

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 4898 Report

This analysis was run 04/05/24 on database version 557.

Pham number 4898 has 15 members, 1 are drafts.

Phages represented in each track:

- Track 1: Stigma\_246, Karp\_248, SparkleGoddess\_248, Belfort\_249
- Track 2 : Comrade\_244Track 3 : Francob\_253, Emma1919\_249, Gilson\_249
- Track 4 : Faust 250
- Track 5: TunaTartare 249
- Track 6 : Beuffert\_249
- Track 7 : SeresaTree 254
- Track 8 : Sham\_241
- Track 9 : Wakanda 205
- Track 10 : Muntaha 205

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

The start number called the most often in the published annotations is 16, it was called in 6 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

 Belfort\_249, Faust\_250, Karp\_248, SeresaTree\_254, SparkleGoddess\_248, Stigma\_246, TunaTartare\_249,

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

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

 Beuffert\_249, Comrade\_244, Emma1919\_249, Francob\_253, Gilson\_249, Muntaha\_205, Sham\_241, Wakanda\_205,

### Summary by start number:

### Start 11:

- Found in 3 of 15 (20.0%) of genes in pham
- Manual Annotations of this start: 3 of 14
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Emma1919\_249 (BK1), Francob\_253 (BK1), Gilson\_249 (BK1),

## Start 14:

- Found in 2 of 15 (13.3%) of genes in pham
- Manual Annotations of this start: 2 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beuffert\_249 (BK1), Sham\_241 (BK1),

### Start 15:

- Found in 3 of 15 (20.0%) of genes in pham
- Manual Annotations of this start: 3 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Comrade\_244 (BK1), Muntaha\_205 (BK2), Wakanda 205 (BK2),

#### Start 16:

- Found in 7 of 15 (46.7%) of genes in pham
- Manual Annotations of this start: 6 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Belfort\_249 (BK1), Faust\_250 (BK1), Karp\_248 (BK1), SeresaTree\_254 (BK1), SparkleGoddess\_248 (BK1), Stigma\_246 (BK1), TunaTartare\_249 (BK1),

## **Summary by clusters:**

There are 2 clusters represented in this pham: BK1, BK2,

Info for manual annotations of cluster BK1:

- •Start number 11 was manually annotated 3 times for cluster BK1.
- •Start number 14 was manually annotated 2 times for cluster BK1.
- •Start number 15 was manually annotated 1 time for cluster BK1.
- •Start number 16 was manually annotated 6 times for cluster BK1.

Info for manual annotations of cluster BK2:

•Start number 15 was manually annotated 2 times for cluster BK2.

#### Gene Information:

Gene: Belfort\_249 Start: 118624, Stop: 118818, Start Num: 16

Candidate Starts for Belfort 249:

(Start: 16 @118624 has 6 MA's), (21, 118663), (25, 118690), (29, 118768),

Gene: Beuffert 249 Start: 119455, Stop: 119661, Start Num: 14

Candidate Starts for Beuffert 249:

(1, 119263), (2, 119299), (3, 119350), (4, 119365), (5, 119371), (7, 119395), (8, 119407), (9, 119419), (13, 119449), (Start: 14 @119455 has 2 MA's), (17, 119476), (20, 119503), (23, 119518),

Gene: Comrade\_244 Start: 118757, Stop: 118960, Start Num: 15

Candidate Starts for Comrade 244:

(12, 118751), (Start: 15 @118757 has 3 MA's), (18, 118787), (22, 118811), (26, 118835), (28, 118844),

Gene: Emma1919\_249 Start: 117219, Stop: 117434, Start Num: 11

Candidate Starts for Emma1919\_249:

(Start: 11 @117219 has 3 MA's), (19, 117270), (22, 117285),

Gene: Faust 250 Start: 120263, Stop: 120457, Start Num: 16

Candidate Starts for Faust\_250:

(Start: 16 @120263 has 6 MA's), (20, 120299), (21, 120302), (23, 120314),

Gene: Francob\_253 Start: 118714, Stop: 118929, Start Num: 11

Candidate Starts for Francob\_253:

(Start: 11 @118714 has 3 MA's), (19, 118765), (22, 118780),

Gene: Gilson\_249 Start: 117979, Stop: 118194, Start Num: 11

Candidate Starts for Gilson 249:

(Start: 11 @117979 has 3 MA's), (19, 118030), (22, 118045),

Gene: Karp\_248 Start: 120222, Stop: 120416, Start Num: 16

Candidate Starts for Karp\_248:

(Start: 16 @120222 has 6 MA's), (21, 120261), (25, 120288), (29, 120366),

Gene: Muntaha\_205 Start: 103073, Stop: 103276, Start Num: 15

Candidate Starts for Muntaha\_205:

(Start: 15 @103073 has 3 MA's), (24, 103136), (29, 103226),

Gene: SeresaTree 254 Start: 120488, Stop: 120682, Start Num: 16

Candidate Starts for SeresaTree\_254:

(Start: 16 @ 120488 has 6 MA's), (20, 120524), (21, 120527),

Gene: Sham\_241 Start: 120336, Stop: 120542, Start Num: 14

Candidate Starts for Sham 241:

(6, 120261), (10, 120321), (Start: 14 @ 120336 has 2 MA's), (18, 120369), (25, 120414), (26, 120417), (29, 120492),

Gene: SparkleGoddess\_248 Start: 119497, Stop: 119691, Start Num: 16

Candidate Starts for SparkleGoddess\_248:

(Start: 16 @119497 has 6 MA's), (21, 119536), (25, 119563), (29, 119641),

Gene: Stigma 246 Start: 119209, Stop: 119403, Start Num: 16

Candidate Starts for Stigma\_246:

(Start: 16 @119209 has 6 MA's), (21, 119248), (25, 119275), (29, 119353),

Gene: TunaTartare 249 Start: 122307, Stop: 122501, Start Num: 16

Candidate Starts for TunaTartare\_249:

(Start: 16 @122307 has 6 MA's), (19, 122334), (24, 122361), (27, 122379), (29, 122451),

Gene: Wakanda\_205 Start: 103308, Stop: 103511, Start Num: 15

Candidate Starts for Wakanda 205:

(Start: 15 @103308 has 3 MA's), (29, 103461),