



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 4233 Report

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

Pham number 4233 has 22 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Patelgo\_13, Moab\_12, Forrest\_14
- Track 2 : Phredrick\_13, Kenrey\_14, Gilson\_14, MeganTheeKilla\_12, Emma1919\_14, Jada\_12
- Track 3 : Karp\_12, Belfort\_14, SparkleGoddess\_12, Stigma\_12, Comrade\_12
- Track 4 : SeresaTree\_12, Faust\_13
- Track 5 : Beuffert\_11
- Track 6 : Annadreamy\_12, Limpid\_12
- Track 7 : Blueeyedbeauty\_14
- Track 8 : Sham\_11
- Track 9 : Francob\_11

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

The start number called the most often in the published annotations is 4, it was called in 11 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Annadreamy\_12, Belfort\_14, Beuffert\_11, Blueeyedbeauty\_14, Comrade\_12, Faust\_13, Karp\_12, Limpid\_12, SeresaTree\_12, Sham\_11, SparkleGoddess\_12, Stigma\_12,

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:

- Emma1919\_14, Forrest\_14, Francob\_11, Gilson\_14, Jada\_12, Kenrey\_14, MeganTheeKilla\_12, Moab\_12, Patelgo\_13, Phredrick\_13,

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

Start 4:

- Found in 12 of 22 ( 54.5% ) of genes in pham
- Manual Annotations of this start: 11 of 21
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Annadreamy\_12 (BK1), Belfort\_14 (BK1), Beuffert\_11 (BK1), Blueeyedbeauty\_14 (BK1), Comrade\_12 (BK1), Faust\_13 (BK1), Karp\_12 (BK1), Limpid\_12 (BK1), SeresaTree\_12 (BK1), Sham\_11 (BK1), SparkleGoddess\_12 (BK1), Stigma\_12 (BK1),

Start 5:

- Found in 9 of 22 ( 40.9% ) of genes in pham
- Manual Annotations of this start: 9 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Emma1919\_14 (BK1), Forrest\_14 (BK1), Gilson\_14 (BK1), Jada\_12 (BK1), Kenrey\_14 (BK1), MeganTheeKilla\_12 (BK1), Moab\_12 (BK1), Patelgo\_13 (BK1), Phredrick\_13 (BK1),

Start 6:

- 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: Francob\_11 (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 11 times for cluster BK1.
- Start number 5 was manually annotated 9 times for cluster BK1.
- Start number 6 was manually annotated 1 time for cluster BK1.

### **Gene Information:**

Gene: Annadreamy\_12 Start: 3876, Stop: 3715, Start Num: 4

Candidate Starts for Annadreamy\_12:

(Start: 4 @3876 has 11 MA's), (10, 3756),

Gene: Belfort\_14 Start: 4672, Stop: 4511, Start Num: 4

Candidate Starts for Belfort\_14:

(3, 4681), (Start: 4 @4672 has 11 MA's),

Gene: Beuffert\_11 Start: 3706, Stop: 3545, Start Num: 4

Candidate Starts for Beuffert\_11:

(Start: 4 @3706 has 11 MA's), (10, 3586),

Gene: Blueeyedbeauty\_14 Start: 4539, Stop: 4378, Start Num: 4

Candidate Starts for Blueeyedbeauty\_14:

(Start: 4 @4539 has 11 MA's),

Gene: Comrade\_12 Start: 3885, Stop: 3724, Start Num: 4

Candidate Starts for Comrade\_12:

(3, 3894), (Start: 4 @3885 has 11 MA's),

Gene: Emma1919\_14 Start: 4480, Stop: 4322, Start Num: 5

Candidate Starts for Emma1919\_14:

(Start: 5 @4480 has 9 MA's), (8, 4399), (9, 4369),

Gene: Faust\_13 Start: 4570, Stop: 4409, Start Num: 4

Candidate Starts for Faust\_13:

(1, 4606), (2, 4594), (Start: 4 @4570 has 11 MA's),

Gene: Forrest\_14 Start: 4614, Stop: 4456, Start Num: 5

Candidate Starts for Forrest\_14:

(Start: 5 @4614 has 9 MA's), (7, 4578),

Gene: Francob\_11 Start: 3839, Stop: 3684, Start Num: 6

Candidate Starts for Francob\_11:

(Start: 6 @3839 has 1 MA's), (9, 3731),

Gene: Gilson\_14 Start: 4433, Stop: 4275, Start Num: 5

Candidate Starts for Gilson\_14:

(Start: 5 @4433 has 9 MA's), (8, 4352), (9, 4322),

Gene: Jada\_12 Start: 3794, Stop: 3636, Start Num: 5

Candidate Starts for Jada\_12:

(Start: 5 @3794 has 9 MA's), (8, 3713), (9, 3683),

Gene: Karp\_12 Start: 3888, Stop: 3727, Start Num: 4

Candidate Starts for Karp\_12:

(3, 3897), (Start: 4 @3888 has 11 MA's),

Gene: Kenrey\_14 Start: 4485, Stop: 4327, Start Num: 5

Candidate Starts for Kenrey\_14:

(Start: 5 @4485 has 9 MA's), (8, 4404), (9, 4374),

Gene: Limpid\_12 Start: 3875, Stop: 3714, Start Num: 4

Candidate Starts for Limpid\_12:

(Start: 4 @3875 has 11 MA's), (10, 3755),

Gene: MeganTheeKilla\_12 Start: 3794, Stop: 3636, Start Num: 5

Candidate Starts for MeganTheeKilla\_12:

(Start: 5 @3794 has 9 MA's), (8, 3713), (9, 3683),

Gene: Moab\_12 Start: 3991, Stop: 3833, Start Num: 5

Candidate Starts for Moab\_12:

(Start: 5 @3991 has 9 MA's), (7, 3955),

Gene: Patelgo\_13 Start: 3991, Stop: 3833, Start Num: 5

Candidate Starts for Patelgo\_13:

(Start: 5 @3991 has 9 MA's), (7, 3955),

Gene: Phredrick\_13 Start: 4093, Stop: 3935, Start Num: 5

Candidate Starts for Phredrick\_13:

(Start: 5 @4093 has 9 MA's), (8, 4012), (9, 3982),

Gene: SeresaTree\_12 Start: 3960, Stop: 3799, Start Num: 4

Candidate Starts for SeresaTree\_12:

(1, 3996), (2, 3984), (Start: 4 @3960 has 11 MA's),

Gene: Sham\_11 Start: 3763, Stop: 3602, Start Num: 4

Candidate Starts for Sham\_11:

(Start: 4 @3763 has 11 MA's),

Gene: SparkleGoddess\_12 Start: 3884, Stop: 3723, Start Num: 4

Candidate Starts for SparkleGoddess\_12:

(3, 3893), (Start: 4 @3884 has 11 MA's),

Gene: Stigma\_12 Start: 3888, Stop: 3727, Start Num: 4

Candidate Starts for Stigma\_12:

(3, 3897), (Start: 4 @3888 has 11 MA's),