

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 86614 Report

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

Pham number 86614 has 23 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Patelgo\_14
- Track 2: Phredrick\_14
  Track 3: Karp\_13, Stigma\_13, Belfort\_15, SparkleGoddess\_13, Comrade\_13
- Track 4 : Kenrey\_15
- Track 5 : Beuffert 12
- Track 6 : Moab\_13, Forrest\_15
- Track 7: Annadreamy 13, Limpid 13
- Track 8 : Blueeyedbeauty\_15
- Track 9: Gilson\_15, MeganTheeKilla\_13, Emma1919\_15
- Track 10 : Francob 12
- Track 11 : Jada\_13
- Track 12 : BillNye\_10, Circinus\_11
- Track 13: Wakanda 9, Muntaha 10

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

The start number called the most often in the published annotations is 9, it was called in 21 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Annadreamy\_13, Belfort\_15, Beuffert\_12, BillNye\_10, Blueeyedbeauty\_15, Circinus\_11, Comrade\_13, Emma1919\_15, Forrest\_15, Francob\_12, Gilson\_15, Jada\_13, Karp\_13, Limpid\_13, MeganTheeKilla\_13, Moab\_13, Muntaha\_10, Patelgo\_14, SparkleGoddess\_13, Stigma\_13, Wakanda\_9,

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

Kenrey\_15, Phredrick\_14,

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

# **Summary by start number:**

Start 5:

- Found in 1 of 23 (4.3%) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kenrey\_15 (BK1),

#### Start 8:

- Found in 2 of 23 (8.7%) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Phredrick\_14 (BK1),

#### Start 9:

- Found in 23 of 23 (100.0%) of genes in pham
- Manual Annotation's of this start. 21 of 23
- Called 91.3% of time when present
- Phage (with cluster) where this start called: Annadreamy\_13 (BK1), Belfort\_15 (BK1), Beuffert\_12 (BK1), BillNye\_10 (BK2), Blueeyedbeauty\_15 (BK1), Circinus\_11 (BK2), Comrade\_13 (BK1), Emma1919\_15 (BK1), Forrest\_15 (BK1), Francob\_12 (BK1), Gilson\_15 (BK1), Jada\_13 (BK1), Karp\_13 (BK1), Limpid\_13 (BK1), MeganTheeKilla\_13 (BK1), Moab\_13 (BK1), Muntaha\_10 (BK2), Patelgo\_14 (BK1), SparkleGoddess 13 (BK1), Stigma 13 (BK1), Wakanda 9 (BK2),

### Summary by clusters:

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

Info for manual annotations of cluster BK1:

- •Start number 5 was manually annotated 1 time for cluster BK1.
- •Start number 8 was manually annotated 1 time for cluster BK1.
- •Start number 9 was manually annotated 17 times for cluster BK1.

Info for manual annotations of cluster BK2:

•Start number 9 was manually annotated 4 times for cluster BK2.

#### Gene Information:

Gene: Annadreamy\_13 Start: 4081, Stop: 3869, Start Num: 9 Candidate Starts for Annadreamy 13:

(7, 4090), (Start: 9 @ 4081 has 21 MA's), (12, 4021), (18, 3913),

Gene: Belfort 15 Start: 4877, Stop: 4665, Start Num: 9

Candidate Starts for Belfort\_15:

(Start: 9 @ 4877 has 21 MA's), (17, 4715), (18, 4709), (19, 4688), (20, 4685),

Gene: Beuffert\_12 Start: 3911, Stop: 3699, Start Num: 9

Candidate Starts for Beuffert 12:

(7, 3920), (Start: 9 @3911 has 21 MA's), (12, 3851), (18, 3743), (20, 3719),

Gene: BillNye 10 Start: 4815, Stop: 4600, Start Num: 9

Candidate Starts for BillNye 10:

(Start: 9 @ 4815 has 21 MA's), (10, 4767), (13, 4728), (15, 4713), (18, 4644),

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Gene: Blueeyedbeauty_15 Start: 4744, Stop: 4532, Start Num: 9
Candidate Starts for Blueeyedbeauty_15:
(7, 4753), (Start: 9 @4744 has 21 MA's), (12, 4684), (18, 4576), (19, 4555), (20, 4552),
Gene: Circinus 11 Start: 4696, Stop: 4481, Start Num: 9
Candidate Starts for Circinus_11:
(Start: 9 @ 4696 has 21 MA's), (10, 4648), (13, 4609), (15, 4594), (18, 4525),
Gene: Comrade_13 Start: 4090, Stop: 3878, Start Num: 9
Candidate Starts for Comrade 13:
(Start: 9 @ 4090 has 21 MA's), (17, 3928), (18, 3922), (19, 3901), (20, 3898),
Gene: Emma1919_15 Start: 4685, Stop: 4473, Start Num: 9
Candidate Starts for Emma1919_15:
(1, 4805), (2, 4799), (3, 4766), (Start: 9 @4685 has 21 MA's),
Gene: Forrest_15 Start: 4819, Stop: 4607, Start Num: 9
Candidate Starts for Forrest 15:
(4, 4849), (Start: 9 @4819 has 21 MA's), (12, 4759), (14, 4732), (18, 4651), (19, 4630), (20, 4627),
Gene: Francob 12 Start: 4047, Stop: 3829, Start Num: 9
Candidate Starts for Francob 12:
(Start: 9 @ 4047 has 21 MA's), (18, 3879),
Gene: Gilson_15 Start: 4638, Stop: 4426, Start Num: 9
Candidate Starts for Gilson_15:
(1, 4758), (2, 4752), (3, 4719), (Start: 9 @4638 has 21 MA's),
Gene: Jada 13 Start: 3999, Stop: 3787, Start Num: 9
Candidate Starts for Jada_13:
(4, 4029), (Start: 9 @3999 has 21 MA's),
Gene: Karp_13 Start: 4093, Stop: 3881, Start Num: 9
Candidate Starts for Karp_13:
(Start: 9 @ 4093 has 21 MA's), (17, 3931), (18, 3925), (19, 3904), (20, 3901),
Gene: Kenrey_15 Start: 4723, Stop: 4478, Start Num: 5
Candidate Starts for Kenrey 15:
(1, 4810), (2, 4804), (3, 4771), (Start: 5 @4723 has 1 MA's), (Start: 8 @4696 has 1 MA's), (Start: 9
@4690 has 21 MA's), (11, 4639),
Gene: Limpid_13 Start: 4080, Stop: 3868, Start Num: 9
Candidate Starts for Limpid 13:
(7, 4089), (Start: 9 @ 4080 has 21 MA's), (12, 4020), (18, 3912),
Gene: MeganTheeKilla_13 Start: 3999, Stop: 3787, Start Num: 9
Candidate Starts for MeganTheeKilla_13:
(1, 4119), (2, 4113), (3, 4080), (Start: 9 @ 3999 has 21 MA's),
Gene: Moab_13 Start: 4196, Stop: 3984, Start Num: 9
Candidate Starts for Moab 13:
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(4, 4226), (Start: 9 @4196 has 21 MA's), (12, 4136), (14, 4109), (18, 4028), (19, 4007), (20, 4004),

Gene: Muntaha\_10 Start: 4388, Stop: 4176, Start Num: 9

Candidate Starts for Muntaha\_10:

(Start: 9 @4388 has 21 MA's), (16, 4241), (18, 4220),

Gene: Patelgo 14 Start: 4196, Stop: 3984, Start Num: 9

Candidate Starts for Patelgo\_14:

(6, 4217), (7, 4205), (Start: 9 @4196 has 21 MA's), (12, 4136), (14, 4109), (18, 4028), (19, 4007), (20, 4004),

Gene: Phredrick\_14 Start: 4304, Stop: 4086, Start Num: 8

Candidate Starts for Phredrick 14:

(1, 4418), (2, 4412), (3, 4379), (Start: 8 @4304 has 1 MA's), (Start: 9 @4298 has 21 MA's), (11, 4247),

Gene: SparkleGoddess\_13 Start: 4089, Stop: 3877, Start Num: 9

Candidate Starts for SparkleGoddess\_13:

(Start: 9 @ 4089 has 21 MA's), (17, 3927), (18, 3921), (19, 3900), (20, 3897),

Gene: Stigma\_13 Start: 4093, Stop: 3881, Start Num: 9

Candidate Starts for Stigma\_13:

(Start: 9 @ 4093 has 21 MA's), (17, 3931), (18, 3925), (19, 3904), (20, 3901),

Gene: Wakanda\_9 Start: 4287, Stop: 4075, Start Num: 9

Candidate Starts for Wakanda\_9:

(Start: 9 @ 4287 has 21 MA's), (16, 4140), (18, 4119),