

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 4167 Report

This analysis was run 03/30/24 on database version 556.

Pham number 4167 has 22 members, 1 are drafts.

Phages represented in each track:

- Track 1: Faust 138, SeresaTree 139
- Track 2 : Beuffert\_136
- Track 3: Karp\_139, SparkleGoddess\_142, Stigma\_140, Belfort\_143, Comrade\_139
- Track 4: MeganTheeKilla\_144, Jada\_145, Gilson\_147, Forrest\_149,

Emma1919 147

- Track 5 : Blueeyedbeauty 137
- Track 6: Francob 145
- Track 7 : Moab\_142, Patelgo\_145
- Track 8 : Annadreamy\_130, Limpid\_137
- Track 9 : Phredrick\_146, Kenrey\_149
- Track 10 : TunaTartare\_142

## 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 8 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Beuffert\_136, Emma1919\_147, Forrest\_149, Gilson\_147, Jada\_145, Kenrey\_149, MeganTheeKilla\_144, Phredrick\_146,

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:

 Annadreamy\_130, Belfort\_143, Blueeyedbeauty\_137, Comrade\_139, Faust\_138, Francob\_145, Karp\_139, Limpid\_137, Moab\_142, Patelgo\_145, SeresaTree\_139, SparkleGoddess\_142, Stigma\_140, TunaTartare\_142,

### **Summary by start number:**

### Start 4:

- Found in 5 of 22 (22.7%) of genes in pham
- Manual Annotations of this start: 5 of 21

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Belfort\_143 (BK1), Comrade\_139 (BK1), Karp\_139 (BK1), SparkleGoddess\_142 (BK1), Stigma\_140 (BK1),

#### Start 5:

- Found in 8 of 22 (36.4%) of genes in pham
- Manual Annotations of this start: 8 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beuffert\_136 (BK1), Emma1919\_147 (BK1), Forrest\_149 (BK1), Gilson\_147 (BK1), Jada\_145 (BK1), Kenrey\_149 (BK1), MeganTheeKilla\_144 (BK1), Phredrick\_146 (BK1),

#### Start 6:

- Found in 7 of 22 (31.8%) of genes in pham
- Manual Annotations of this start: 6 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Annadreamy\_130 (BK1),
  Blueeyedbeauty\_137 (BK1), Faust\_138 (BK1), Francob\_145 (BK1), Limpid\_137 (BK1), SeresaTree\_139 (BK1), TunaTartare\_142 (BK1),

#### Start 7:

- Found in 2 of 22 ( 9.1% ) of genes in pham
- Manual Annotations of this start: 2 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Moab\_142 (BK1), Patelgo\_145 (BK1),

## Summary by clusters:

There is one cluster represented in this pham: BK1

Info for manual annotations of cluster BK1:

- •Start number 4 was manually annotated 5 times for cluster BK1.
- •Start number 5 was manually annotated 8 times for cluster BK1.
- •Start number 6 was manually annotated 6 times for cluster BK1.
- •Start number 7 was manually annotated 2 times for cluster BK1.

### Gene Information:

Gene: Annadreamy\_130 Start: 75336, Stop: 75506, Start Num: 6

Candidate Starts for Annadreamy\_130:

(Start: 6 @75336 has 6 MA's), (9, 75393), (10, 75411), (11, 75417),

Gene: Belfort\_143 Start: 82444, Stop: 82614, Start Num: 4

Candidate Starts for Belfort\_143:

(Start: 4 @82444 has 5 MA's), (13, 82543), (15, 82576),

Gene: Beuffert 136 Start: 79834, Stop: 80004, Start Num: 5

Candidate Starts for Beuffert 136:

(2, 79816), (3, 79825), (Start: 5 @ 79834 has 8 MA's), (15, 79966),

Gene: Blueeyedbeauty\_137 Start: 79090, Stop: 79260, Start Num: 6

Candidate Starts for Blueeyedbeauty\_137:

(Start: 6 @79090 has 6 MA's), (9, 79147), (11, 79171),

Gene: Comrade\_139 Start: 81763, Stop: 81933, Start Num: 4

Candidate Starts for Comrade\_139:

(Start: 4 @81763 has 5 MA's), (13, 81862), (15, 81895),

Gene: Emma1919\_147 Start: 81701, Stop: 81868, Start Num: 5

Candidate Starts for Emma1919\_147:

(2, 81683), (3, 81692), (Start: 5 @81701 has 8 MA's), (8, 81749), (15, 81830),

Gene: Faust\_138 Start: 81938, Stop: 82117, Start Num: 6

Candidate Starts for Faust\_138:

(Start: 6 @ 81938 has 6 MA's), (14, 82055), (15, 82079), (16, 82091),

Gene: Forrest\_149 Start: 82573, Stop: 82740, Start Num: 5

Candidate Starts for Forrest 149:

(2, 82555), (3, 82564), (Start: 5 @82573 has 8 MA's), (8, 82621), (15, 82702),

Gene: Francob\_145 Start: 82211, Stop: 82381, Start Num: 6

Candidate Starts for Francob 145:

(1, 82172), (Start: 6 @ 82211 has 6 MA's), (9, 82268), (10, 82286), (11, 82292), (12, 82295),

Gene: Gilson\_147 Start: 81663, Stop: 81830, Start Num: 5

Candidate Starts for Gilson 147:

(2, 81645), (3, 81654), (Start: 5 @81663 has 8 MA's), (8, 81711), (15, 81792),

Gene: Jada 145 Start: 81503, Stop: 81670, Start Num: 5

Candidate Starts for Jada\_145:

(2, 81485), (3, 81494), (Start: 5 @81503 has 8 MA's), (8, 81551), (15, 81632),

Gene: Karp\_139 Start: 81871, Stop: 82041, Start Num: 4

Candidate Starts for Karp 139:

(Start: 4 @81871 has 5 MA's), (13, 81970), (15, 82003),

Gene: Kenrey\_149 Start: 82824, Stop: 82991, Start Num: 5

Candidate Starts for Kenrey\_149:

(2, 82806), (3, 82815), (Start: 5 @82824 has 8 MA's), (13, 82920), (15, 82953),

Gene: Limpid\_137 Start: 80644, Stop: 80814, Start Num: 6

Candidate Starts for Limpid 137:

(Start: 6 @ 80644 has 6 MA's), (9, 80701), (10, 80719), (11, 80725),

Gene: MeganTheeKilla\_144 Start: 81379, Stop: 81546, Start Num: 5

Candidate Starts for MeganTheeKilla 144:

(2, 81361), (3, 81370), (Start: 5 @81379 has 8 MA's), (8, 81427), (15, 81508),

Gene: Moab\_142 Start: 83444, Stop: 83611, Start Num: 7

Candidate Starts for Moab\_142:

(Start: 7 @83444 has 2 MA's), (11, 83522),

Gene: Patelgo 145 Start: 84136, Stop: 84303, Start Num: 7

Candidate Starts for Patelgo\_145:

(Start: 7 @84136 has 2 MA's), (11, 84214),

Gene: Phredrick\_146 Start: 81159, Stop: 81326, Start Num: 5

Candidate Starts for Phredrick\_146:

(2, 81141), (3, 81150), (Start: 5 @81159 has 8 MA's), (13, 81255), (15, 81288),

Gene: SeresaTree\_139 Start: 81320, Stop: 81499, Start Num: 6

Candidate Starts for SeresaTree\_139:

(Start: 6 @81320 has 6 MA's), (14, 81437), (15, 81461), (16, 81473),

Gene: SparkleGoddess\_142 Start: 82063, Stop: 82233, Start Num: 4

Candidate Starts for SparkleGoddess\_142:

(Start: 4 @ 82063 has 5 MA's), (13, 82162), (15, 82195),

Gene: Stigma\_140 Start: 82208, Stop: 82378, Start Num: 4

Candidate Starts for Stigma\_140:

(Start: 4 @82208 has 5 MA's), (13, 82307), (15, 82340),

Gene: TunaTartare\_142 Start: 83951, Stop: 84121, Start Num: 6

Candidate Starts for TunaTartare\_142: (Start: 6 @83951 has 6 MA's), (15, 84083),