

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 86676 Report

This analysis was run 04/28/24 on database version 559.

Pham number 86676 has 22 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Stigma\_220, Jada\_223, Belfort\_221, MeganTheeKilla\_226, Comrade\_218, Karp\_217, Emma1919\_224, Forrest\_224, SparkleGoddess\_221
- Track 2 : Phredrick\_226, Kenrey\_227
- Track 3 : Patelgo\_224, Moab\_223
- Track 4: Faust 218, SeresaTree 222
- Track 5 : Francob 226
- Track 6: TunaTartare 221, Sham 213
- Track 7: Muntaha\_241, Wakanda\_237, Circinus\_226
- Track 8 : BillNye\_226

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

The start number called the most often in the published annotations is 2, it was called in 20 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Belfort\_221, Circinus\_226, Comrade\_218, Emma1919\_224, Faust\_218,
Forrest\_224, Francob\_226, Jada\_223, Karp\_217, Kenrey\_227, MeganTheeKilla\_226,
Moab\_223, Muntaha\_241, Patelgo\_224, Phredrick\_226, SeresaTree\_222,
Sham\_213, SparkleGoddess\_221, Stigma\_220, TunaTartare\_221, Wakanda\_237,

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:

BillNye\_226,

## Summary by start number:

#### Start 2:

- Found in 21 of 22 (95.5%) of genes in pham
- Manual Annotations of this start: 20 of 21
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Belfort\_221 (BK1), Circinus\_226 (BK2), Comrade\_218 (BK1), Emma1919\_224 (BK1), Faust\_218 (BK1), Forrest\_224 (BK1), Francob\_226 (BK1), Jada\_223 (BK1), Karp\_217 (BK1), Kenrey\_227 (BK1), MeganTheeKilla\_226 (BK1), Moab\_223 (BK1), Muntaha\_241 (BK2), Patelgo\_224 (BK1), Phredrick\_226 (BK1), SeresaTree\_222 (BK1), Sham\_213 (BK1), SparkleGoddess\_221 (BK1), Stigma\_220 (BK1), TunaTartare\_221 (BK1), Wakanda 237 (BK2),

#### Start 3:

- Found in 1 of 22 (4.5%) of genes in pham
- Manual Annotations of this start: 1 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BillNye\_226 (BK2),

### Summary by clusters:

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

Info for manual annotations of cluster BK1:

•Start number 2 was manually annotated 17 times for cluster BK1.

Info for manual annotations of cluster BK2:

- •Start number 2 was manually annotated 3 times for cluster BK2.
- •Start number 3 was manually annotated 1 time for cluster BK2.

#### Gene Information:

Gene: Belfort\_221 Start: 109766, Stop: 109870, Start Num: 2 Candidate Starts for Belfort\_221: (Start: 2 @109766 has 20 MA's),

Gene: BillNye\_226 Start: 115980, Stop: 116084, Start Num: 3

Candidate Starts for BillNye 226:

(1, 115974), (Start: 3 @115980 has 1 MA's), (7, 116049),

Gene: Circinus\_226 Start: 115568, Stop: 115672, Start Num: 2

Candidate Starts for Circinus 226:

(Start: 2 @115568 has 20 MA's), (7, 115637),

Gene: Comrade\_218 Start: 109965, Stop: 110069, Start Num: 2

Candidate Starts for Comrade\_218: (Start: 2 @109965 has 20 MA's),

Gene: Emma1919\_224 Start: 108541, Stop: 108645, Start Num: 2

Candidate Starts for Emma1919\_224: (Start: 2 @108541 has 20 MA's),

Gene: Faust 218 Start: 110568, Stop: 110681, Start Num: 2

Candidate Starts for Faust 218:

(Start: 2 @110568 has 20 MA's), (7, 110637), (9, 110670),

Gene: Forrest\_224 Start: 109506, Stop: 109610, Start Num: 2

Candidate Starts for Forrest\_224: (Start: 2 @109506 has 20 MA's),

Gene: Francob\_226 Start: 109541, Stop: 109645, Start Num: 2

Candidate Starts for Francob\_226: (Start: 2 @109541 has 20 MA's),

Gene: Jada\_223 Start: 108743, Stop: 108847, Start Num: 2

Candidate Starts for Jada\_223: (Start: 2 @108743 has 20 MA's),

Gene: Karp\_217 Start: 110132, Stop: 110236, Start Num: 2

Candidate Starts for Karp\_217: (Start: 2 @110132 has 20 MA's),

Gene: Kenrey\_227 Start: 109308, Stop: 109412, Start Num: 2

Candidate Starts for Kenrey\_227:

(Start: 2 @ 109308 has 20 MA's), (6, 109371),

Gene: MeganTheeKilla\_226 Start: 108938, Stop: 109042, Start Num: 2

Candidate Starts for MeganTheeKilla\_226:

(Start: 2 @ 108938 has 20 MA's),

Gene: Moab\_223 Start: 111074, Stop: 111178, Start Num: 2

Candidate Starts for Moab\_223:

(Start: 2 @111074 has 20 MA's), (4, 111080), (5, 111125),

Gene: Muntaha\_241 Start: 116188, Stop: 116292, Start Num: 2

Candidate Starts for Muntaha\_241:

(Start: 2 @116188 has 20 MA's), (7, 116257),

Gene: Patelgo\_224 Start: 111504, Stop: 111608, Start Num: 2

Candidate Starts for Patelgo 224:

(Start: 2 @111504 has 20 MA's), (4, 111510), (5, 111555),

Gene: Phredrick\_226 Start: 108360, Stop: 108464, Start Num: 2

Candidate Starts for Phredrick\_226:

(Start: 2 @108360 has 20 MA's), (6, 108423),

Gene: SeresaTree 222 Start: 110554, Stop: 110667, Start Num: 2

Candidate Starts for SeresaTree\_222:

(Start: 2 @110554 has 20 MA's), (7, 110623), (9, 110656),

Gene: Sham\_213 Start: 111454, Stop: 111567, Start Num: 2

Candidate Starts for Sham\_213:

(Start: 2 @111454 has 20 MA's), (8, 111526),

Gene: SparkleGoddess\_221 Start: 110193, Stop: 110297, Start Num: 2

Candidate Starts for SparkleGoddess 221:

(Start: 2 @110193 has 20 MA's),

Gene: Stigma\_220 Start: 110399, Stop: 110503, Start Num: 2

Candidate Starts for Stigma\_220: (Start: 2 @110399 has 20 MA's),

Gene: TunaTartare\_221 Start: 113748, Stop: 113861, Start Num: 2

Candidate Starts for TunaTartare\_221:

(Start: 2 @113748 has 20 MA's), (8, 113820),

Gene: Wakanda\_237 Start: 115176, Stop: 115280, Start Num: 2

Candidate Starts for Wakanda\_237:

(Start: 2 @115176 has 20 MA's), (7, 115245),