

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 156886 Report

This analysis was run 04/12/24 on database version 558.

Pham number 156886 has 8 members, 0 are drafts.

Phages represented in each track:

Track 1: Shlim410\_43, Adora\_42, Hortense\_45, Twinkle\_44, Howe\_45

• Track 2 : Clark 43, MichaelScott 44

Track 3 : Samman98\_44

## 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 5 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Adora\_42, Hortense\_45, Howe\_45, Shlim410\_43, Twinkle\_44,

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

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

Clark 43, MichaelScott 44, Samman98 44,

#### Summary by start number:

# Start 5:

- Found in 5 of 8 (62.5%) of genes in pham
- Manual Annotations of this start: 5 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adora\_42 (CZ4), Hortense\_45 (CZ4), Howe\_45 (CZ4), Shlim410\_43 (CZ4), Twinkle\_44 (CZ4),

## Start 7:

- Found in 3 of 8 ( 37.5% ) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Samman98\_44 (CZ4),

#### Start 8:

- Found in 3 of 8 ( 37.5% ) of genes in pham
- Manual Annotations of this start: 2 of 8
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Clark\_43 (CZ4), MichaelScott\_44 (CZ4),

## **Summary by clusters:**

There is one cluster represented in this pham: CZ4

Info for manual annotations of cluster CZ4:

- •Start number 5 was manually annotated 5 times for cluster CZ4.
- •Start number 7 was manually annotated 1 time for cluster CZ4.
- •Start number 8 was manually annotated 2 times for cluster CZ4.

#### Gene Information:

Gene: Adora 42 Start: 34999, Stop: 34100, Start Num: 5

Candidate Starts for Adora 42:

(1, 35077), (2, 35047), (Start: 5 @34999 has 5 MA's), (11, 34843), (13, 34783), (16, 34705), (17, 34678), (18, 34630), (19, 34621), (23, 34474), (25, 34429), (27, 34228), (28, 34147), (29, 34132),

Gene: Clark\_43 Start: 32446, Stop: 31643, Start Num: 8

Candidate Starts for Clark 43:

(3, 32560), (4, 32527), (6, 32503), (Start: 7 @32476 has 1 MA's), (Start: 8 @32446 has 2 MA's), (9, 32401), (10, 32380), (12, 32374), (14, 32275), (15, 32269), (20, 32110), (21, 32101), (22, 32089), (24, 31993), (26, 31930), (27, 31792), (29, 31696),

Gene: Hortense 45 Start: 36354, Stop: 35455, Start Num: 5

Candidate Starts for Hortense 45:

(1, 36432), (2, 36402), (Start: 5 @ 36354 has 5 MA's), (11, 36198), (13, 36138), (16, 36060), (17, 36033), (18, 35985), (19, 35976), (23, 35829), (25, 35784), (27, 35583), (28, 35502), (29, 35487),

Gene: Howe\_45 Start: 36354, Stop: 35455, Start Num: 5

Candidate Starts for Howe\_45:

(1, 36432), (2, 36402), (Start: 5 @36354 has 5 MA's), (11, 36198), (13, 36138), (16, 36060), (17, 36033), (18, 35985), (19, 35976), (23, 35829), (25, 35784), (27, 35583), (28, 35502), (29, 35487),

Gene: MichaelScott\_44 Start: 33922, Stop: 33119, Start Num: 8

Candidate Starts for MichaelScott 44:

(3, 34036), (4, 34003), (6, 33979), (Start: 7 @33952 has 1 MA's), (Start: 8 @33922 has 2 MA's), (9, 33877), (10, 33856), (12, 33850), (14, 33751), (15, 33745), (20, 33586), (21, 33577), (22, 33565), (24, 33469), (26, 33406), (27, 33268), (29, 33172),

Gene: Samman98\_44 Start: 32579, Stop: 31746, Start Num: 7

Candidate Starts for Samman98 44:

(3, 32663), (4, 32630), (6, 32606), (Start: 7 @32579 has 1 MA's), (Start: 8 @32549 has 2 MA's), (9, 32504), (10, 32483), (12, 32477), (14, 32378), (15, 32372), (20, 32213), (21, 32204), (22, 32192), (24, 32096), (26, 32033), (27, 31895), (29, 31799),

Gene: Shlim410\_43 Start: 36354, Stop: 35455, Start Num: 5

Candidate Starts for Shlim410\_43:

(1, 36432), (2, 36402), (Start: 5 @ 36354 has 5 MA's), (11, 36198), (13, 36138), (16, 36060), (17, 36033), (18, 35985), (19, 35976), (23, 35829), (25, 35784), (27, 35583), (28, 35502), (29, 35487),

Gene: Twinkle\_44 Start: 37413, Stop: 36514, Start Num: 5

Candidate Starts for Twinkle\_44:

(1, 37491), (2, 37461), (Start: 5 @37413 has 5 MA's), (11, 37257), (13, 37197), (16, 37119), (17, 37092), (18, 37044), (19, 37035), (23, 36888), (25, 36843), (27, 36642), (28, 36561), (29, 36546),