



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 301582 Report

This analysis was run 06/08/26 on database version 649.

Pham number 301582 has 35 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Shida\_30, Corndog\_31, Dylan\_29, Mori\_29, Firecracker\_30, Vorrps\_29, NiebruSaylor\_29, Zakhe101\_30, Bora\_27, Wildflower\_30, Ashwin\_31, Krili\_29
- Track 2 : Idergollasper\_29, JangDynasty\_29, FoulBall\_29, Murai\_30, TelAviv\_27, Familton\_30
- Track 3 : Imara\_28, SchoolBus\_29, Ryadel\_32, Catdawg\_29, YoyoKar\_28, Winget\_30
- Track 4 : Vagabond\_30, Schuy\_31, Blessica\_30, Zebo\_29, Smooch\_32, MadKillah\_31, Alkhayr\_30, Wogge42\_29
- Track 5 : YungJamal\_32
- Track 6 : KingPhillip3\_27
- Track 7 : REQ2\_01

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

The start number called the most often in the published annotations is 6, it was called in 25 of the 30 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alkhayr\_30, Ashwin\_31, Blessica\_30, Bora\_27, Corndog\_31, Dylan\_29, Familton\_30, Firecracker\_30, FoulBall\_29, Idergollasper\_29, JangDynasty\_29, Krili\_29, MadKillah\_31, Mori\_29, Murai\_30, NiebruSaylor\_29, Schuy\_31, Shida\_30, Smooch\_32, TelAviv\_27, Vagabond\_30, Vorrps\_29, Wildflower\_30, Wogge42\_29, Zakhe101\_30, Zebo\_29,

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

- Catdawg\_29, Imara\_28, KingPhillip3\_27, Ryadel\_32, SchoolBus\_29, Winget\_30, YoyoKar\_28, YungJamal\_32,

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

- REQ2\_01,

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

Start 3:

- Found in 1 of 35 ( 2.9% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: REQ2\_01 (singleton),

#### Start 6:

- Found in 34 of 35 ( 97.1% ) of genes in pham
- Manual Annotations of this start: 25 of 30
- Called 76.5% of time when present
- Phage (with cluster) where this start called: Alkhayr\_30 (O), Ashwin\_31 (O), Blessica\_30 (O), Bora\_27 (O), Corndog\_31 (O), Dylan\_29 (O), Familton\_30 (O), Firecracker\_30 (O), FoulBall\_29 (O), Idergollasper\_29 (O), JangDynasty\_29 (O), Kriili\_29 (O), MadKillah\_31 (O), Mori\_29 (O), Murai\_30 (O), NiebruSaylor\_29 (O), Schuy\_31 (O), Shida\_30 (O), Smooch\_32 (O), TelAviv\_27 (O), Vagabond\_30 (O), Vorrrps\_29 (O), Wildflower\_30 (O), Wogge42\_29 (O), Zakhe101\_30 (O), Zebo\_29 (O),

#### Start 8:

- Found in 34 of 35 ( 97.1% ) of genes in pham
- Manual Annotations of this start: 5 of 30
- Called 23.5% of time when present
- Phage (with cluster) where this start called: Catdawg\_29 (O), Imara\_28 (O), KingPhillip3\_27 (O), Ryadel\_32 (O), SchoolBus\_29 (O), Winget\_30 (O), YoyoKar\_28 (O), YungJamal\_32 (O),

### Summary by clusters:

There are 2 clusters represented in this pham: singleton, O,

Info for manual annotations of cluster O:

- Start number 6 was manually annotated 25 times for cluster O.
- Start number 8 was manually annotated 5 times for cluster O.

### **Gene Information:**

Gene: Alkhayr\_30 Start: 13181, Stop: 13480, Start Num: 6

Candidate Starts for Alkhayr\_30:

(1, 13058), (Start: 6 @13181 has 25 MA's), (Start: 8 @13190 has 5 MA's), (12, 13331), (13, 13373),

Gene: Ashwin\_31 Start: 13191, Stop: 13490, Start Num: 6

Candidate Starts for Ashwin\_31:

(2, 13113), (Start: 6 @13191 has 25 MA's), (Start: 8 @13200 has 5 MA's), (12, 13341), (13, 13383),

Gene: Blessica\_30 Start: 13214, Stop: 13513, Start Num: 6

Candidate Starts for Blessica\_30:

(1, 13091), (Start: 6 @13214 has 25 MA's), (Start: 8 @13223 has 5 MA's), (12, 13364), (13, 13406),

Gene: Bora\_27 Start: 12644, Stop: 12943, Start Num: 6

Candidate Starts for Bora\_27:

(2, 12566), (Start: 6 @12644 has 25 MA's), (Start: 8 @12653 has 5 MA's), (12, 12794), (13, 12836),

Gene: Catdawg\_29 Start: 12829, Stop: 13119, Start Num: 8

Candidate Starts for Catdawg\_29:

(1, 12697), (Start: 6 @12820 has 25 MA's), (Start: 8 @12829 has 5 MA's), (12, 12970), (13, 13012),

Gene: Corndog\_31 Start: 13270, Stop: 13569, Start Num: 6

Candidate Starts for Corndog\_31:

(2, 13192), (Start: 6 @13270 has 25 MA's), (Start: 8 @13279 has 5 MA's), (12, 13420), (13, 13462),

Gene: Dylan\_29 Start: 12996, Stop: 13295, Start Num: 6

Candidate Starts for Dylan\_29:

(2, 12918), (Start: 6 @12996 has 25 MA's), (Start: 8 @13005 has 5 MA's), (12, 13146), (13, 13188),

Gene: Familton\_30 Start: 12824, Stop: 13123, Start Num: 6

Candidate Starts for Familton\_30:

(Start: 6 @12824 has 25 MA's), (Start: 8 @12833 has 5 MA's), (12, 12974), (13, 13016),

Gene: Firecracker\_30 Start: 12894, Stop: 13193, Start Num: 6

Candidate Starts for Firecracker\_30:

(2, 12816), (Start: 6 @12894 has 25 MA's), (Start: 8 @12903 has 5 MA's), (12, 13044), (13, 13086),

Gene: FoulBall\_29 Start: 12818, Stop: 13117, Start Num: 6

Candidate Starts for FoulBall\_29:

(Start: 6 @12818 has 25 MA's), (Start: 8 @12827 has 5 MA's), (12, 12968), (13, 13010),

Gene: Idergollasper\_29 Start: 12818, Stop: 13117, Start Num: 6

Candidate Starts for Idergollasper\_29:

(Start: 6 @12818 has 25 MA's), (Start: 8 @12827 has 5 MA's), (12, 12968), (13, 13010),

Gene: Imara\_28 Start: 13076, Stop: 13366, Start Num: 8

Candidate Starts for Imara\_28:

(1, 12944), (Start: 6 @13067 has 25 MA's), (Start: 8 @13076 has 5 MA's), (12, 13217), (13, 13259),

Gene: JangDynasty\_29 Start: 12913, Stop: 13212, Start Num: 6

Candidate Starts for JangDynasty\_29:

(Start: 6 @12913 has 25 MA's), (Start: 8 @12922 has 5 MA's), (12, 13063), (13, 13105),

Gene: KingPhillip3\_27 Start: 12827, Stop: 13117, Start Num: 8

Candidate Starts for KingPhillip3\_27:

(Start: 6 @12818 has 25 MA's), (Start: 8 @12827 has 5 MA's), (12, 12968), (13, 13010),

Gene: Krili\_29 Start: 12988, Stop: 13287, Start Num: 6

Candidate Starts for Krili\_29:

(2, 12910), (Start: 6 @12988 has 25 MA's), (Start: 8 @12997 has 5 MA's), (12, 13138), (13, 13180),

Gene: MadKillah\_31 Start: 13207, Stop: 13506, Start Num: 6

Candidate Starts for MadKillah\_31:

(1, 13084), (Start: 6 @13207 has 25 MA's), (Start: 8 @13216 has 5 MA's), (12, 13357), (13, 13399),

Gene: Mori\_29 Start: 12859, Stop: 13158, Start Num: 6

Candidate Starts for Mori\_29:

(2, 12781), (Start: 6 @12859 has 25 MA's), (Start: 8 @12868 has 5 MA's), (12, 13009), (13, 13051),

Gene: Murai\_30 Start: 13049, Stop: 13348, Start Num: 6

Candidate Starts for Murai\_30:

(Start: 6 @13049 has 25 MA's), (Start: 8 @13058 has 5 MA's), (12, 13199), (13, 13241),

Gene: NiebruSaylor\_29 Start: 12860, Stop: 13159, Start Num: 6

Candidate Starts for NiebruSaylor\_29:

(2, 12782), (Start: 6 @12860 has 25 MA's), (Start: 8 @12869 has 5 MA's), (12, 13010), (13, 13052),

Gene: REQ2\_01 Start: 71, Stop: 421, Start Num: 3

Candidate Starts for REQ2\_01:

(1, 5), (3, 71), (4, 116), (5, 128), (7, 134), (9, 182), (10, 206), (11, 245),

Gene: Ryadel\_32 Start: 13643, Stop: 13933, Start Num: 8

Candidate Starts for Ryadel\_32:

(1, 13511), (Start: 6 @13634 has 25 MA's), (Start: 8 @13643 has 5 MA's), (12, 13784), (13, 13826),

Gene: SchoolBus\_29 Start: 12830, Stop: 13120, Start Num: 8

Candidate Starts for SchoolBus\_29:

(1, 12698), (Start: 6 @12821 has 25 MA's), (Start: 8 @12830 has 5 MA's), (12, 12971), (13, 13013),

Gene: Schuy\_31 Start: 13207, Stop: 13506, Start Num: 6

Candidate Starts for Schuy\_31:

(1, 13084), (Start: 6 @13207 has 25 MA's), (Start: 8 @13216 has 5 MA's), (12, 13357), (13, 13399),

Gene: Shida\_30 Start: 13114, Stop: 13413, Start Num: 6

Candidate Starts for Shida\_30:

(2, 13036), (Start: 6 @13114 has 25 MA's), (Start: 8 @13123 has 5 MA's), (12, 13264), (13, 13306),

Gene: Smooch\_32 Start: 14365, Stop: 14664, Start Num: 6

Candidate Starts for Smooch\_32:

(1, 14242), (Start: 6 @14365 has 25 MA's), (Start: 8 @14374 has 5 MA's), (12, 14515), (13, 14557),

Gene: TelAviv\_27 Start: 12815, Stop: 13114, Start Num: 6

Candidate Starts for TelAviv\_27:

(Start: 6 @12815 has 25 MA's), (Start: 8 @12824 has 5 MA's), (12, 12965), (13, 13007),

Gene: Vagabond\_30 Start: 13088, Stop: 13387, Start Num: 6

Candidate Starts for Vagabond\_30:

(1, 12965), (Start: 6 @13088 has 25 MA's), (Start: 8 @13097 has 5 MA's), (12, 13238), (13, 13280),

Gene: Vorrrps\_29 Start: 12860, Stop: 13159, Start Num: 6

Candidate Starts for Vorrrps\_29:

(2, 12782), (Start: 6 @12860 has 25 MA's), (Start: 8 @12869 has 5 MA's), (12, 13010), (13, 13052),

Gene: Wildflower\_30 Start: 12855, Stop: 13154, Start Num: 6

Candidate Starts for Wildflower\_30:

(2, 12777), (Start: 6 @12855 has 25 MA's), (Start: 8 @12864 has 5 MA's), (12, 13005), (13, 13047),

Gene: Winget\_30 Start: 13096, Stop: 13386, Start Num: 8

Candidate Starts for Winget\_30:

(1, 12964), (Start: 6 @13087 has 25 MA's), (Start: 8 @13096 has 5 MA's), (12, 13237), (13, 13279),

Gene: Wogge42\_29 Start: 13177, Stop: 13476, Start Num: 6

Candidate Starts for Wogge42\_29:

(1, 13054), (Start: 6 @13177 has 25 MA's), (Start: 8 @13186 has 5 MA's), (12, 13327), (13, 13369),

Gene: YoyoKar\_28 Start: 12831, Stop: 13121, Start Num: 8

Candidate Starts for YoyoKar\_28:

(1, 12699), (Start: 6 @12822 has 25 MA's), (Start: 8 @12831 has 5 MA's), (12, 12972), (13, 13014),

Gene: YungJamal\_32 Start: 13159, Stop: 13449, Start Num: 8

Candidate Starts for YungJamal\_32:

(2, 13072), (Start: 6 @13150 has 25 MA's), (Start: 8 @13159 has 5 MA's), (12, 13300), (13, 13342),

Gene: Zakhe101\_30 Start: 13000, Stop: 13299, Start Num: 6

Candidate Starts for Zakhe101\_30:

(2, 12922), (Start: 6 @13000 has 25 MA's), (Start: 8 @13009 has 5 MA's), (12, 13150), (13, 13192),

Gene: Zebo\_29 Start: 12821, Stop: 13120, Start Num: 6

Candidate Starts for Zebo\_29:

(1, 12698), (Start: 6 @12821 has 25 MA's), (Start: 8 @12830 has 5 MA's), (12, 12971), (13, 13013),