

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 224987 Report

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

Pham number 224987 has 15 members, 3 are drafts.

Phages represented in each track:

• Track 1 : Scavito 62

Track 2 : JaNo\_62, Mordred\_62

Track 3 : DrYang\_60

Track 4 : AbbyDaisy\_47

Track 5 : MaterMagnus\_49, Aikyam\_47

Track 6: Isolde\_48, Raphaella\_48, YoungHarleezy\_49

• Track 7 : Persistence 44

• Track 8 : Tiff81 45

Track 9 : Auxilium 45

• Track 10 : Seahorse 52

• Track 11 : BillyTP\_50

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

The start number called the most often in the published annotations is 15, it was called in 5 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

AbbyDaisy\_47, Auxilium\_45, Persistence\_44, Seahorse\_52, Tiff81\_45,

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

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

 Aikyam\_47, BillyTP\_50, DrYang\_60, Isolde\_48, JaNo\_62, MaterMagnus\_49, Mordred\_62, Raphaella\_48, Scavito\_62, YoungHarleezy\_49,

## Summary by start number:

#### Start 11:

- Found in 3 of 15 (20.0%) of genes in pham
- Manual Annotations of this start: 2 of 12
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Isolde\_48 (AY), Raphaella\_48 (AY), YoungHarleezy\_49 (AY),

### Start 14:

- Found in 3 of 15 (20.0%) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aikyam\_47 (AY), BillyTP\_50 (AY), MaterMagnus\_49 (AY),

#### Start 15:

- Found in 5 of 15 (33.3%) of genes in pham
- Manual Annotations of this start: 5 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AbbyDaisy\_47 (AY), Auxilium\_45 (AY), Persistence\_44 (AY), Seahorse\_52 (AY), Tiff81\_45 (AY),

#### Start 21:

- Found in 4 of 15 (26.7%) of genes in pham
- Manual Annotations of this start: 4 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DrYang\_60 (AR), JaNo\_62 (AR), Mordred\_62 (AR), Scavito\_62 (AR),

## **Summary by clusters:**

There are 2 clusters represented in this pham: AY, AR,

Info for manual annotations of cluster AR:

•Start number 21 was manually annotated 4 times for cluster AR.

Info for manual annotations of cluster AY:

- •Start number 11 was manually annotated 2 times for cluster AY.
- •Start number 14 was manually annotated 1 time for cluster AY.
- •Start number 15 was manually annotated 5 times for cluster AY.

### Gene Information:

Gene: AbbyDaisy 47 Start: 30662, Stop: 31039, Start Num: 15

Candidate Starts for AbbyDaisy 47:

(1, 30500), (2, 30521), (3, 30545), (6, 30569), (8, 30581), (10, 30626), (12, 30644), (Start: 15 @30662 has 5 MA's), (24, 30821), (29, 30872), (31, 30926), (34, 31010),

Gene: Aikyam\_47 Start: 28281, Stop: 28652, Start Num: 14

Candidate Starts for Aikyam 47:

(Start: 14 @28281 has 1 MA's), (22, 28419), (23, 28428), (27, 28455), (28, 28485), (29, 28488), (30, 28518), (31, 28542),

Gene: Auxilium\_45 Start: 28077, Stop: 28445, Start Num: 15

Candidate Starts for Auxilium 45:

(4, 27969), (8, 27999), (9, 28002), (10, 28044), (Start: 15 @28077 has 5 MA's), (23, 28221), (24, 28230), (29, 28281), (31, 28335),

Gene: BillyTP\_50 Start: 31459, Stop: 31839, Start Num: 14

Candidate Starts for BillyTP\_50:

(7, 31381), (Start: 14 @31459 has 1 MA's), (20, 31540), (22, 31606), (23, 31615), (27, 31642), (28, 31672), (29, 31675), (30, 31705), (31, 31729),

Gene: DrYang\_60 Start: 45907, Stop: 46182, Start Num: 21

Candidate Starts for DrYang\_60:

(Start: 21 @45907 has 4 MA's), (25, 45958), (26, 45970),

Gene: Isolde\_48 Start: 30136, Stop: 30528, Start Num: 11

Candidate Starts for Isolde 48:

(Start: 11 @30136 has 2 MA's), (13, 30145), (17, 30169), (19, 30199), (20, 30229), (23, 30304), (29, 30364), (31, 30418),

Gene: JaNo\_62 Start: 44654, Stop: 44932, Start Num: 21

Candidate Starts for JaNo 62:

(16, 44546), (Start: 21 @44654 has 4 MA's), (25, 44705), (26, 44717), (32, 44840), (33, 44897),

Gene: MaterMagnus\_49 Start: 30453, Stop: 30824, Start Num: 14

Candidate Starts for MaterMagnus\_49:

(Start: 14 @30453 has 1 MA's), (22, 30591), (23, 30600), (27, 30627), (28, 30657), (29, 30660), (30, 30690), (31, 30714),

Gene: Mordred\_62 Start: 44648, Stop: 44926, Start Num: 21

Candidate Starts for Mordred 62:

(16, 44540), (Start: 21 @44648 has 4 MA's), (25, 44699), (26, 44711), (32, 44834), (33, 44891),

Gene: Persistence\_44 Start: 29226, Stop: 29594, Start Num: 15

Candidate Starts for Persistence\_44:

(Start: 15 @29226 has 5 MA's), (18, 29247), (29, 29430), (31, 29484),

Gene: Raphaella\_48 Start: 30068, Stop: 30460, Start Num: 11

Candidate Starts for Raphaella\_48:

(Start: 11 @30068 has 2 MA's), (13, 30077), (17, 30101), (19, 30131), (20, 30161), (23, 30236), (29, 30296), (31, 30350),

Gene: Scavito\_62 Start: 44545, Stop: 44823, Start Num: 21

Candidate Starts for Scavito 62:

(5, 44335), (16, 44437), (Start: 21 @44545 has 4 MA's), (25, 44596), (32, 44731), (33, 44788),

Gene: Seahorse 52 Start: 32428, Stop: 32802, Start Num: 15

Candidate Starts for Seahorse 52:

(3, 32311), (6, 32335), (8, 32347), (12, 32410), (Start: 15 @32428 has 5 MA's), (23, 32578), (24, 32587), (29, 32638), (31, 32692),

Gene: Tiff81\_45 Start: 28602, Stop: 28973, Start Num: 15

Candidate Starts for Tiff81 45:

(4, 28494), (8, 28524), (9, 28527), (10, 28569), (Start: 15 @28602 has 5 MA's), (27, 28773), (29, 28806), (30, 28839), (31, 28863),

Gene: YoungHarleezy\_49 Start: 30634, Stop: 31026, Start Num: 11 Candidate Starts for YoungHarleezy\_49: (Start: 11 @30634 has 2 MA's), (13, 30643), (17, 30667), (19, 30697), (20, 30727), (23, 30802), (29, 30862), (31, 30916),