

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 170225 Report

This analysis was run 07/09/24 on database version 566.

Pham number 170225 has 28 members, 4 are drafts.

Phages represented in each track:

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• Track 1 : Acolyte 67
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- Track 2 : Farewell 49
- Track 3 : Sparky_48
- Track 4: JustASigh 47
- Track 5 : Hestia 45
- Track 6: JasperJr_41, Hitter_44, Guacamole_41, Walrus_42
- Track 7 : PhrostedPhlake 45
- Track 8 : PeggyLeg03_39, Pucara_36
- Track 9 : Karkharias 40
- Track 10 : Sarge_33
- Track 11 : Shoya 40
- Track 12 : Nandita_44, Ryan_44
- Track 13 : Zucker_43Track 14 : Bauer_44
- Track 15: JanetJ 32
- Track 16 : Maja 33
- Track 17 : Aoka_33, EvenBluerMoon_39
- Track 18 : Philonius 36
- Track 19: Gudmit 37
- Track 20 : ArV2 35
- Track 21 : P3MA 41
- Track 22 : Shambre1 37

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

The start number called the most often in the published annotations is 21, it was called in 7 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

 ArV2_35, Bauer_44, Farewell_49, Hestia_45, Maja_33, Sarge_33, Shoya_40, Zucker 43.

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

Sparky 48.

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

Acolyte_67, Aoka_33, EvenBluerMoon_39, Guacamole_41, Gudmit_37, Hitter_44, JanetJ_32, JasperJr_41, JustASigh_47, Karkharias_40, Nandita_44, P3MA_41, PeggyLeg03_39, Philonius_36, PhrostedPhlake_45, Pucara_36, Ryan_44, Shambre1_37, Walrus_42,

Summary by start number:

Start 4:

- Found in 3 of 28 (10.7%) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 66.7% of time when present
- Phage (with cluster) where this start called: PeggyLeg03_39 (FA), Pucara_36 (FA),

Start 6:

- Found in 5 of 28 (17.9%) of genes in pham
- Manual Annotations of this start: 4 of 24
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Guacamole_41 (CV), Hitter_44 (CV), JasperJr_41 (CV), Walrus_42 (CV),

Start 11:

- Found in 5 of 28 (17.9%) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Karkharias_40 (FA),

Start 14:

- Found in 2 of 28 (7.1%) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Sparky 48 (AF),

Start 20:

- Found in 3 of 28 (10.7%) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Philonius_36 (N),

Start 21:

- Found in 9 of 28 (32.1%) of genes in pham
- Manual Annotations of this start: 7 of 24
- Called 88.9% of time when present
- Phage (with cluster) where this start called: ArV2_35 (singleton), Bauer_44 (FN), Farewell_49 (AF), Hestia_45 (AY), Maja_33 (FO), Sarge_33 (FB), Shoya_40 (FB), Zucker 43 (FN),

Start 22:

- Found in 1 of 28 (3.6%) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acolyte 67 (A2),

Start 23:

- Found in 8 of 28 (28.6%) of genes in pham
- Manual Annotations of this start: 7 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aoka_33 (FO), EvenBluerMoon_39 (FO), Gudmit_37 (singleton), JanetJ_32 (FO), Nandita_44 (FF), P3MA_41 (singleton), PhrostedPhlake_45 (CV), Ryan_44 (FF),

Start 24:

- Found in 1 of 28 (3.6%) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Shambre1 37 (singleton),

Start 35:

- Found in 8 of 28 (28.6%) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 12.5% of time when present
- Phage (with cluster) where this start called: JustASigh_47 (AH),

Summary by clusters:

There are 12 clusters represented in this pham: singleton, AF, AH, N, FA, FB, A2, FF, AY, CV, FN, FO,

Info for manual annotations of cluster A2:

•Start number 22 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster AF:

- •Start number 14 was manually annotated 1 time for cluster AF.
- •Start number 21 was manually annotated 1 time for cluster AF.

Info for manual annotations of cluster AH:

•Start number 35 was manually annotated 1 time for cluster AH.

Info for manual annotations of cluster AY:

•Start number 21 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster CV:

- •Start number 6 was manually annotated 4 times for cluster CV.
- •Start number 23 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster FA:

•Start number 4 was manually annotated 1 time for cluster FA.

Info for manual annotations of cluster FB:

•Start number 21 was manually annotated 2 times for cluster FB.

Info for manual annotations of cluster FF:

Start number 23 was manually annotated 2 times for cluster FF.

Info for manual annotations of cluster FN:

•Start number 21 was manually annotated 2 times for cluster FN.

Info for manual annotations of cluster FO:

- •Start number 21 was manually annotated 1 time for cluster FO.
- •Start number 23 was manually annotated 2 times for cluster FO.

Info for manual annotations of cluster N:

•Start number 20 was manually annotated 1 time for cluster N.

Gene Information:

Gene: Acolyte_67 Start: 43619, Stop: 43897, Start Num: 22

Candidate Starts for Acolyte_67:

(Start: 22 @43619 has 1 MA's), (27, 43631), (34, 43667), (Start: 35 @43673 has 1 MA's), (43, 43760),

Gene: Aoka_33 Start: 26261, Stop: 26512, Start Num: 23

Candidate Starts for Aoka_33:

(8, 26222), (Start: 23 @26261 has 7 MA's),

Gene: ArV2_35 Start: 24447, Stop: 24674, Start Num: 21

Candidate Starts for ArV2_35: (Start: 21 @24447 has 7 MA's),

Gene: Bauer_44 Start: 29731, Stop: 29958, Start Num: 21

Candidate Starts for Bauer_44: (Start: 21 @29731 has 7 MA's),

Gene: EvenBluerMoon 39 Start: 26499, Stop: 26750, Start Num: 23

Candidate Starts for EvenBluerMoon_39: (8, 26460), (Start: 23 @26499 has 7 MA's),

Gene: Farewell 49 Start: 36104, Stop: 36349, Start Num: 21

Candidate Starts for Farewell 49:

(3, 36020), (11, 36077), (Start: 14 @ 36083 has 1 MA's), (17, 36092), (Start: 20 @ 36101 has 1 MA's), (Start: 21 @ 36104 has 7 MA's), (25, 36113), (28, 36125), (30, 36137), (32, 36152), (40, 36209),

Gene: Guacamole 41 Start: 33011, Stop: 33295, Start Num: 6

Candidate Starts for Guacamole 41:

(Start: 6 @ 33011 has 4 MA's), (16, 33047), (31, 33098), (51, 33284),

Gene: Gudmit 37 Start: 27130, Stop: 27366, Start Num: 23

Candidate Starts for Gudmit_37:

(Start: 23 @27130 has 7 MA's), (Start: 35 @27181 has 1 MA's), (39, 27223), (46, 27316), (51, 27355),

Gene: Hestia_45 Start: 29565, Stop: 29792, Start Num: 21

Candidate Starts for Hestia 45:

(Start: 21 @29565 has 7 MA's), (42, 29697),

Gene: Hitter 44 Start: 32655, Stop: 32939, Start Num: 6

Candidate Starts for Hitter 44:

(Start: 6 @ 32655 has 4 MA's), (16, 32691), (31, 32742), (51, 32928),

Gene: JanetJ_32 Start: 26887, Stop: 27126, Start Num: 23

Candidate Starts for JanetJ 32:

(Start: 23 @26887 has 7 MA's), (31, 26923), (52, 27109),

Gene: JasperJr 41 Start: 33011, Stop: 33295, Start Num: 6

Candidate Starts for JasperJr_41:

(Start: 6 @ 33011 has 4 MA's), (16, 33047), (31, 33098), (51, 33284),

Gene: JustASigh_47 Start: 34656, Stop: 34838, Start Num: 35

Candidate Starts for JustASigh 47:

(7, 34569), (13, 34587), (29, 34629), (Start: 35 @34656 has 1 MA's), (37, 34671), (40, 34704), (45, 34782),

Gene: Karkharias_40 Start: 28250, Stop: 28516, Start Num: 11

Candidate Starts for Karkharias_40:

(1, 28181), (2, 28190), (Start: 4 @28202 has 1 MA's), (11, 28250), (15, 28259), (30, 28301), (Start: 35 @28325 has 1 MA's),

Gene: Maja_33 Start: 26682, Stop: 26909, Start Num: 21

Candidate Starts for Maja_33:

(Start: 21 @26682 has 7 MA's), (33, 26730), (48, 26889),

Gene: Nandita_44 Start: 30213, Stop: 30452, Start Num: 23

Candidate Starts for Nandita 44:

(Start: 23 @30213 has 7 MA's), (47, 30402), (53, 30438),

Gene: P3MA 41 Start: 31122, Stop: 31355, Start Num: 23

Candidate Starts for P3MA 41:

(9, 31086), (Start: 23 @31122 has 7 MA's), (26, 31131), (30, 31149), (39, 31215), (41, 31230), (42, 31248), (43, 31260),

Gene: PeggyLeg03 39 Start: 28437, Stop: 28751, Start Num: 4

Candidate Starts for PeggyLeg03 39:

(1, 28416), (2, 28425), (Start: 4 @28437 has 1 MA's), (11, 28485), (15, 28494), (30, 28536), (Start: 35 @28560 has 1 MA's),

Gene: Philonius_36 Start: 27911, Stop: 28141, Start Num: 20

Candidate Starts for Philonius_36:

(Start: 6 @27863 has 4 MA's), (10, 27887), (16, 27899), (18, 27908), (Start: 20 @27911 has 1 MA's), (42, 28040), (43, 28052),

Gene: PhrostedPhlake_45 Start: 32973, Stop: 33212, Start Num: 23

Candidate Starts for PhrostedPhlake 45:

(Start: 23 @32973 has 7 MA's), (Start: 35 @33024 has 1 MA's), (39, 33066), (43, 33111), (50, 33195), (51, 33201),

Gene: Pucara_36 Start: 28042, Stop: 28356, Start Num: 4

Candidate Starts for Pucara_36:

(1, 28021), (2, 28030), (Start: 4 @28042 has 1 MA's), (11, 28090), (15, 28099), (30, 28141), (Start: 35 @28165 has 1 MA's),

Gene: Ryan_44 Start: 30762, Stop: 31001, Start Num: 23

Candidate Starts for Ryan_44:

(Start: 23 @ 30762 has 7 MA's), (47, 30951), (53, 30987),

Gene: Sarge_33 Start: 24068, Stop: 24295, Start Num: 21

Candidate Starts for Sarge_33:

(Start: 21 @24068 has 7 MA's), (38, 24164), (44, 24233),

Gene: Shambre1_37 Start: 25536, Stop: 25748, Start Num: 24

Candidate Starts for Shambre1_37:

 $(5,\,25458),\,(9,\,25494),\,(12,\,25503),\,(19,\,25524),\,(\text{Start:}\,\,24\,\,@\,25536\,\,\text{has}\,\,1\,\,\text{MA's}),\,(\text{Start:}\,\,35\,\,@\,25587),\,(12,\,25494),\,(12,\,25503),\,(13,\,25524)$

has 1 MA's), (42, 25662), (44, 25695),

Gene: Shoya_40 Start: 26509, Stop: 26736, Start Num: 21

Candidate Starts for Shoya_40:

(Start: 21 @26509 has 7 MA's), (36, 26569), (44, 26674),

Gene: Sparky_48 Start: 36514, Stop: 36780, Start Num: 14

Candidate Starts for Sparky_48:

(3, 36451), (11, 36508), (Start: 14 @ 36514 has 1 MA's), (17, 36523), (Start: 20 @ 36532 has 1 MA's), (Start: 21 @ 36535 has 7 MA's), (25, 36544), (28, 36556), (30, 36568), (32, 36583), (40, 36640),

Gene: Walrus_42 Start: 32790, Stop: 33074, Start Num: 6

Candidate Starts for Walrus 42:

(Start: 6 @ 32790 has 4 MA's), (16, 32826), (31, 32877), (51, 33063),

Gene: Zucker_43 Start: 30252, Stop: 30479, Start Num: 21

Candidate Starts for Zucker_43:

(Start: 21 @30252 has 7 MA's), (33, 30300), (34, 30303), (48, 30459), (49, 30471),