

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 4066 Report

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

Pham number 4066 has 23 members, 1 are drafts.

Phages represented in each track:

- Track 1: Moab 108, Patelgo 109
- Track 2: Beuffert\_102, Phredrick\_107, MeganTheeKilla\_108
- Track 3 : Limpid\_104
- Track 4 : Karp\_104, Belfort\_108, SparkleGoddess\_106, Comrade\_105
- Track 5 : Blueeyedbeauty\_105
- Track 6 : TunaTartare\_104
- Track 7: Forrest\_113, Gilson\_108, Jada\_109, Emma1919\_109, Kenrey\_111
- Track 8 : SeresaTree\_105, Faust\_105
- Track 9 : Francob 106
- Track 10 : Sham 102
- Track 11 : Stigma\_105
- Track 12 : Trina 148

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

The start number called the most often in the published annotations is 14, it was called in 20 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Belfort\_108, Beuffert\_102, Blueeyedbeauty\_105, Comrade\_105, Emma1919\_109, Forrest\_113, Francob\_106, Gilson\_108, Jada\_109, Karp\_104, Kenrey\_111, Limpid\_104, MeganTheeKilla\_108, Moab\_108, Patelgo\_109, Phredrick\_107, Sham\_102, SparkleGoddess\_106, Stigma\_105, TunaTartare\_104,

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

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

Faust\_105, SeresaTree\_105, Trina\_148,

### Summary by start number:

#### Start 11:

• Found in 1 of 23 (4.3%) of genes in pham

- Manual Annotations of this start: 1 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Trina\_148 (CE),

#### Start 12:

- Found in 2 of 23 (8.7%) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Faust 105 (BK1), SeresaTree 105 (BK1),

#### Start 14:

- Found in 20 of 23 (87.0%) of genes in pham
- Manual Annotations of this start: 20 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Belfort 108 (BK1), Beuffert 102 (BK1), Blueeyedbeauty\_105 (BK1), Comrade\_105 (BK1), Emma1919\_109 (BK1), Forrest\_113 (BK1), Francob\_106 (BK1), Gilson\_108 (BK1), Jada\_109 (BK1), Karp\_104 (BK1), Kenrey\_111 (BK1), Limpid\_104 (BK1), MeganTheeKilla\_108 (BK1), Moab 108 (BK1), Patelgo 109 (BK1), Phredrick 107 (BK1), Sham 102 (BK1), SparkleGoddess 106 (BK1), Stigma 105 (BK1), TunaTartare 104 (BK1),

### Summary by clusters:

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

Info for manual annotations of cluster BK1:

- •Start number 12 was manually annotated 1 time for cluster BK1.
- •Start number 14 was manually annotated 20 times for cluster BK1.

Info for manual annotations of cluster CE:

•Start number 11 was manually annotated 1 time for cluster CE.

#### Gene Information:

Gene: Belfort 108 Start: 72705, Stop: 72911, Start Num: 14

Candidate Starts for Belfort 108:

(Start: 14 @72705 has 20 MA's), (15, 72762), (19, 72876),

Gene: Beuffert\_102 Start: 71535, Stop: 71741, Start Num: 14

Candidate Starts for Beuffert 102:

(Start: 14 @71535 has 20 MA's), (15, 71592),

Gene: Blueeyedbeauty 105 Start: 70684, Stop: 70890, Start Num: 14

Candidate Starts for Blueeyedbeauty 105:

(2, 70600), (3, 70603), (5, 70627), (6, 70639), (9, 70654), (13, 70681), (Start: 14 @70684 has 20

MA's), (15, 70741), (18, 70843),

Gene: Comrade 105 Start: 72022, Stop: 72228, Start Num: 14

Candidate Starts for Comrade 105:

(Start: 14 @72022 has 20 MA's), (15, 72079), (19, 72193),

Gene: Emma1919\_109 Start: 71471, Stop: 71677, Start Num: 14

Candidate Starts for Emma1919 109:

(Start: 14 @71471 has 20 MA's), (15, 71528),

Gene: Faust\_105 Start: 72087, Stop: 72299, Start Num: 12

Candidate Starts for Faust 105:

(7, 72057), (8, 72060), (9, 72063), (Start: 12 @72087 has 1 MA's), (15, 72147), (16, 72153), (17, 72198),

Gene: Forrest 113 Start: 73784, Stop: 73990, Start Num: 14

Candidate Starts for Forrest 113:

(Start: 14 @73784 has 20 MA's), (15, 73841),

Gene: Francob\_106 Start: 71635, Stop: 71841, Start Num: 14

Candidate Starts for Francob\_106:

(1, 71548), (6, 71590), (7, 71599), (9, 71605), (Start: 14 @71635 has 20 MA's), (15, 71692), (16, 71698), (17, 71743),

Gene: Gilson\_108 Start: 71433, Stop: 71639, Start Num: 14

Candidate Starts for Gilson\_108:

(Start: 14 @71433 has 20 MA's), (15, 71490),

Gene: Jada\_109 Start: 72714, Stop: 72920, Start Num: 14

Candidate Starts for Jada 109:

(Start: 14 @72714 has 20 MA's), (15, 72771),

Gene: Karp 104 Start: 71993, Stop: 72199, Start Num: 14

Candidate Starts for Karp 104:

(Start: 14 @71993 has 20 MA's), (15, 72050), (19, 72164),

Gene: Kenrey\_111 Start: 72473, Stop: 72679, Start Num: 14

Candidate Starts for Kenrey 111:

(Start: 14 @72473 has 20 MA's), (15, 72530),

Gene: Limpid\_104 Start: 72009, Stop: 72215, Start Num: 14

Candidate Starts for Limpid\_104:

(2, 71925), (3, 71928), (5, 71952), (6, 71964), (9, 71979), (13, 72006), (Start: 14 @72009 has 20 MA's), (15, 72066),

..... ( ), ( ! 0, ! 2000),

Gene: MeganTheeKilla\_108 Start: 71639, Stop: 71845, Start Num: 14

Candidate Starts for MeganTheeKilla\_108: (Start: 14 @71639 has 20 MA's), (15, 71696),

Gene: Moab 108 Start: 73942, Stop: 74148, Start Num: 14

Candidate Starts for Moab\_108:

(13, 73939), (Start: 14 @73942 has 20 MA's), (15, 73999), (19, 74113),

Gene: Patelgo\_109 Start: 73802, Stop: 74008, Start Num: 14

Candidate Starts for Patelgo\_109:

(13, 73799), (Start: 14 @ 73802 has 20 MA's), (15, 73859), (19, 73973),

Gene: Phredrick\_107 Start: 70759, Stop: 70965, Start Num: 14

Candidate Starts for Phredrick 107:

(Start: 14 @70759 has 20 MA's), (15, 70816),

Gene: SeresaTree\_105 Start: 71469, Stop: 71681, Start Num: 12

Candidate Starts for SeresaTree\_105:

(7, 71439), (8, 71442), (9, 71445), (Start: 12 @71469 has 1 MA's), (15, 71529), (16, 71535), (17, 71580),

Gene: Sham\_102 Start: 71711, Stop: 71920, Start Num: 14

Candidate Starts for Sham\_102:

(4, 71639), (5, 71660), (6, 71672), (10, 71699), (Start: 14 @71711 has 20 MA's), (15, 71768),

Gene: SparkleGoddess\_106 Start: 72322, Stop: 72528, Start Num: 14

Candidate Starts for SparkleGoddess\_106:

(Start: 14 @72322 has 20 MA's), (15, 72379), (19, 72493),

Gene: Stigma\_105 Start: 72330, Stop: 72536, Start Num: 14

Candidate Starts for Stigma\_105:

(Start: 14 @72330 has 20 MA's), (15, 72387), (18, 72489), (19, 72501),

Gene: Trina\_148 Start: 90625, Stop: 90837, Start Num: 11

Candidate Starts for Trina\_148:

(Start: 11 @90625 has 1 MA's), (16, 90697), (17, 90742), (18, 90793), (19, 90805), (20, 90832),

Gene: TunaTartare\_104 Start: 72874, Stop: 73083, Start Num: 14

Candidate Starts for TunaTartare\_104:

(1, 72793), (4, 72802), (5, 72823), (10, 72862), (Start: 14 @72874 has 20 MA's), (15, 72931),