

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 196892 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196892 has 18 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Mask\_95, Sejanus\_97
- Track 2 : BoostSeason\_88, Mufasa\_88
- Track 3: DarthP\_40, Hammy\_40
- Track 4 : Amgine\_39
- Track 5 : Ellie 38
- Track 6 : SirPhilip\_41
- Track 7: Amohnition 41
- Track 8 : Fefferhead 39
- Track 9: Sunflower1121\_44, Syra333\_44, Shadow1\_44, Ximenita\_45
- Track 10 : Ekdilam\_38
- Track 11 : Tierra\_42
- Track 12 : TClif\_95

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

The start number called the most often in the published annotations is 22, it was called in 8 of the 18 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

 Amgine\_39, Amohnition\_41, BoostSeason\_88, DarthP\_40, Fefferhead\_39, Hammy\_40, Mufasa\_88, TClif\_95,

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

• Ellie\_38, Shadow1\_44, SirPhilip\_41, Sunflower1121\_44, Syra333\_44, Ximenita\_45,

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

Ekdilam\_38, Mask\_95, Sejanus\_97, Tierra\_42,

## Summary by start number:

## Start 15:

- Found in 1 of 18 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called 100.0% of time when present

Phage (with cluster) where this start called: Ekdilam\_38 (K6),

#### Start 18:

- Found in 1 of 18 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Tierra\_42 (K6),

#### Start 20:

- Found in 2 of 18 (11.1%) of genes in pham
- Manual Annotations of this start: 2 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mask\_95 (AD), Sejanus\_97 (AD),

### Start 22:

- Found in 14 of 18 (77.8%) of genes in pham
- Manual Annotations of this start: 8 of 18
- Called 57.1% of time when present
- Phage (with cluster) where this start called: Amgine\_39 (K6), Amohnition\_41 (K6), BoostSeason\_88 (K2), DarthP\_40 (K6), Fefferhead\_39 (K6), Hammy\_40 (K6), Mufasa\_88 (K2), TClif\_95 (K6),

#### Start 25:

- Found in 9 of 18 (50.0%) of genes in pham
- Manual Annotations of this start: 6 of 18
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Ellie\_38 (K6), Shadow1\_44 (K6), SirPhilip\_41 (K6), Sunflower1121\_44 (K6), Syra333\_44 (K6), Ximenita\_45 (K6),

## **Summary by clusters:**

There are 3 clusters represented in this pham: K2, K6, AD,

Info for manual annotations of cluster AD:

•Start number 20 was manually annotated 2 times for cluster AD.

Info for manual annotations of cluster K2:

•Start number 22 was manually annotated 2 times for cluster K2.

Info for manual annotations of cluster K6:

- •Start number 15 was manually annotated 1 time for cluster K6.
- •Start number 18 was manually annotated 1 time for cluster K6.
- •Start number 22 was manually annotated 6 times for cluster K6.
- •Start number 25 was manually annotated 6 times for cluster K6.

### Gene Information:

Gene: Amgine 39 Start: 33010, Stop: 32798, Start Num: 22

Candidate Starts for Amgine 39:

(16, 33052), (Start: 22 @33010 has 8 MA's), (Start: 25 @32965 has 6 MA's), (31, 32917), (33, 32893),

Gene: Amohnition\_41 Start: 32710, Stop: 32498, Start Num: 22

Candidate Starts for Amohnition\_41:

(Start: 22 @32710 has 8 MA's), (Start: 25 @32665 has 6 MA's), (31, 32617), (33, 32593),

Gene: BoostSeason\_88 Start: 56098, Stop: 56313, Start Num: 22

Candidate Starts for BoostSeason 88:

(13, 55987), (Start: 22 @56098 has 8 MA's), (28, 56182), (31, 56194),

Gene: DarthP\_40 Start: 32347, Stop: 32135, Start Num: 22

Candidate Starts for DarthP 40:

(Start: 22 @32347 has 8 MA's), (31, 32254), (33, 32230),

Gene: Ekdilam\_38 Start: 32274, Stop: 32005, Start Num: 15

Candidate Starts for Ekdilam 38:

(Start: 15 @32274 has 1 MA's), (19, 32238), (21, 32226), (31, 32124), (33, 32100),

Gene: Ellie 38 Start: 32153, Stop: 31986, Start Num: 25

Candidate Starts for Ellie\_38:

(Start: 22 @32198 has 8 MA's), (Start: 25 @32153 has 6 MA's), (31, 32105),

Gene: Fefferhead\_39 Start: 32152, Stop: 31940, Start Num: 22

Candidate Starts for Fefferhead\_39:

(Start: 22 @32152 has 8 MA's), (Start: 25 @32107 has 6 MA's), (31, 32059), (33, 32035),

Gene: Hammy\_40 Start: 32335, Stop: 32123, Start Num: 22

Candidate Starts for Hammy\_40:

(Start: 22 @32335 has 8 MA's), (31, 32242), (33, 32218),

Gene: Mask\_95 Start: 63858, Stop: 64094, Start Num: 20

Candidate Starts for Mask\_95:

(Start: 20 @63858 has 2 MA's), (23, 63879), (24, 63903), (26, 63939), (27, 63942), (28, 63957), (29, 63960), (30, 63963), (34, 64026), (35, 64029), (36, 64080),

Gene: Mufasa 88 Start: 56085, Stop: 56300, Start Num: 22

Candidate Starts for Mufasa 88:

(13, 55974), (Start: 22 @56085 has 8 MA's), (28, 56169), (31, 56181),

Gene: Sejanus\_97 Start: 62878, Stop: 63114, Start Num: 20

Candidate Starts for Sejanus\_97:

(Start: 20 @62878 has 2 MA's), (23, 62899), (24, 62923), (26, 62959), (27, 62962), (28, 62977), (29, 62980), (30, 62983), (34, 63046), (35, 63049), (36, 63100),

Gene: Shadow1\_44 Start: 32514, Stop: 32347, Start Num: 25

Candidate Starts for Shadow1 44:

(Start: 22 @32559 has 8 MA's), (Start: 25 @32514 has 6 MA's), (31, 32466), (33, 32442),

Gene: SirPhilip\_41 Start: 32747, Stop: 32580, Start Num: 25

Candidate Starts for SirPhilip\_41:

(14, 32873), (Start: 22 @32792 has 8 MA's), (Start: 25 @32747 has 6 MA's), (33, 32675),

Gene: Sunflower1121\_44 Start: 32609, Stop: 32442, Start Num: 25

Candidate Starts for Sunflower1121 44:

(Start: 22 @32654 has 8 MA's), (Start: 25 @32609 has 6 MA's), (31, 32561), (33, 32537),

Gene: Syra333\_44 Start: 32270, Stop: 32103, Start Num: 25

Candidate Starts for Syra333\_44:

(Start: 22 @32315 has 8 MA's), (Start: 25 @32270 has 6 MA's), (31, 32222), (33, 32198),

Gene: TClif\_95 Start: 58904, Stop: 59119, Start Num: 22

Candidate Starts for TClif\_95:

(Start: 22 @58904 has 8 MA's), (28, 58988), (32, 59021), (35, 59063),

Gene: Tierra\_42 Start: 32376, Stop: 32137, Start Num: 18

Candidate Starts for Tierra\_42:

(1, 33114), (2, 33030), (3, 32940), (4, 32931), (5, 32898), (6, 32895), (7, 32871), (8, 32862), (9, 32844), (10, 32775), (11, 32718), (12, 32553), (17, 32382), (Start: 18 @32376 has 1 MA's), (30, 32268), (31, 32262),

Gene: Ximenita\_45 Start: 32454, Stop: 32287, Start Num: 25

Candidate Starts for Ximenita\_45:

(Start: 22 @32499 has 8 MA's), (Start: 25 @32454 has 6 MA's), (31, 32406), (33, 32382),