

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 224863 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224863 has 24 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Big3\_41
- Track 2 : Paphu\_41
- Track 3 : DrFeelGood\_41
- Track 4: Pita2\_45, PSullivan\_42
- Track 5 : SarFire\_41, Thor\_41
- Track 6 : Snazzy\_40, ShortQueendom\_37
- Track 7 : Sibs6\_43, Gwendoluna\_44, Jorgensen\_42, Parliament\_41, Adahisdi\_42, Oogway\_40, JackSparrow\_44, Makemake\_42
- Track 8: KyMonks1A 45
- Track 9 : Dulcie 42
- Track 10 : Bigchungi 41
- Track 11 : Fushigi\_40, BillKnuckles\_42
- Track 12 : Scowl\_42
- Track 13 : Arcanine\_41

# 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 16 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Adahisdi\_42, Big3\_41, BillKnuckles\_42, DrFeelGood\_41, Dulcie\_42, Fushigi\_40, Gwendoluna\_44, JackSparrow\_44, Jorgensen\_42, KyMonks1A\_45, Makemake\_42, Oogway\_40, PSullivan\_42, Parliament\_41, Pita2\_45, Sibs6\_43,

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

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

• Arcanine\_41, Bigchungi\_41, Paphu\_41, SarFire\_41, Scowl\_42, ShortQueendom\_37, Snazzy\_40, Thor\_41,

# **Summary by start number:**

#### Start 2:

- Found in 2 of 24 (8.3%) of genes in pham
- Manual Annotations of this start: 2 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: SarFire\_41 (A1), Thor\_41 (A1),

### Start 3:

- Found in 2 of 24 (8.3%) of genes in pham
- Manual Annotations of this start: 2 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arcanine\_41 (A1), Scowl\_42 (A1),

# Start 4:

- Found in 3 of 24 (12.5%) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bigchungi\_41 (A1), ShortQueendom\_37 (A1), Snazzy\_40 (A1),

## Start 5:

- Found in 16 of 24 (66.7%) of genes in pham
- Manual Annotations of this start: 16 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adahisdi\_42 (A1), Big3\_41 (A1), BillKnuckles\_42 (A1), DrFeelGood\_41 (A1), Dulcie\_42 (A1), Fushigi\_40 (A1), Gwendoluna\_44 (A1), JackSparrow\_44 (A1), Jorgensen\_42 (A1), KyMonks1A\_45 (A1), Makemake\_42 (A1), Oogway\_40 (A1), PSullivan\_42 (A1), Parliament\_41 (A1), Pita2\_45 (A1), Sibs6\_43 (A1),

## Start 11:

- Found in 3 of 24 (12.5%) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Paphu\_41 (A1),

# Summary by clusters:

There is one cluster represented in this pham: A1

Info for manual annotations of cluster A1:

- •Start number 2 was manually annotated 2 times for cluster A1.
- •Start number 3 was manually annotated 2 times for cluster A1.
- •Start number 4 was manually annotated 1 time for cluster A1.
- •Start number 5 was manually annotated 16 times for cluster A1.
- •Start number 11 was manually annotated 1 time for cluster A1.

## Gene Information:

Gene: Adahisdi 42 Start: 32146, Stop: 31904, Start Num: 5

Candidate Starts for Adahisdi 42:

(Start: 5 @ 32146 has 16 MA's), (7, 32131), (13, 32005), (15, 31954),

Gene: Arcanine\_41 Start: 31349, Stop: 31077, Start Num: 3

Candidate Starts for Arcanine\_41:

(Start: 3 @31349 has 2 MA's), (7, 31304), (13, 31178), (15, 31127),

Gene: Big3\_41 Start: 32438, Stop: 32196, Start Num: 5

Candidate Starts for Big3\_41:

(Start: 5 @ 32438 has 16 MA's), (13, 32297), (15, 32246),

Gene: Bigchungi\_41 Start: 31571, Stop: 31308, Start Num: 4

Candidate Starts for Bigchungi 41:

(Start: 4 @31571 has 1 MA's), (13, 31409), (15, 31358),

Gene: BillKnuckles\_42 Start: 32660, Stop: 32418, Start Num: 5

Candidate Starts for BillKnuckles\_42:

(Start: 5 @ 32660 has 16 MA's), (6, 32648), (7, 32645), (13, 32519), (15, 32468),

Gene: DrFeelGood\_41 Start: 32592, Stop: 32350, Start Num: 5

Candidate Starts for DrFeelGood 41:

(1, 32802), (Start: 5 @ 32592 has 16 MA's), (6, 32580), (7, 32577), (13, 32451), (15, 32400),

Gene: Dulcie 42 Start: 32111, Stop: 31875, Start Num: 5

Candidate Starts for Dulcie 42:

(Start: 5 @32111 has 16 MA's), (14, 31967),

Gene: Fushigi\_40 Start: 30062, Stop: 29820, Start Num: 5

Candidate Starts for Fushigi\_40:

(Start: 5 @ 30062 has 16 MA's), (6, 30050), (7, 30047), (13, 29921), (15, 29870),

Gene: Gwendoluna\_44 Start: 34030, Stop: 33788, Start Num: 5

Candidate Starts for Gwendoluna\_44:

(Start: 5 @ 34030 has 16 MA's), (7, 34015), (13, 33889), (15, 33838),

Gene: JackSparrow 44 Start: 32959, Stop: 32717, Start Num: 5

Candidate Starts for JackSparrow\_44:

(Start: 5 @ 32959 has 16 MA's), (7, 32944), (13, 32818), (15, 32767),

Gene: Jorgensen\_42 Start: 32074, Stop: 31832, Start Num: 5

Candidate Starts for Jorgensen\_42:

(Start: 5 @ 32074 has 16 MA's), (7, 32059), (13, 31933), (15, 31882),

Gene: KyMonks1A\_45 Start: 32790, Stop: 32497, Start Num: 5

Candidate Starts for KyMonks1A\_45:

(Start: 5 @ 32790 has 16 MA's), (8, 32730), (13, 32598), (15, 32547),

Gene: Makemake\_42 Start: 33140, Stop: 32898, Start Num: 5

Candidate Starts for Makemake\_42:

(Start: 5 @ 33140 has 16 MA's), (7, 33125), (13, 32999), (15, 32948),

Gene: Oogway 40 Start: 31353, Stop: 31111, Start Num: 5

Candidate Starts for Oogway\_40:

(Start: 5 @ 31353 has 16 MA's), (7, 31338), (13, 31212), (15, 31161),

Gene: PSullivan\_42 Start: 31747, Stop: 31505, Start Num: 5

Candidate Starts for PSullivan\_42:

(Start: 5 @ 31747 has 16 MA's), (7, 31732), (13, 31606), (15, 31555),

Gene: Paphu\_41 Start: 32017, Stop: 31832, Start Num: 11

Candidate Starts for Paphu\_41:

(Start: 11 @32017 has 1 MA's), (13, 31933), (15, 31882),

Gene: Parliament\_41 Start: 32362, Stop: 32120, Start Num: 5

Candidate Starts for Parliament\_41:

(Start: 5 @ 32362 has 16 MA's), (7, 32347), (13, 32221), (15, 32170),

Gene: Pita2\_45 Start: 33244, Stop: 33002, Start Num: 5

Candidate Starts for Pita2 45:

(Start: 5 @ 33244 has 16 MA's), (7, 33229), (13, 33103), (15, 33052),

Gene: SarFire 41 Start: 32238, Stop: 31951, Start Num: 2

Candidate Starts for SarFire\_41:

(Start: 2 @32238 has 2 MA's), (9, 32154), (10, 32145), (Start: 11 @32136 has 1 MA's), (12, 32124), (13, 32052), (15, 32001),

Gene: Scowl 42 Start: 32734, Stop: 32462, Start Num: 3

Candidate Starts for Scowl 42:

(Start: 3 @ 32734 has 2 MA's), (7, 32689), (13, 32563),

Gene: ShortQueendom\_37 Start: 28736, Stop: 28473, Start Num: 4

Candidate Starts for ShortQueendom\_37:

(Start: 4 @28736 has 1 MA's), (13, 28574), (15, 28523),

Gene: Sibs6\_43 Start: 31379, Stop: 31137, Start Num: 5

Candidate Starts for Sibs6\_43:

(Start: 5 @31379 has 16 MA's), (7, 31364), (13, 31238), (15, 31187),

Gene: Snazzy\_40 Start: 31803, Stop: 31540, Start Num: 4

Candidate Starts for Snazzy\_40:

(Start: 4 @31803 has 1 MA's), (13, 31641), (15, 31590),

Gene: Thor\_41 Start: 31596, Stop: 31309, Start Num: 2

Candidate Starts for Thor 41:

(Start: 2 @31596 has 2 MA's), (9, 31512), (10, 31503), (Start: 11 @31494 has 1 MA's), (12, 31482),

(13, 31410), (15, 31359),