



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 203170 Report

This analysis was run 01/25/25 on database version 584.

Pham number 203170 has 33 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Thonko\_51
- Track 2 : Shida\_16, Bora\_16, FoulBall\_15, Ryadel\_18, Wogge42\_17, Schuy\_17, JangDynasty\_15, Zakhe101\_17, Alkhayr\_16, Zebo\_15
- Track 3 : Catdawg\_15, Firecracker\_16, Corndog\_18, Wildflower\_16, Murai\_16, Blessica\_16, Krili\_16, Dylan\_16, YungJamal\_17, Smooch\_17, Familton\_16, Vorrrps\_16, Mori\_16, NiebruSaylor\_16, Ashwin\_17, TelAviv\_15, MadKillah\_17, SchoolBus\_15, Idergollasper\_15
- Track 4 : Winget\_16
- Track 5 : Vagabond\_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 1, it was called in 19 of the 29 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, Vorrrps\_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, Wogge42\_17, Zakhe101\_17, Zebo\_15,

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

- StAugustine\_165, Thonko\_51, Vagabond\_16, Winget\_16,

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

Start 1:

- Found in 29 of 33 ( 87.9% ) of genes in pham
- Manual Annotations of this start: 19 of 29

- Called 65.5% 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), Vorrrps\_16 (O), Wildflower\_16 (O), YungJamal\_17 (O),

#### Start 2:

- Found in 2 of 33 ( 6.1% ) of genes in pham
- Manual Annotations of this start: 1 of 29
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Winget\_16 (O),

#### Start 4:

- Found in 1 of 33 ( 3.0% ) 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 5:

- Found in 32 of 33 ( 97.0% ) of genes in pham
- Manual Annotations of this start: 9 of 29
- Called 37.5% 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), Vagabond\_16 (O), Wogge42\_17 (O), Zakhe101\_17 (O), Zebo\_15 (O),

### Summary by clusters:

There are 3 clusters represented in this pham: singleton, B8, O,

Info for manual annotations of cluster B8:

- Start number 5 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster O:

- Start number 1 was manually annotated 19 times for cluster O.
- Start number 2 was manually annotated 1 time for cluster O.
- Start number 5 was manually annotated 8 times for cluster O.

### Gene Information:

Gene: Alkhayr\_16 Start: 6826, Stop: 7140, Start Num: 5

Candidate Starts for Alkhayr\_16:

(Start: 1 @6766 has 19 MA's), (Start: 5 @6826 has 9 MA's), (9, 7015), (11, 7045),

Gene: Ashwin\_17 Start: 6986, Stop: 7360, Start Num: 1

Candidate Starts for Ashwin\_17:

(Start: 1 @6986 has 19 MA's), (Start: 5 @7046 has 9 MA's), (9, 7235), (11, 7265),

Gene: Blessica\_16 Start: 6789, Stop: 7163, Start Num: 1

Candidate Starts for Blessica\_16:

(Start: 1 @6789 has 19 MA's), (Start: 5 @6849 has 9 MA's), (9, 7038), (11, 7068),

Gene: Bora\_16 Start: 6856, Stop: 7170, Start Num: 5

Candidate Starts for Bora\_16:

(Start: 1 @6796 has 19 MA's), (Start: 5 @6856 has 9 MA's), (9, 7045), (11, 7075),

Gene: Catdawg\_15 Start: 6395, Stop: 6769, Start Num: 1

Candidate Starts for Catdawg\_15:

(Start: 1 @6395 has 19 MA's), (Start: 5 @6455 has 9 MA's), (9, 6644), (11, 6674),

Gene: Corndog\_18 Start: 7098, Stop: 7472, Start Num: 1

Candidate Starts for Corndog\_18:

(Start: 1 @7098 has 19 MA's), (Start: 5 @7158 has 9 MA's), (9, 7347), (11, 7377),

Gene: Dylan\_16 Start: 6986, Stop: 7360, Start Num: 1

Candidate Starts for Dylan\_16:

(Start: 1 @6986 has 19 MA's), (Start: 5 @7046 has 9 MA's), (9, 7235), (11, 7265),

Gene: Familton\_16 Start: 6396, Stop: 6770, Start Num: 1

Candidate Starts for Familton\_16:

(Start: 1 @6396 has 19 MA's), (Start: 5 @6456 has 9 MA's), (9, 6645), (11, 6675),

Gene: Firecracker\_16 Start: 6719, Stop: 7093, Start Num: 1

Candidate Starts for Firecracker\_16:

(Start: 1 @6719 has 19 MA's), (Start: 5 @6779 has 9 MA's), (9, 6968), (11, 6998),

Gene: FoulBall\_15 Start: 6456, Stop: 6770, Start Num: 5

Candidate Starts for FoulBall\_15:

(Start: 1 @6396 has 19 MA's), (Start: 5 @6456 has 9 MA's), (9, 6645), (11, 6675),

Gene: Idergollasper\_15 Start: 6396, Stop: 6770, Start Num: 1

Candidate Starts for Idergollasper\_15:

(Start: 1 @6396 has 19 MA's), (Start: 5 @6456 has 9 MA's), (9, 6645), (11, 6675),

Gene: JangDynasty\_15 Start: 6545, Stop: 6859, Start Num: 5

Candidate Starts for JangDynasty\_15:

(Start: 1 @6485 has 19 MA's), (Start: 5 @6545 has 9 MA's), (9, 6734), (11, 6764),

Gene: Krili\_16 Start: 6755, Stop: 7129, Start Num: 1

Candidate Starts for Krili\_16:

(Start: 1 @6755 has 19 MA's), (Start: 5 @6815 has 9 MA's), (9, 7004), (11, 7034),

Gene: MadKillah\_17 Start: 6788, Stop: 7162, Start Num: 1

Candidate Starts for MadKillah\_17:

(Start: 1 @6788 has 19 MA's), (Start: 5 @6848 has 9 MA's), (9, 7037), (11, 7067),

Gene: Mori\_16 Start: 6627, Stop: 7001, Start Num: 1

Candidate Starts for Mori\_16:

(Start: 1 @6627 has 19 MA's), (Start: 5 @6687 has 9 MA's), (9, 6876), (11, 6906),

Gene: Murai\_16 Start: 6627, Stop: 7001, Start Num: 1

Candidate Starts for Murai\_16:

(Start: 1 @6627 has 19 MA's), (Start: 5 @6687 has 9 MA's), (9, 6876), (11, 6906),

Gene: NiebruSaylor\_16 Start: 6627, Stop: 7001, Start Num: 1

Candidate Starts for NiebruSaylor\_16:

(Start: 1 @6627 has 19 MA's), (Start: 5 @6687 has 9 MA's), (9, 6876), (11, 6906),

Gene: Ryadel\_18 Start: 7269, Stop: 7583, Start Num: 5

Candidate Starts for Ryadel\_18:

(Start: 1 @7209 has 19 MA's), (Start: 5 @7269 has 9 MA's), (9, 7458), (11, 7488),

Gene: SchoolBus\_15 Start: 6396, Stop: 6770, Start Num: 1

Candidate Starts for SchoolBus\_15:

(Start: 1 @6396 has 19 MA's), (Start: 5 @6456 has 9 MA's), (9, 6645), (11, 6675),

Gene: Schuy\_17 Start: 6848, Stop: 7162, Start Num: 5

Candidate Starts for Schuy\_17:

(Start: 1 @6788 has 19 MA's), (Start: 5 @6848 has 9 MA's), (9, 7037), (11, 7067),

Gene: Shida\_16 Start: 6753, Stop: 7067, Start Num: 5

Candidate Starts for Shida\_16:

(Start: 1 @6693 has 19 MA's), (Start: 5 @6753 has 9 MA's), (9, 6942), (11, 6972),

Gene: Smooch\_17 Start: 6942, Stop: 7316, Start Num: 1

Candidate Starts for Smooch\_17:

(Start: 1 @6942 has 19 MA's), (Start: 5 @7002 has 9 MA's), (9, 7191), (11, 7221),

Gene: StAugustine\_165 Start: 90648, Stop: 90313, Start Num: 4

Candidate Starts for StAugustine\_165:

(3, 90651), (4, 90648), (8, 90435), (10, 90429), (11, 90402), (12, 90393),

Gene: TelAviv\_15 Start: 6393, Stop: 6767, Start Num: 1

Candidate Starts for TelAviv\_15:

(Start: 1 @6393 has 19 MA's), (Start: 5 @6453 has 9 MA's), (9, 6642), (11, 6672),

Gene: Thonko\_51 Start: 44134, Stop: 43847, Start Num: 5

Candidate Starts for Thonko\_51:

(Start: 5 @44134 has 9 MA's), (6, 44053), (7, 44032), (12, 43909), (13, 43858),

Gene: Vagabond\_16 Start: 6730, Stop: 7044, Start Num: 5

Candidate Starts for Vagabond\_16:

(Start: 2 @6688 has 1 MA's), (Start: 5 @6730 has 9 MA's), (9, 6919), (11, 6949),

Gene: Vorrrps\_16 Start: 6627, Stop: 7001, Start Num: 1

Candidate Starts for Vorrrps\_16:

(Start: 1 @6627 has 19 MA's), (Start: 5 @6687 has 9 MA's), (9, 6876), (11, 6906),

Gene: Wildflower\_16 Start: 6650, Stop: 7024, Start Num: 1

Candidate Starts for Wildflower\_16:

(Start: 1 @6650 has 19 MA's), (Start: 5 @6710 has 9 MA's), (9, 6899), (11, 6929),

Gene: Winget\_16 Start: 6687, Stop: 7043, Start Num: 2

Candidate Starts for Winget\_16:

(Start: 2 @6687 has 1 MA's), (Start: 5 @6729 has 9 MA's), (9, 6918), (11, 6948),

Gene: Wogge42\_17 Start: 6818, Stop: 7132, Start Num: 5

Candidate Starts for Wogge42\_17:

(Start: 1 @6758 has 19 MA's), (Start: 5 @6818 has 9 MA's), (9, 7007), (11, 7037),

Gene: YungJamal\_17 Start: 6978, Stop: 7352, Start Num: 1

Candidate Starts for YungJamal\_17:

(Start: 1 @6978 has 19 MA's), (Start: 5 @7038 has 9 MA's), (9, 7227), (11, 7257),

Gene: Zakhe101\_17 Start: 7050, Stop: 7364, Start Num: 5

Candidate Starts for Zakhe101\_17:

(Start: 1 @6990 has 19 MA's), (Start: 5 @7050 has 9 MA's), (9, 7239), (11, 7269),

Gene: Zebo\_15 Start: 6456, Stop: 6770, Start Num: 5

Candidate Starts for Zebo\_15:

(Start: 1 @6396 has 19 MA's), (Start: 5 @6456 has 9 MA's), (9, 6645), (11, 6675),