



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 219906 Report

This analysis was run 03/28/25 on database version 593.

Pham number 219906 has 32 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Corndog\_76, Wildflower\_73, Bora\_71, Firecracker\_75, Catdawg\_73, Murai\_74, Krili\_72, Schuy\_74, Wogge42\_72, YungJamal\_78, Ryadel\_77, Blessica\_74, MadKillah\_74, Vorrps\_73, JangDynasty\_73, Familton\_74, Smooch\_76, Mori\_73, FoulBall\_73, Idergollasper\_73, NiebruSaylor\_72, TelAviv\_70, Winget\_74, Shida\_73, SchoolBus\_73, Vagabond\_73, Zebo\_72
- Track 2 : KingPhillip3\_72, Alkhayr\_71
- Track 3 : Ashwin\_75
- Track 4 : Dylan\_73, Zakhe101\_72

### ***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 27 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Blessica\_74, Bora\_71, Catdawg\_73, Corndog\_76, Dylan\_73, Familton\_74, Firecracker\_75, FoulBall\_73, Idergollasper\_73, JangDynasty\_73, Krili\_72, MadKillah\_74, Mori\_73, Murai\_74, NiebruSaylor\_72, Ryadel\_77, SchoolBus\_73, Schuy\_74, Shida\_73, Smooch\_76, TelAviv\_70, Vagabond\_73, Vorrps\_73, Wildflower\_73, Winget\_74, Wogge42\_72, YungJamal\_78, Zakhe101\_72, Zebo\_72,

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

- Alkhayr\_71, Ashwin\_75, KingPhillip3\_72,

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

- 

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

Start 1:

- Found in 32 of 32 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 27 of 28
- Called 90.6% of time when present

- Phage (with cluster) where this start called: Blessica\_74 (O), Bora\_71 (O), Catdawg\_73 (O), Corndog\_76 (O), Dylan\_73 (O), Familton\_74 (O), Firecracker\_75 (O), FouilBall\_73 (O), Idergollasper\_73 (O), JangDynasty\_73 (O), Krili\_72 (O), MadKillah\_74 (O), Mori\_73 (O), Murai\_74 (O), NiebruSaylor\_72 (O), Ryadel\_77 (O), SchoolBus\_73 (O), Schuy\_74 (O), Shida\_73 (O), Smooch\_76 (O), TelAviv\_70 (O), Vagabond\_73 (O), Vorrps\_73 (O), Wildflower\_73 (O), Winget\_74 (O), Wogge42\_72 (O), YungJamal\_78 (O), Zakhe101\_72 (O), Zebo\_72 (O),

Start 3:

- Found in 32 of 32 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 3.1% of time when present
- Phage (with cluster) where this start called: Ashwin\_75 (O),

Start 5:

- Found in 32 of 32 ( 100.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 6.2% of time when present
- Phage (with cluster) where this start called: Alkhayr\_71 (O), KingPhillip3\_72 (O),

### Summary by clusters:

There is one cluster represented in this pham: O

Info for manual annotations of cluster O:

- Start number 1 was manually annotated 27 times for cluster O.
- Start number 3 was manually annotated 1 time for cluster O.

### **Gene Information:**

Gene: Alkhayr\_71 Start: 46479, Stop: 46159, Start Num: 5

Candidate Starts for Alkhayr\_71:

(Start: 1 @46566 has 27 MA's), (2, 46557), (Start: 3 @46554 has 1 MA's), (4, 46503), (5, 46479), (6, 46380), (7, 46248),

Gene: Ashwin\_75 Start: 47324, Stop: 46929, Start Num: 3

Candidate Starts for Ashwin\_75:

(Start: 1 @47336 has 27 MA's), (2, 47327), (Start: 3 @47324 has 1 MA's), (4, 47273), (5, 47249), (6, 47150), (7, 47018),

Gene: Blessica\_74 Start: 47165, Stop: 46758, Start Num: 1

Candidate Starts for Blessica\_74:

(Start: 1 @47165 has 27 MA's), (2, 47156), (Start: 3 @47153 has 1 MA's), (4, 47102), (5, 47078), (6, 46979), (7, 46847),

Gene: Bora\_71 Start: 46546, Stop: 46139, Start Num: 1

Candidate Starts for Bora\_71:

(Start: 1 @46546 has 27 MA's), (2, 46537), (Start: 3 @46534 has 1 MA's), (4, 46483), (5, 46459), (6, 46360), (7, 46228),

Gene: Catdawg\_73 Start: 46901, Stop: 46494, Start Num: 1

Candidate Starts for Catdawg\_73:

(Start: 1 @46901 has 27 MA's), (2, 46892), (Start: 3 @46889 has 1 MA's), (4, 46838), (5, 46814), (6, 46715), (7, 46583),

Gene: Corndog\_76 Start: 47895, Stop: 47488, Start Num: 1

Candidate Starts for Corndog\_76:

(Start: 1 @47895 has 27 MA's), (2, 47886), (Start: 3 @47883 has 1 MA's), (4, 47832), (5, 47808), (6, 47709), (7, 47577),

Gene: Dylan\_73 Start: 46948, Stop: 46541, Start Num: 1

Candidate Starts for Dylan\_73:

(Start: 1 @46948 has 27 MA's), (2, 46939), (Start: 3 @46936 has 1 MA's), (5, 46861), (6, 46762), (7, 46630),

Gene: Familton\_74 Start: 46858, Stop: 46451, Start Num: 1

Candidate Starts for Familton\_74:

(Start: 1 @46858 has 27 MA's), (2, 46849), (Start: 3 @46846 has 1 MA's), (4, 46795), (5, 46771), (6, 46672), (7, 46540),

Gene: Firecracker\_75 Start: 47248, Stop: 46841, Start Num: 1

Candidate Starts for Firecracker\_75:

(Start: 1 @47248 has 27 MA's), (2, 47239), (Start: 3 @47236 has 1 MA's), (4, 47185), (5, 47161), (6, 47062), (7, 46930),

Gene: FoulBall\_73 Start: 46852, Stop: 46445, Start Num: 1

Candidate Starts for FoulBall\_73:

(Start: 1 @46852 has 27 MA's), (2, 46843), (Start: 3 @46840 has 1 MA's), (4, 46789), (5, 46765), (6, 46666), (7, 46534),

Gene: Idergollasper\_73 Start: 46852, Stop: 46445, Start Num: 1

Candidate Starts for Idergollasper\_73:

(Start: 1 @46852 has 27 MA's), (2, 46843), (Start: 3 @46840 has 1 MA's), (4, 46789), (5, 46765), (6, 46666), (7, 46534),

Gene: JangDynasty\_73 Start: 46938, Stop: 46531, Start Num: 1

Candidate Starts for JangDynasty\_73:

(Start: 1 @46938 has 27 MA's), (2, 46929), (Start: 3 @46926 has 1 MA's), (4, 46875), (5, 46851), (6, 46752), (7, 46620),

Gene: KingPhillip3\_72 Start: 46780, Stop: 46460, Start Num: 5

Candidate Starts for KingPhillip3\_72:

(Start: 1 @46867 has 27 MA's), (2, 46858), (Start: 3 @46855 has 1 MA's), (4, 46804), (5, 46780), (6, 46681), (7, 46549),

Gene: Krili\_72 Start: 46362, Stop: 45955, Start Num: 1

Candidate Starts for Krili\_72:

(Start: 1 @46362 has 27 MA's), (2, 46353), (Start: 3 @46350 has 1 MA's), (4, 46299), (5, 46275), (6, 46176), (7, 46044),

Gene: MadKillah\_74 Start: 46631, Stop: 46224, Start Num: 1

Candidate Starts for MadKillah\_74:

(Start: 1 @46631 has 27 MA's), (2, 46622), (Start: 3 @46619 has 1 MA's), (4, 46568), (5, 46544), (6, 46445), (7, 46313),

Gene: Mori\_73 Start: 46893, Stop: 46486, Start Num: 1

Candidate Starts for Mori\_73:

(Start: 1 @46893 has 27 MA's), (2, 46884), (Start: 3 @46881 has 1 MA's), (4, 46830), (5, 46806), (6, 46707), (7, 46575),

Gene: Murai\_74 Start: 47074, Stop: 46667, Start Num: 1

Candidate Starts for Murai\_74:

(Start: 1 @47074 has 27 MA's), (2, 47065), (Start: 3 @47062 has 1 MA's), (4, 47011), (5, 46987), (6, 46888), (7, 46756),

Gene: NiebruSaylor\_72 Start: 46281, Stop: 45874, Start Num: 1

Candidate Starts for NiebruSaylor\_72:

(Start: 1 @46281 has 27 MA's), (2, 46272), (Start: 3 @46269 has 1 MA's), (4, 46218), (5, 46194), (6, 46095), (7, 45963),

Gene: Ryadel\_77 Start: 47686, Stop: 47279, Start Num: 1

Candidate Starts for Ryadel\_77:

(Start: 1 @47686 has 27 MA's), (2, 47677), (Start: 3 @47674 has 1 MA's), (4, 47623), (5, 47599), (6, 47500), (7, 47368),

Gene: SchoolBus\_73 Start: 46834, Stop: 46427, Start Num: 1

Candidate Starts for SchoolBus\_73:

(Start: 1 @46834 has 27 MA's), (2, 46825), (Start: 3 @46822 has 1 MA's), (4, 46771), (5, 46747), (6, 46648), (7, 46516),

Gene: Schuy\_74 Start: 46637, Stop: 46230, Start Num: 1

Candidate Starts for Schuy\_74:

(Start: 1 @46637 has 27 MA's), (2, 46628), (Start: 3 @46625 has 1 MA's), (4, 46574), (5, 46550), (6, 46451), (7, 46319),

Gene: Shida\_73 Start: 46544, Stop: 46137, Start Num: 1

Candidate Starts for Shida\_73:

(Start: 1 @46544 has 27 MA's), (2, 46535), (Start: 3 @46532 has 1 MA's), (4, 46481), (5, 46457), (6, 46358), (7, 46226),

Gene: Smooch\_76 Start: 48590, Stop: 48183, Start Num: 1

Candidate Starts for Smooch\_76:

(Start: 1 @48590 has 27 MA's), (2, 48581), (Start: 3 @48578 has 1 MA's), (4, 48527), (5, 48503), (6, 48404), (7, 48272),

Gene: TelAviv\_70 Start: 46819, Stop: 46412, Start Num: 1

Candidate Starts for TelAviv\_70:

(Start: 1 @46819 has 27 MA's), (2, 46810), (Start: 3 @46807 has 1 MA's), (4, 46756), (5, 46732), (6, 46633), (7, 46501),

Gene: Vagabond\_73 Start: 46682, Stop: 46275, Start Num: 1

Candidate Starts for Vagabond\_73:

(Start: 1 @46682 has 27 MA's), (2, 46673), (Start: 3 @46670 has 1 MA's), (4, 46619), (5, 46595), (6, 46496), (7, 46364),

Gene: Vorrps\_73 Start: 46894, Stop: 46487, Start Num: 1

Candidate Starts for Vorrps\_73:

(Start: 1 @46894 has 27 MA's), (2, 46885), (Start: 3 @46882 has 1 MA's), (4, 46831), (5, 46807), (6, 46708), (7, 46576),

Gene: Wildflower\_73 Start: 46406, Stop: 45999, Start Num: 1

Candidate Starts for Wildflower\_73:

(Start: 1 @46406 has 27 MA's), (2, 46397), (Start: 3 @46394 has 1 MA's), (4, 46343), (5, 46319), (6, 46220), (7, 46088),

Gene: Winget\_74 Start: 47112, Stop: 46705, Start Num: 1

Candidate Starts for Winget\_74:

(Start: 1 @47112 has 27 MA's), (2, 47103), (Start: 3 @47100 has 1 MA's), (4, 47049), (5, 47025), (6, 46926), (7, 46794),

Gene: Wogge42\_72 Start: 46553, Stop: 46146, Start Num: 1

Candidate Starts for Wogge42\_72:

(Start: 1 @46553 has 27 MA's), (2, 46544), (Start: 3 @46541 has 1 MA's), (4, 46490), (5, 46466), (6, 46367), (7, 46235),

Gene: YungJamal\_78 Start: 48304, Stop: 47897, Start Num: 1

Candidate Starts for YungJamal\_78:

(Start: 1 @48304 has 27 MA's), (2, 48295), (Start: 3 @48292 has 1 MA's), (4, 48241), (5, 48217), (6, 48118), (7, 47986),

Gene: Zakhe101\_72 Start: 46952, Stop: 46545, Start Num: 1

Candidate Starts for Zakhe101\_72:

(Start: 1 @46952 has 27 MA's), (2, 46943), (Start: 3 @46940 has 1 MA's), (5, 46865), (6, 46766), (7, 46634),

Gene: Zebo\_72 Start: 46843, Stop: 46436, Start Num: 1

Candidate Starts for Zebo\_72:

(Start: 1 @46843 has 27 MA's), (2, 46834), (Start: 3 @46831 has 1 MA's), (4, 46780), (5, 46756), (6, 46657), (7, 46525),