

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 138293 Report

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

Pham number 138293 has 16 members, 1 are drafts.

Phages represented in each track:

- Track 1: Karp\_228, Belfort\_232, Comrade\_229, SparkleGoddess\_232
- Track 2 : MeganTheeKilla\_236, Gilson\_230
- Track 3 : SeresaTree\_233
- Track 4: Sham 223, Faust 229
- Track 5: Emma1919 234
- Track 6 : TunaTartare\_231
- Track 7: Moab 234, Patelgo 235
- Track 8 : Kenrey\_240
- Track 9: Wakanda\_168, Muntaha\_170

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

The start number called the most often in the published annotations is 7, it was called in 9 of the 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Belfort\_232, Comrade\_229, Faust\_229, Karp\_228, Moab\_234, Patelgo\_235, Sham\_223, SparkleGoddess\_232, TunaTartare\_231,

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

SeresaTree\_233,

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

• Emma1919\_234, Gilson\_230, Kenrey\_240, MeganTheeKilla\_236, Muntaha\_170, Wakanda\_168,

### Summary by start number:

### Start 6:

- Found in 4 of 16 (25.0%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: SeresaTree\_233 (BK1),

#### Start 7:

- Found in 10 of 16 (62.5%) of genes in pham
- Manual Annotation's of this start: 9 of 15
- Called 90.0% of time when present
- Phage (with cluster) where this start called: Belfort\_232 (BK1), Comrade\_229 (BK1), Faust\_229 (BK1), Karp\_228 (BK1), Moab\_234 (BK1), Patelgo\_235 (BK1), Sham\_223 (BK1), SparkleGoddess\_232 (BK1), TunaTartare\_231 (BK1),

#### Start 9:

- Found in 6 of 16 (37.5%) of genes in pham
- Manual Annotations of this start: 6 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Emma1919\_234 (BK1), Gilson\_230 (BK1), Kenrey\_240 (BK1), MeganTheeKilla\_236 (BK1), Muntaha\_170 (BK2), Wakanda 168 (BK2),

## Summary by clusters:

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

Info for manual annotations of cluster BK1:

- •Start number 7 was manually annotated 9 times for cluster BK1.
- •Start number 9 was manually annotated 4 times for cluster BK1.

Info for manual annotations of cluster BK2:

•Start number 9 was manually annotated 2 times for cluster BK2.

#### Gene Information:

Gene: Belfort\_232 Start: 113582, Stop: 113770, Start Num: 7

Candidate Starts for Belfort 232:

(Start: 7 @113582 has 9 MA's), (21, 113735),

Gene: Comrade\_229 Start: 113778, Stop: 113966, Start Num: 7

Candidate Starts for Comrade\_229:

(Start: 7 @113778 has 9 MA's), (21, 113931),

Gene: Emma1919 234 Start: 112311, Stop: 112493, Start Num: 9

Candidate Starts for Emma1919 234:

(Start: 9 @112311 has 6 MA's), (10, 112332), (11, 112347), (15, 112371), (21, 112455),

Gene: Faust\_229 Start: 113630, Stop: 113815, Start Num: 7

Candidate Starts for Faust\_229:

(6, 113624), (Start: 7 @113630 has 9 MA's), (13, 113687), (21, 113780),

Gene: Gilson 230 Start: 111836, Stop: 112018, Start Num: 9

Candidate Starts for Gilson 230:

(Start: 9 @111836 has 6 MA's), (10, 111857), (11, 111872), (17, 111911), (21, 111980),

Gene: Karp\_228 Start: 113948, Stop: 114136, Start Num: 7

Candidate Starts for Karp\_228:

(Start: 7 @113948 has 9 MA's), (21, 114101),

Gene: Kenrey\_240 Start: 113945, Stop: 114127, Start Num: 9

Candidate Starts for Kenrey\_240:

(Start: 9 @113945 has 6 MA's), (10, 113966), (21, 114089),

Gene: MeganTheeKilla\_236 Start: 112709, Stop: 112891, Start Num: 9

Candidate Starts for MeganTheeKilla 236:

(Start: 9 @112709 has 6 MA's), (10, 112730), (11, 112745), (17, 112784), (21, 112853),

Gene: Moab\_234 Start: 114858, Stop: 115046, Start Num: 7

Candidate Starts for Moab 234:

(Start: 7 @114858 has 9 MA's), (14, 114927), (15, 114930), (17, 114945), (19, 114960), (20, 114993), (21, 115011),

Gene: Muntaha\_170 Start: 90415, Stop: 90594, Start Num: 9

Candidate Starts for Muntaha 170:

(1, 90217), (2, 90220), (3, 90313), (4, 90349), (5, 90364), (8, 90409), (Start: 9 @90415 has 6 MA's), (12, 90454), (16, 90478), (17, 90490), (18, 90493),

Gene: Patelgo\_235 Start: 115272, Stop: 115460, Start Num: 7

Candidate Starts for Patelgo\_235:

(Start: 7 @115272 has 9 MA's), (14, 115341), (15, 115344), (17, 115359), (19, 115374), (20, 115407), (21, 115425),

Gene: SeresaTree\_233 Start: 113610, Stop: 113801, Start Num: 6

Candidate Starts for SeresaTree\_233:

(6, 113610), (Start: 7 @113616 has 9 MA's), (13, 113673), (21, 113766),

Gene: Sham\_223 Start: 114299, Stop: 114487, Start Num: 7

Candidate Starts for Sham\_223:

(6, 114293), (Start: 7 @114299 has 9 MA's), (13, 114356), (21, 114452),

Gene: SparkleGoddess\_232 Start: 114007, Stop: 114195, Start Num: 7

Candidate Starts for SparkleGoddess\_232: (Start: 7 @114007 has 9 MA's), (21, 114160),

Gene: TunaTartare\_231 Start: 116624, Stop: 116809, Start Num: 7

Candidate Starts for TunaTartare\_231:

(6, 116618), (Start: 7 @116624 has 9 MA's), (21, 116777), (22, 116801),

Gene: Wakanda\_168 Start: 90095, Stop: 90274, Start Num: 9

Candidate Starts for Wakanda\_168:

(1, 89897), (2, 89900), (3, 89993), (4, 90029), (5, 90044), (8, 90089), (Start: 9 @90095 has 6 MA's), (12, 90134), (16, 90158), (17, 90170), (18, 90173),