

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 171671 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171671 has 31 members, 3 are drafts.

Phages represented in each track:

Track 1 : Settecandela_195

• Track 2 : Thonko 51

Track 3: Shida_16, Bora_16, FoulBall_15, Ryadel_18, Schuy_17, JangDynasty_15, Zakhe101 17, Alkhayr 16

• Track 4: Catdawg_15, Firecracker_16, Corndog_18, Wildflower_16, Murai_16, Blessica_16, Krili_16, Dylan_16, YungJamal_17, Smooch_17, Familton_16, Vorrps_16, Mori_16, NiebruSaylor_16, Ashwin_17, TelAviv_15, MadKillah_17, SchoolBus_15, Idergollasper_15

Track 5 : Winget_16

Track 6 : StAugustine_165

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

The start number called the most often in the published annotations is 2, it was called in 19 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Ashwin_17, Blessica_16, Catdawg_15, Corndog_18, Dylan_16, Familton_16, Firecracker_16, Idergollasper_15, Krili_16, MadKillah_17, Mori_16, Murai_16, NiebruSaylor_16, SchoolBus_15, Smooch_17, TelAviv_15, Vorrps_16, Wildflower_16, YungJamal_17,

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

• Alkhayr_16, Bora_16, FoulBall_15, JangDynasty_15, Ryadel_18, Schuy_17, Shida_16, Zakhe101_17,

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

• Settecandela_195, StAugustine_165, Thonko_51, Winget_16,

Summary by start number:

Start 1:

- Found in 1 of 31 (3.2%) of genes in pham
- Manual Annotations of this start: 1 of 28

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Settecandela_195 (AA),

Start 2:

- Found in 27 of 31 (87.1%) of genes in pham
- Manual Annotations of this start: 19 of 28
- Called 70.4% of time when present
- Phage (with cluster) where this start called: Ashwin_17 (O), Blessica_16 (O), Catdawg_15 (O), Corndog_18 (O), Dylan_16 (O), Familton_16 (O), Firecracker_16 (O), Idergollasper_15 (O), Krili_16 (O), MadKillah_17 (O), Mori_16 (O), Murai_16 (O), NiebruSaylor_16 (O), SchoolBus_15 (O), Smooch_17 (O), TelAviv_15 (O), Vorrps_16 (O), Wildflower_16 (O), YungJamal_17 (O),

Start 3:

- Found in 1 of 31 (3.2%) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Winget_16 (O),

Start 5:

- Found in 1 of 31 (3.2%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: StAugustine_165 (singleton),

Start 6:

- Found in 29 of 31 (93.5%) of genes in pham
- Manual Annotations of this start: 7 of 28
- Called 31.0% of time when present
- Phage (with cluster) where this start called: Alkhayr_16 (O), Bora_16 (O), FoulBall_15 (O), JangDynasty_15 (O), Ryadel_18 (O), Schuy_17 (O), Shida_16 (O), Thonko_51 (B8), Zakhe101_17 (O),

Summary by clusters:

There are 4 clusters represented in this pham: AA, singleton, B8, O,

Info for manual annotations of cluster AA:

•Start number 1 was manually annotated 1 time for cluster AA.

Info for manual annotations of cluster B8:

•Start number 6 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster O:

- •Start number 2 was manually annotated 19 times for cluster O.
- •Start number 3 was manually annotated 1 time for cluster O.
- •Start number 6 was manually annotated 6 times for cluster O.

Gene Information:

Gene: Alkhayr_16 Start: 6826, Stop: 7140, Start Num: 6

Candidate Starts for Alkhayr 16:

(Start: 2 @6766 has 19 MA's), (Start: 6 @6826 has 7 MA's), (12, 7015), (15, 7045),

Gene: Ashwin_17 Start: 6986, Stop: 7360, Start Num: 2

Candidate Starts for Ashwin_17:

(Start: 2 @6986 has 19 MA's), (Start: 6 @7046 has 7 MA's), (12, 7235), (15, 7265),

Gene: Blessica_16 Start: 6789, Stop: 7163, Start Num: 2

Candidate Starts for Blessica_16:

(Start: 2 @6789 has 19 MA's), (Start: 6 @6849 has 7 MA's), (12, 7038), (15, 7068),

Gene: Bora_16 Start: 6856, Stop: 7170, Start Num: 6

Candidate Starts for Bora_16:

(Start: 2 @6796 has 19 MA's), (Start: 6 @6856 has 7 MA's), (12, 7045), (15, 7075),

Gene: Catdawg_15 Start: 6395, Stop: 6769, Start Num: 2

Candidate Starts for Catdawg 15:

(Start: 2 @6395 has 19 MA's), (Start: 6 @6455 has 7 MA's), (12, 6644), (15, 6674),

Gene: Corndog_18 Start: 7098, Stop: 7472, Start Num: 2

Candidate Starts for Corndog_18:

(Start: 2 @7098 has 19 MA's), (Start: 6 @7158 has 7 MA's), (12, 7347), (15, 7377),

Gene: Dylan_16 Start: 6986, Stop: 7360, Start Num: 2

Candidate Starts for Dylan_16:

(Start: 2 @6986 has 19 MA's), (Start: 6 @7046 has 7 MA's), (12, 7235), (15, 7265),

Gene: Familton 16 Start: 6396, Stop: 6770, Start Num: 2

Candidate Starts for Familton_16:

(Start: 2 @6396 has 19 MA's), (Start: 6 @6456 has 7 MA's), (12, 6645), (15, 6675),

Gene: Firecracker_16 Start: 6719, Stop: 7093, Start Num: 2

Candidate Starts for Firecracker 16:

(Start: 2 @6719 has 19 MA's), (Start: 6 @6779 has 7 MA's), (12, 6968), (15, 6998),

Gene: FoulBall_15 Start: 6456, Stop: 6770, Start Num: 6

Candidate Starts for FoulBall_15:

(Start: 2 @6396 has 19 MA's), (Start: 6 @6456 has 7 MA's), (12, 6645), (15, 6675),

Gene: Idergollasper_15 Start: 6396, Stop: 6770, Start Num: 2

Candidate Starts for Idergollasper_15:

(Start: 2 @6396 has 19 MA's), (Start: 6 @6456 has 7 MA's), (12, 6645), (15, 6675),

Gene: JangDynasty_15 Start: 6545, Stop: 6859, Start Num: 6

Candidate Starts for JangDynasty 15:

(Start: 2 @6485 has 19 MA's), (Start: 6 @6545 has 7 MA's), (12, 6734), (15, 6764),

Gene: Krili_16 Start: 6755, Stop: 7129, Start Num: 2

Candidate Starts for Krili_16:

(Start: 2 @6755 has 19 MA's), (Start: 6 @6815 has 7 MA's), (12, 7004), (15, 7034),

Gene: MadKillah_17 Start: 6788, Stop: 7162, Start Num: 2

Candidate Starts for MadKillah_17:

```
(Start: 2 @6788 has 19 MA's), (Start: 6 @6848 has 7 MA's), (12, 7037), (15, 7067),
```

Gene: Mori_16 Start: 6627, Stop: 7001, Start Num: 2

Candidate Starts for Mori_16:

(Start: 2 @6627 has 19 MA's), (Start: 6 @6687 has 7 MA's), (12, 6876), (15, 6906),

Gene: Murai_16 Start: 6627, Stop: 7001, Start Num: 2

Candidate Starts for Murai 16:

(Start: 2 @6627 has 19 MA's), (Start: 6 @6687 has 7 MA's), (12, 6876), (15, 6906),

Gene: NiebruSaylor_16 Start: 6627, Stop: 7001, Start Num: 2

Candidate Starts for NiebruSaylor 16:

(Start: 2 @6627 has 19 MA's), (Start: 6 @6687 has 7 MA's), (12, 6876), (15, 6906),

Gene: Ryadel_18 Start: 7269, Stop: 7583, Start Num: 6

Candidate Starts for Ryadel_18:

(Start: 2 @7209 has 19 MA's), (Start: 6 @7269 has 7 MA's), (12, 7458), (15, 7488),

Gene: SchoolBus 15 Start: 6396, Stop: 6770, Start Num: 2

Candidate Starts for SchoolBus_15:

(Start: 2 @6396 has 19 MA's), (Start: 6 @6456 has 7 MA's), (12, 6645), (15, 6675),

Gene: Schuy_17 Start: 6848, Stop: 7162, Start Num: 6

Candidate Starts for Schuy_17:

(Start: 2 @6788 has 19 MA's), (Start: 6 @6848 has 7 MA's), (12, 7037), (15, 7067),

Gene: Settecandela_195 Start: 123754, Stop: 124140, Start Num: 1

Candidate Starts for Settecandela 195:

(Start: 1 @123754 has 1 MA's), (9, 124012), (10, 124021), (18, 124111),

Gene: Shida_16 Start: 6753, Stop: 7067, Start Num: 6

Candidate Starts for Shida_16:

(Start: 2 @6693 has 19 MA's), (Start: 6 @6753 has 7 MA's), (12, 6942), (15, 6972),

Gene: Smooch_17 Start: 6942, Stop: 7316, Start Num: 2

Candidate Starts for Smooch_17:

(Start: 2 @6942 has 19 MA's), (Start: 6 @7002 has 7 MA's), (12, 7191), (15, 7221),

Gene: StAugustine_165 Start: 90648, Stop: 90313, Start Num: 5

Candidate Starts for StAugustine_165:

(4, 90651), (5, 90648), (11, 90435), (13, 90429), (15, 90402), (16, 90393),

Gene: TelAviv_15 Start: 6393, Stop: 6767, Start Num: 2

Candidate Starts for TelAviv 15:

(Start: 2 @6393 has 19 MA's), (Start: 6 @6453 has 7 MA's), (12, 6642), (15, 6672),

Gene: Thonko_51 Start: 44134, Stop: 43847, Start Num: 6

Candidate Starts for Thonko_51:

(Start: 6 @44134 has 7 MA's), (7, 44053), (8, 44032), (14, 43909), (17, 43858),

Gene: Vorrps_16 Start: 6627, Stop: 7001, Start Num: 2

Candidate Starts for Vorrps 16:

(Start: 2 @6627 has 19 MA's), (Start: 6 @6687 has 7 MA's), (12, 6876), (15, 6906),

Gene: Wildflower_16 Start: 6650, Stop: 7024, Start Num: 2

Candidate Starts for Wildflower_16:

(Start: 2 @6650 has 19 MA's), (Start: 6 @6710 has 7 MA's), (12, 6899), (15, 6929),

Gene: Winget_16 Start: 6687, Stop: 7043, Start Num: 3

Candidate Starts for Winget_16:

(Start: 3 @6687 has 1 MA's), (Start: 6 @6729 has 7 MA's), (12, 6918), (15, 6948),

Gene: YungJamal_17 Start: 6978, Stop: 7352, Start Num: 2

Candidate Starts for YungJamal_17:

(Start: 2 @6978 has 19 MA's), (Start: 6 @7038 has 7 MA's), (12, 7227), (15, 7257),

Gene: Zakhe101_17 Start: 7050, Stop: 7364, Start Num: 6

Candidate Starts for Zakhe101_17:

(Start: 2 @6990 has 19 MA's), (Start: 6 @7050 has 7 MA's), (12, 7239), (15, 7269),