Pham 86633


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 86633 Report

This analysis was run 03/30/24 on database version 556 .
Pham number 86633 has 22 members, 2 are drafts.
Phages represented in each track:

- Track 1 : Wrigley_70
- Track 2 : Posh_6 $\overline{8}$
- Track 3 : WelcōmeAyanna_66, ThankyouJordi_66
- Track 4 : TuertoX_62, GemG_62, Gizermo_62, Ebert_66, PantheRoc_71, Sproutie_62, Mochā12_62, Sā̄age_62, Herōd_68, Bialota_62, Clap_6̄
- Track 5: Lamberg_58, Haley23_62
- Track 6 : Nettuno_58
- Track 7 : Whiteclaw_62, Hugley_66, Cynthia_62
- Track 8 : Bjanes7_59


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

The start number called the most often in the published annotations is 2 , it was called in 11 of the 20 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bialota_62, Clap_62, Ebert_66, GemG_62, Gizermo_62, Herod_68, Mocha12_62, PantheRoc_71, Pōsh_68, Sāvage_62, Sproutie_62, TuertoX_62,

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

- Bjanes7_59, Cynthia_62, Haley23_62, Hugley_66, Lamberg_58, Nettuno_58,

ThankyouJordi_66, WēlcomeAyanna_66, Whiteclaw_62, Wrigley_70,
Genes that do not have the "Most Annotated" start:
-

## Summary by start number:

Start 1:

- Found in 22 of 22 ( $100.0 \%$ ) of genes in pham
- Manual Annotations of this start: 5 of 20
- Called $27.3 \%$ of time when present
- Phage (with cluster) where this start called: Cynthia_62 (CZ2), Hugley 66 (CZ1), ThankyouJordi_66 (CZ1), WelcomeAyanna_66 (CZ1), Whiteclaw_62 (CZ2),

Wrigley_70 (CY),
Start 2:

- Found in 22 of 22 ( $100.0 \%$ ) of genes in pham
- Manual Annotations of this start: 11 of 20
- Called $54.5 \%$ of time when present
- Phage (with cluster) where this start called: Bialota 62 (CZ1), Clap 62 (CZ2),

Ebert_66 (CZ2), GemG_62 (CZ2), Gizermo_62 (CZ2̄), Herod_68 (CZ1), Mocha12_62 (CZ2), PantheRoc_71 (ㄷZ3), Posh_68 (CY), Savage_62 (CZ̄̄), Sproutie_62 (CZ2), TuertoX_62 (CZ2),

Start 3:

- Found in 20 of 22 ( $90.9 \%$ ) of genes in pham
- Manual Annotations of this start: 3 of 20
- Called $15.0 \%$ of time when present
- Phage (with cluster) where this start called: Haley23_62 (CZ2), Lamberg_58 (CZ2),

Nettuno_58 (CZ2),
Start 6:

- Found in 22 of 22 ( $100.0 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called $4.5 \%$ of time when present
- Phage (with cluster) where this start called: Bjanes7_59 (CZ2),


## Summary by clusters:

There are 4 clusters represented in this pham: CZ2, CZ3, CY, CZ1,
Info for manual annotations of cluster CY:

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

Info for manual annotations of cluster CZ1:

- Start number 1 was manually annotated 2 times for cluster CZ1.
- Start number 2 was manually annotated 2 times for cluster CZ1.

Info for manual annotations of cluster CZ2:

- Start number 1 was manually annotated 2 times for cluster CZ2.
- Start number 2 was manually annotated 8 times for cluster CZ2.
- Start number 3 was manually annotated 3 times for cluster CZ2.
- Start number 6 was manually annotated 1 time for cluster CZ2.


## Gene Information:

Gene: Bialota_62 Start: 44959, Stop: 44381, Start Num: 2
Candidate Starts for Bialota_62:
(Start: 1 @44974 has 5 MA's), (Start: 2 @44959 has 11 MA's), (Start: 3 @44956 has 3 MA's), (Start: 6 @44866 has 1 MA's), (9, 44725), (10, 44689), (11, 44671), (15, 44440),

Gene: Bjanes7_59 Start: 40562, Stop: 40077, Start Num: 6

Candidate Starts for Bjanes7_59:
(Start: 1 @40670 has 5 MA's), (Start: 2 @40655 has 11 MA's), (Start: 3 @40652 has 3 MA's), (Start: 6 @40562 has 1 MA's), ( 9,40421 ), (10, 40385), (11, 40367), ( 15,40136 ),

Gene: Clap_62 Start: 40834, Stop: 40256, Start Num: 2
Candidate Starts for Clap_62:
(Start: 1 @ 40849 has 5 MA's), (Start: 2 @40834 has 11 MA's), (Start: 3 @40831 has 3 MA's), (Start: 6 @40741 has 1 MA's), ( 9,40600 ), (10, 40564), (11, 40546), ( 15,40315 ),

Gene: Cynthia_62 Start: 40847, Stop: 40254, Start Num: 1
Candidate Starts for Cynthia_62:
(Start: 1 @40847 has 5 MA's), (Start: 2 @40832 has 11 MA's), (Start: 3 @40829 has 3 MA's), (Start: 6 @40739 has 1 MA's), (9, 40598), (10, 40562), (11, 40544), (15, 40313),

Gene: Ebert_66 Start: 41266, Stop: 40688, Start Num: 2
Candidate Starts for Ebert 66:
(Start: 1 @41281 has 5 MA's), (Start: 2 @41266 has 11 MA's), (Start: 3 @41263 has 3 MA's), (Start: 6 @41173 has 1 MA's), (9, 41032), (10, 40996), (11, 40978), (15, 40747),

Gene: GemG_62 Start: 40838, Stop: 40260, Start Num: 2
Candidate Starts for GemG_62:
(Start: 1 @40853 has 5 MA's), (Start: 2 @40838 has 11 MA's), (Start: 3 @40835 has 3 MA's), (Start: 6 @40745 has 1 MA's), (9, 40604), (10, 40568), (11, 40550), (15, 40319),

Gene: Gizermo_62 Start: 40834, Stop: 40256, Start Num: 2 Candidate Starts for Gizermo_62:
(Start: 1 @40849 has 5 MA's), (Start: 2 @ 40834 has 11 MA's), (Start: 3 @40831 has 3 MA's), (Start: 6 @40741 has 1 MA's), ( 9,40600 ), (10, 40564), (11, 40546), ( 15,40315 ),

Gene: Haley23_62 Start: 40831, Stop: 40256, Start Num: 3 Candidate Starts for Haley23_62:
(Start: 1 @40849 has 5 MA's), (Start: 2 @40834 has 11 MA's), (Start: 3 @40831 has 3 MA's), (Start: 6 @40741 has 1 MA's), ( 9,40600 ), (10, 40564), (11, 40546), ( 15,40315 ),

Gene: Herod_68 Start: 47669, Stop: 47091, Start Num: 2
Candidate Starts for Herod_68:
(Start: 1 @47684 has 5 MA's), (Start: 2 @47669 has 11 MA's), (Start: 3 @47666 has 3 MA's), (Start: 6 @47576 has 1 MA's), (9, 47435), (10, 47399), (11, 47381), (15, 47150),

Gene: Hugley_66 Start: 47664, Stop: 47071, Start Num: 1
Candidate Starts for Hugley_66:
(Start: 1 @ 47664 has 5 MA's), (Start: 2 @ 47649 has 11 MA's), (Start: 3 @47646 has 3 MA's), (Start: 6 @47556 has 1 MA's), (9, 47415), (10, 47379), (11, 47361), (15, 47130),

Gene: Lamberg_58 Start: 39340, Stop: 38765, Start Num: 3
Candidate Starts for Lamberg_58:
(Start: 1 @39358 has 5 MA's), (Start: 2 @39343 has 11 MA's), (Start: 3 @39340 has 3 MA's), (Start: 6 @39250 has 1 MA's), (9, 39109), (10, 39073), (11, 39055), (15, 38824),

Gene: Mocha12_62 Start: 40834, Stop: 40256, Start Num: 2
Candidate Starts for Mocha12_62:
(Start: 1 @ 40849 has 5 MA's), (Start: 2 @40834 has 11 MA's), (Start: 3 @40831 has 3 MA's), (Start: 6 @40741 has 1 MA's), ( 9,40600 ), (10, 40564), ( 11,40546 ), ( 15,40315 ),

Gene: Nettuno_58 Start: 39340, Stop: 38765, Start Num: 3
Candidate Starts for Nettuno_58:
(Start: 1 @39358 has 5 MA's), (Start: 2 @39343 has 11 MA's), (Start: 3 @39340 has 3 MA's), (Start: 6 @39250 has 1 MA's), (7, 39172), (9, 39109), (10, 39073), (11, 39055), (15, 38824),

Gene: PantheRoc_71 Start: 46968, Stop: 46390, Start Num: 2
Candidate Starts for PantheRoc_71:
(Start: 1 @46983 has 5 MA's), (Start: 2 @46968 has 11 MA's), (Start: 3 @46965 has 3 MA's), (Start: 6 @46875 has 1 MA's), (9, 46734), (10, 46698), (11, 46680), (15, 46449),

Gene: Posh_68 Start: 47145, Stop: 46561, Start Num: 2
Candidate Starts for Posh_68:
(Start: 1 @47160 has 5 MA's), (Start: 2 @47145 has 11 MA's), (4, 47136), (5, 47130), (Start: 6
@47046 has 1 MA's), (7, 46968), (8, 46914), (10, 46869), (12, 46815), (14, 46713),
Gene: Savage_62 Start: 40834, Stop: 40256, Start Num: 2
Candidate Starts for Savage_62:
(Start: 1 @ 40849 has 5 MA's), (Start: 2 @40834 has 11 MA's), (Start: 3 @40831 has 3 MA's), (Start: 6 @40741 has 1 MA's), ( 9,40600 ), (10, 40564), (11, 40546), ( 15,40315 ),

Gene: Sproutie_62 Start: 40834, Stop: 40256, Start Num: 2
Candidate Starts for Sproutie_62:
(Start: 1 @40849 has 5 MA's), (Start: 2 @ 40834 has 11 MA's), (Start: 3 @40831 has 3 MA's), (Start: 6 @40741 has 1 MA's), ( 9,40600 ), (10, 40564), (11, 40546), ( 15,40315 ),

Gene: ThankyouJordi_66 Start: 47477, Stop: 46884, Start Num: 1
Candidate Starts for ThankyouJordi_66:
(Start: 1 @ 47477 has 5 MA's), (Start: 2 @47462 has 11 MA's), (Start: 3 @47459 has 3 MA's), (Start: 6 @47369 has 1 MA's), (7, 47291), (9, 47228), (10, 47192), (11, 47174), (12, 47138), (13, 47087), (15, 46943),

Gene: TuertoX_62 Start: 40834, Stop: 40256, Start Num: 2
Candidate Starts for TuertoX_62:
(Start: 1 @40849 has 5 MA's), (Start: 2 @40834 has 11 MA's), (Start: 3 @40831 has 3 MA's), (Start: 6 @40741 has 1 MA's), ( 9,40600 ), ( 10,40564 ), ( 11,40546 ), ( 15,40315 ),

Gene: WelcomeAyanna_66 Start: 47624, Stop: 47031, Start Num: 1
Candidate Starts for WelcomeAyanna_66:
(Start: 1 @ 47624 has 5 MA's), (Start: 2 @ 47609 has 11 MA's), (Start: 3 @47606 has 3 MA's), (Start: 6 @47516 has 1 MA's), (7, 47438), (9, 47375), (10, 47339), (11, 47321), (12, 47285), (13, 47234), (15, 47090),

Gene: Whiteclaw_62 Start: 40849, Stop: 40256, Start Num: 1
Candidate Starts for Whiteclaw_62:
(Start: 1 @ 40849 has 5 MA's), (Start: 2 @40834 has 11 MA's), (Start: 3 @40831 has 3 MA's), (Start: 6 @40741 has 1 MA's), (9, 40600), (10, 40564), (11, 40546), (15, 40315),

Gene: Wrigley_70 Start: 46743, Stop: 46144, Start Num: 1
Candidate Starts for Wrigley_70:
(Start: 1 @46743 has 5 MA's), (Start: 2 @46728 has 11 MA's), (4, 46719), (5, 46713), (Start: 6
@46629 has 1 MA's), (7, 46551), (8, 46497), (10, 46452), (12, 46398), (14, 46296),

