5
Candidate Starts for Qui_209:
(Start: 5 @97920 has 2 MA's), (16, 98052), (20, 98076), (21, 98094), (26, 98121), (28, 98145),
Gene: Qui_210 Start: 98162, Stop: 98401, Start Num: 6
Candidate Starts for Qui_210:
(Start: 6 @98162 has 2 MA's), (17, 98306), (23, 98351), (28, 98390),
Gene: Sunny4976_75 Start: 49976, Stop: 50197, Start Num: 8
Candidate Starts for Sunny4976_75:
$(8,49976),(15,50078),(22,50147),(25,50156),(27,50168)$,
Gene: Uzumaki_88 Start: 50799, Stop: 51023, Start Num: 7
Candidate Starts for Uzumaki_88:
(Start: 7 @50799 has 2 MA's), (18, 50937), (20, 50943), (26, 50988), (27, 50991),

