

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 194443 Report

This analysis was run 11/02/24 on database version 579.

Pham number 194443 has 15 members, 1 are drafts.

Phages represented in each track:

```
Track 1 : Ohgeesy_84
```

• Track 2 : PantheRoc_86

Track 3: Yeezy_86

Track 4: Adora_76, Hortense_79, Shlim410_77, Howe_79, Twinkle_78

Track 5 : Denise_77

Track 6 : DirtyBoi_4

Track 7 : RayTheFireFly_4

Track 8 : Coriander_4

Track 9 : Kiko_4

Track 10 : Dmitri_4

• Track 11 : Hedwig 4

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 7 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

 Adora_76, Denise_77, Hortense_79, Howe_79, Ohgeesy_84, Shlim410_77, Twinkle_78,

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

•

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

• Coriander_4, DirtyBoi_4, Dmitri_4, Hedwig_4, Kiko_4, PantheRoc_86, RayTheFireFly_4, Yeezy_86,

Summary by start number:

Start 4:

- Found in 7 of 15 (46.7%) of genes in pham
- Manual Annotations of this start: 7 of 14
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Adora_76 (CZ4), Denise_77 (CZ5), Hortense_79 (CZ4), Howe_79 (CZ4), Ohgeesy_84 (CZ), Shlim410_77 (CZ4), Twinkle_78 (CZ4),

Start 6:

- Found in 6 of 15 (40.0%) of genes in pham
- Manual Annotations of this start: 3 of 14
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Coriander_4 (DB), Hedwig_4 (DB), Kiko_4 (DB), RayTheFireFly_4 (DB),

Start 7:

- Found in 6 of 15 (40.0%) of genes in pham
- Manual Annotations of this start: 2 of 14
- Called 33.3% of time when present
- Phage (with cluster) where this start called: DirtyBoi_4 (DB), Dmitri_4 (DB),

Start 8:

- Found in 1 of 15 (6.7%) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PantheRoc_86 (CZ3),

Start 10:

- Found in 1 of 15 (6.7%) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yeezy_86 (CZ3),

Summary by clusters:

There are 5 clusters represented in this pham: CZ3, CZ5, DB, CZ4, CZ,

Info for manual annotations of cluster CZ:

Start number 4 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ3:

- •Start number 8 was manually annotated 1 time for cluster CZ3.
- •Start number 10 was manually annotated 1 time for cluster CZ3.

Info for manual annotations of cluster CZ4:

•Start number 4 was manually annotated 5 times for cluster CZ4.

Info for manual annotations of cluster CZ5:

•Start number 4 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster DB:

- •Start number 6 was manually annotated 3 times for cluster DB.
- •Start number 7 was manually annotated 2 times for cluster DB.

Gene Information:

Gene: Adora 76 Start: 50971, Stop: 51381, Start Num: 4

Candidate Starts for Adora_76:

(3, 50956), (Start: 4 @50971 has 7 MA's),

Gene: Coriander_4 Start: 3569, Stop: 3937, Start Num: 6

Candidate Starts for Coriander 4:

(1, 2813), (2, 2852), (Start: 6 @ 3569 has 3 MA's), (Start: 7 @ 3572 has 2 MA's), (12, 3647), (14, 3701), (17, 3773), (20, 3887), (22, 3914),

Gene: Denise_77 Start: 44257, Stop: 44676, Start Num: 4

Candidate Starts for Denise 77:

(Start: 4 @ 44257 has 7 MA's), (9, 44365), (18, 44533), (23, 44653),

Gene: DirtyBoi_4 Start: 3575, Stop: 3940, Start Num: 7

Candidate Starts for DirtyBoi_4:

(Start: 6 @3572 has 3 MA's), (Start: 7 @3575 has 2 MA's), (12, 3650), (13, 3659), (14, 3704), (17, 3776), (20, 3890), (22, 3917).

Gene: Dmitri 4 Start: 3575, Stop: 3940, Start Num: 7

Candidate Starts for Dmitri_4:

(Start: 6 @3572 has 3 MA's), (Start: 7 @3575 has 2 MA's), (12, 3650), (14, 3704), (17, 3776), (20, 3890), (22, 3917),

Gene: Hedwig_4 Start: 3569, Stop: 3937, Start Num: 6

Candidate Starts for Hedwig 4:

(Start: 6 @3569 has 3 MA's), (Start: 7 @3572 has 2 MA's), (12, 3647), (13, 3656), (14, 3701), (17, 3773), (20, 3887), (22, 3914),

Gene: Hortense_79 Start: 52326, Stop: 52736, Start Num: 4

Candidate Starts for Hortense_79:

(3, 52311), (Start: 4 @52326 has 7 MA's),

Gene: Howe_79 Start: 52326, Stop: 52736, Start Num: 4

Candidate Starts for Howe 79:

(3, 52311), (Start: 4 @52326 has 7 MA's),

Gene: Kiko_4 Start: 3441, Stop: 3809, Start Num: 6

Candidate Starts for Kiko_4:

(Start: 6 @ 3441 has 3 MA's), (Start: 7 @ 3444 has 2 MA's), (12, 3519), (16, 3609),

Gene: Ohgeesy_84 Start: 52600, Stop: 53016, Start Num: 4

Candidate Starts for Ohgeesy_84:

(Start: 4 @52600 has 7 MA's), (5, 52609), (15, 52807), (19, 52960), (21, 52972), (23, 52993), (24, 53008),

Gene: PantheRoc_86 Start: 52720, Stop: 53085, Start Num: 8

Candidate Starts for PantheRoc_86:

(Start: 8 @52720 has 1 MA's), (23, 53062), (24, 53077),

Gene: RayTheFireFly_4 Start: 3578, Stop: 3946, Start Num: 6

Candidate Starts for RayTheFireFly_4:

(1, 2816), (2, 2855), (Start: 6 @3578 has 3 MA's), (Start: 7 @3581 has 2 MA's), (12, 3656), (14, 3710), (17, 3782), (20, 3896), (22, 3923),

Gene: Shlim410_77 Start: 52326, Stop: 52736, Start Num: 4

Candidate Starts for Shlim410_77:

(3, 52311), (Start: 4 @52326 has 7 MA's),

Gene: Twinkle_78 Start: 53385, Stop: 53795, Start Num: 4

Candidate Starts for Twinkle_78:

(3, 53370), (Start: 4 @53385 has 7 MA's),

Gene: Yeezy_86 Start: 51123, Stop: 51428, Start Num: 10

Candidate Starts for Yeezy_86:

(Start: 10 @51123 has 1 MA's), (11, 51132), (15, 51219), (19, 51372), (23, 51405), (24, 51420),