Pham 164015


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 164015 Report

This analysis was run 04/28/24 on database version 559.
Pham number 164015 has 15 members, 2 are drafts.
Phages represented in each track:

- Track 1 : Puissant_97
- Track 2 : Megatroñ06_1
- Track 3 : Predator_1
- Track 4 : Konstantine_1, Beckerton_1, Thumb_1, Cborch11_1, Damien_1, Oaker_1, Phreeze_1
- Track 5 : DrLupo_1
- Track 6 : Barnyard_1
- Track 7 : Labelle_1, Madruga_1, Patience_1


## 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 13 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Beckerton_1, Cborch11_1, Damien_1, Konstantine_1, Megatron06_1, Oaker_1, Phreeze_1, Predator_1, Thumb_1,

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

- Puissant_97,

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

- Barnyard_1, DrLupo_1, Labelle_1, Madruga_1, Patience_1,


## Summary by start number:

Start 4:

- 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: Puissant_97 (H1),

Start 5:

- Found in 2 of 15 ( $13.3 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 13
- Called $50.0 \%$ of time when present
- Phage (with cluster) where this start called: Barnyard_1 (H2),

Start 6:

- Found in 10 of 15 ( $66.7 \%$ ) of genes in pham
- Manual Annotations of this start: 8 of 13
- Called $90.0 \%$ of time when present
- Phage (with cluster) where this start called: Beckerton_1 (H1), Cborch11_1 (H1), Damien_1 (H1), Konstantine_1 (H1), Megatron06_1 (H1), Oaker_1 (H1), Phreeze_1 (H1), Predator_1 (H1), Thumb_1 (H1),

Start 8:

- Found in 15 of 15 ( $100.0 \%$ ) of genes in pham
- Manual Annotations of this start: 4 of 13
- Called $26.7 \%$ of time when present
- Phage (with cluster) where this start called: DrLupo_1 (H2), Labelle_1 (U), Madruga_1 (U), Patience_1 (U),


## Summary by clusters:

There are 3 clusters represented in this pham: $\mathrm{H} 2, \mathrm{H} 1, \mathrm{U}$,
Info for manual annotations of cluster H1:

- Start number 6 was manually annotated 8 times for cluster H 1 .

Info for manual annotations of cluster H 2 :

- Start number 5 was manually annotated 1 time for cluster H 2 .
- Start number 8 was manually annotated 1 time for cluster H 2 .

Info for manual annotations of cluster U:

- Start number 8 was manually annotated 3 times for cluster $U$.


## Gene Information:

Gene: Barnyard_1 Start: 1, Stop: 351, Start Num: 5
Candidate Starts for Barnyard_1:
(Start: 5 @1 has 1 MA's), (Start: 8 @22 has 4 MA's), (11, 64), (12, 82), (13, 85), (14, 121), (22, 223), (24, 271), (29, 322), (30, 334),

Gene: Beckerton_1 Start: 1, Stop: 348, Start Num: 6
Candidate Starts for Beckerton_1:
(Start: 6 @1 has 8 MA's), (7, 4), (Start: 8 @13 has 4 MA's), (16, 118), (17, 145), (18, 148), (22, 220), $(24,268),(26,289)$,

Gene: Cborch11_1 Start: 1, Stop: 348, Start Num: 6
Candidate Starts for Cborch11_1:
(Start: 6 @1 has 8 MA's), (7, 4), (Start: 8 @13 has 4 MA's), (16, 118), (17, 145), (18, 148), (22, 220), $(24,268),(26,289)$,

Gene: Damien_1 Start: 1, Stop: 348, Start Num: 6

Candidate Starts for Damien_1:
(Start: 6 @1 has 8 MA's), (7, 4), (Start: 8 @13 has 4 MA's), (16, 118), (17, 145), (18, 148), (22, 220), $(24,268),(26,289)$,

Gene: DrLupo_1 Start: 1, Stop: 330, Start Num: 8
Candidate Starts for DrLupo_1:
(Start: 8 @1 has 4 MA's), (12, 61), (13, 64), (14, 100), (22, 202), (24, 250),
Gene: Konstantine_1 Start: 1, Stop: 348, Start Num: 6
Candidate Starts for Konstantine_1:
(Start: 6 @1 has 8 MA's), (7, 4), (Start: 8 @13 has 4 MA's), (16, 118), (17, 145), (18, 148), (22, 220), $(24,268),(26,289)$,

Gene: Labelle_1 Start: 1, Stop: 351, Start Num: 8
Candidate Starts for Labelle_1:
(Start: 8 @1 has 4 MA's), (15, 103), (19, 163), (20, 187), (21, 214), (22, 223), (23, 232), (25, 274), (27, 304), (30, 334),

Gene: Madruga_1 Start: 1, Stop: 351, Start Num: 8
Candidate Starts for Madruga_1:
(Start: 8 @1 has 4 MA's), (15, 103), (19, 163), (20, 187), (21, 214), (22, 223), (23, 232), (25, 274), (27, 304), (30, 334),

Gene: Megatron06_1 Start: 1, Stop: 348, Start Num: 6
Candidate Starts for Megatron06_1:
(Start: 6 @1 has 8 MA's), (7, 4), (Start: 8 @13 has 4 MA's), (17, 145), (18, 148), (22, 220), (24, 268), $(26,289)$,

Gene: Oaker_1 Start: 1, Stop: 348, Start Num: 6
Candidate Starts for Oaker_1:
(Start: 6 @1 has 8 MA's), ( 7,4 ), (Start: 8 @13 has 4 MA's), (16, 118), (17, 145), (18, 148), (22, 220), $(24,268),(26,289)$,

Gene: Patience_1 Start: 1, Stop: 351, Start Num: 8
Candidate Starts for Patience_1:
(Start: 8 @1 has 4 MA's), (15, 103), (19, 163), (20, 187), (21, 214), (22, 223), (23, 232), (25, 274), (27, 304), (30, 334),

Gene: Phreeze_1 Start: 1, Stop: 348, Start Num: 6
Candidate Starts for Phreeze_1:
(Start: 6 @1 has 8 MA's), (7, 4 ), (Start: 8 @13 has 4 MA's), (16, 118), (17, 145), (18, 148), (22, 220), $(24,268),(26,289)$,

Gene: Predator_1 Start: 1, Stop: 348, Start Num: 6
Candidate Starts for Predator_1:
(Start: 6 @1 has 8 MA's), (Start: 8 @13 has 4 MA's), (9, 19), (10, 25), (12, 73), (22, 220), (24, 268), $(26,289),(28,304),(30,331)$,

Gene: Puissant_97 Start: 69332, Stop: 348, Start Num: 4
Candidate Starts for Puissant_97:
(1, 69230), (2, 69284), (3, 69302), (4, 69332), (Start: 5 @69341 has 1 MA's), (Start: 6 @69350 has 8 MA's), (Start: 8 @69362 has 4 MA's), (10, 69374), (17, 69494), (18, 69497), (22, 69569), (24, 69617), $(30,69680)$,

Gene: Thumb_1 Start: 1, Stop: 348, Start Num: 6
Candidate Starts for Thumb_1:
(Start: 6 @1 has 8 MA's), (7, 4), (Start: 8 @13 has 4 MA's), (16, 118), (17, 145), (18, 148), (22, 220), $(24,268),(26,289)$,

