Pham 166910







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 166910 Report

This analysis was run 07/09/24 on database version 566.
Pham number 166910 has 28 members, 2 are drafts.
Phages represented in each track:

- Track 1 : Ryadel_20
- Track 2 : TelAviv_17, Bora_18, Shida_18, Catdawg_17, Krili_18, Blessica_18,

Vorrps_18, Familtōn_18, Corndog_20, Mori_18, JangDynasty_17, MadKillā_19, Winget_18, SchoolBūs_17, Idergollasper_17

- Track 3 : Wildflower_18
- Track 4 : Firecrackē_18, Murai_18, Dylan_18, Schuy_19, Smooch_19,

Zakhe101_19, NiebruSaylor_18

- Track 5 :YungJamal_19
- Track 6 : Ashwin_19
- Track 7 : Alkhayr_18, FoulBall_17


## 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 23 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Blessica_18, Bora_18, Catdawg_17, Corndog_20, Dylan_18, Familton_18, Firecrackē_18, Idergollasper_17, JangDynasty_17, Krili_18, MadKillah_19, Mori_18, Murai_18, NiebruSaylor_18, SchoolBus_17, Schuy_19, Shida_18, Smooch_19, TelAviv_17, Vorrps_18, Wildflower_18, Winget_18, Zakhe101_19,

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

- Alkhayr_18, Ashwin_19, FoulBall_17, Ryadel_20, YungJamal_19,

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

## Summary by start number:

Start 1:

- Found in 28 of 28 ( $100.0 \%$ ) of genes in pham
- Manual Annotations of this start: 2 of 26
- Called $7.1 \%$ of time when present
- Phage (with cluster) where this start called: Ashwin_19 (O), Ryadel_20 (O),

Start 2:

- Found in 28 of 28 ( $100.0 \%$ ) of genes in pham
- Manual Annotations of this start: 23 of 26
- Called $82.1 \%$ of time when present
- Phage (with cluster) where this start called: Blessica_18(O), Bora_18(O),

Catdawg_17 (O), Corndog_20 (O), Dylan_18 (O), Familton_18 (O), Firecracker_18 (O), Idergollasper_17 (O), JangDynasty_17 (O), Krili_18 (O), MadKillah_19 (O), Mori_18(O), Murāi_18(O), NiebruSaylō_18(O), SchoolBus_17 (O), Sc̄huy_19 (O), Shidā_18 (O), Smōoch_19 (O), TelAviv_17 (O), Vorrps_18 (O), Wildflower_18 (O), Winget_18 (O), Zakhe101_19 (O),

Start 4:

- Found in 28 of 28 ( $100.0 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 26
- Called 3.6\% of time when present
- Phage (with cluster) where this start called: YungJamal_19 (O),

Start 5:

- Found in 28 of 28 ( $100.0 \%$ ) of genes in pham
- No Manual Annotations of this start.
- Called $7.1 \%$ of time when present
- Phage (with cluster) where this start called: Alkhayr_18 (O), FoulBall_17 (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 2 times for cluster $O$.
- Start number 2 was manually annotated 23 times for cluster 0 .
- Start number 4 was manually annotated 1 time for cluster $O$.


## Gene Information:

Gene: Alkhayr_18 Start: 7504, Stop: 7668, Start Num: 5
Candidate Starts for Alkhayr_18:
(Start: 1 @7432 has 2 MA's), (Start: 2 @ 7441 has 23 MA's), (Start: 4 @7468 has 1 MA's), (5, 7504), $(6,7528),(7,7558),(8,7564),(9,7660)$,

Gene: Ashwin_19 Start: 7652, Stop: 7888, Start Num: 1
Candidate Starts for Ashwin_19:
(Start: 1 @ 7652 has 2 MA's), (Start: 2 @ 7661 has 23 MA's), (Start: 4 @7688 has 1 MA's), (5, 7724), (7, 7778), (8, 7784), (9, 7880),

Gene: Blessica_18 Start: 7464, Stop: 7691, Start Num: 2
Candidate Starts for Blessica_18:
(Start: 1 @ 7455 has 2 MA's), (Start: 2 @ 7464 has 23 MA's), (Start: 4 @7491 has 1 MA's), (5, 7527), (6, 7551), (7, 7581), (8, 7587), (9, 7683),

Gene: Bora_18 Start: 7471, Stop: 7698, Start Num: 2
Candidate Starts for Bora_18:
(Start: 1 @ 7462 has 2 MA's), (Start: 2 @ 7471 has 23 MA's), (Start: 4 @7498 has 1 MA's), (5, 7534), $(6,7558),(7,7588),(8,7594),(9,7690)$,

Gene: Catdawg_17 Start: 7070, Stop: 7297, Start Num: 2
Candidate Starts for Catdawg_17:
(Start: 1 @ 7061 has 2 MA's), (Start: 2 @ 7070 has 23 MA's), (Start: 4 @ 7097 has 1 MA's), (5, 7133), (6, 7157), (7, 7187), (8, 7193), (9, 7289),

Gene: Corndog_20 Start: 7773, Stop: 8000, Start Num: 2
Candidate Starts for Corndog_20:
(Start: 1 @7764 has 2 MA's), (Start: 2 @ 7773 has 23 MA's), (Start: 4 @7800 has 1 MA's), (5, 7836), (6, 7860), (7, 7890), (8, 7896), (9, 7992),

Gene: Dylan_18 Start: 7661, Stop: 7888, Start Num: 2
Candidate Starts for Dylan_18:
(Start: 1 @ 7652 has 2 MA's), (Start: 2 @ 7661 has 23 MA's), (Start: 4 @7688 has 1 MA's), (5, 7724), (7, 7778), (8, 7784), (9, 7880),

Gene: Familton_18 Start: 7071, Stop: 7298, Start Num: 2
Candidate Starts for Familton_18:
(Start: 1 @ 7062 has 2 MA's), (Start: 2 @ 7071 has 23 MA's), (Start: 4 @ 7098 has 1 MA's), (5, 7134), (6, 7158), (7, 7188), (8, 7194), (9, 7290),

Gene: Firecracker_18 Start: 7394, Stop: 7621, Start Num: 2
Candidate Starts for Firecracker_18:
(Start: 1 @ 7385 has 2 MA's), (Start: 2 @ 7394 has 23 MA's), (Start: 4 @ 7421 has 1 MA's), (5, 7457), (7, 7511), (8, 7517), (9, 7613),

Gene: FoulBall_17 Start: 7134, Stop: 7298, Start Num: 5
Candidate Starts for FoulBall_17:
(Start: 1 @ 7062 has 2 MA's), (Start: 2 @ 7071 has 23 MA's), (Start: 4 @7098 has 1 MA's), (5, 7134), $(6,7158),(7,7188),(8,7194),(9,7290)$,

Gene: Idergollasper_17 Start: 7071, Stop: 7298, Start Num: 2
Candidate Starts for Idergollasper_17:
(Start: 1 @ 7062 has 2 MA's), (Start: 2 @ 7071 has 23 MA's), (Start: 4 @7098 has 1 MA's), (5, 7134), (6, 7158), (7, 7188), (8, 7194), (9, 7290),

Gene: JangDynasty_17 Start: 7160, Stop: 7387, Start Num: 2
Candidate Starts for JangDynasty_17:
(Start: 1 @ 7151 has 2 MA's), (Start: 2 @ 7160 has 23 MA's), (Start: 4 @ 7187 has 1 MA's), (5, 7223), $(6,7247),(7,7277),(8,7283),(9,7379)$,

Gene: Krili_18 Start: 7430, Stop: 7657, Start Num: 2
Candidate Starts for Krili_18:
(Start: 1 @ 7421 has 2 MA's), (Start: 2 @ 7430 has 23 MA's), (Start: 4 @ 7457 has 1 MA's), (5, 7493), $(6,7517),(7,7547),(8,7553),(9,7649)$,

Gene: MadKillah_19 Start: 7463, Stop: 7690, Start Num: 2 Candidate Starts for MadKillah_19:
(Start: 1 @7454 has 2 MA's), (Start: 2 @7463 has 23 MA's), (Start: 4 @7490 has 1 MA's), (5, 7526), (6, 7550), (7, 7580), (8, 7586), (9, 7682),

Gene: Mori_18 Start: 7302, Stop: 7529, Start Num: 2
Candidate Starts for Mori_18:
(Start: 1 @7293 has 2 MA's), (Start: 2 @ 7302 has 23 MA's), (Start: 4 @7329 has 1 MA's), (5, 7365), (6, 7389), (7, 7419), (8, 7425), (9, 7521),

Gene: Murai_18 Start: 7302, Stop: 7529, Start Num: 2
Candidate Starts for Murai_18:
(Start: 1 @7293 has 2 MA's), (Start: 2 @ 7302 has 23 MA's), (Start: 4 @7329 has 1 MA's), (5, 7365), (7, 7419), (8, 7425), (9, 7521),

Gene: NiebruSaylor_18 Start: 7302, Stop: 7529, Start Num: 2
Candidate Starts for NiebruSaylor_18:
(Start: 1 @7293 has 2 MA's), (Start: 2 @7302 has 23 MA's), (Start: 4 @7329 has 1 MA's), (5, 7365), (7, 7419), (8, 7425), (9, 7521),

Gene: Ryadel_20 Start: 7875, Stop: 8111, Start Num: 1
Candidate Starts for Ryadel_20:
(Start: 1 @7875 has 2 MA's), (Start: 2 @7884 has 23 MA's), (Start: 4 @7911 has 1 MA's), (5, 7947), (6, 7971), (7, 8001), (8, 8007), (9, 8103),

Gene: SchoolBus_17 Start: 7071, Stop: 7298, Start Num: 2
Candidate Starts for SchoolBus_17:
(Start: 1 @ 7062 has 2 MA's), (Start: 2 @ 7071 has 23 MA's), (Start: 4 @7098 has 1 MA's), (5, 7134), (6, 7158), (7, 7188), (8, 7194), (9, 7290),

Gene: Schuy_19 Start: 7463, Stop: 7690, Start Num: 2
Candidate Starts for Schuy_19:
(Start: 1 @7454 has 2 MA's), (Start: 2 @ 7463 has 23 MA's), (Start: 4 @7490 has 1 MA's), (5, 7526), (7, 7580), (8, 7586), (9, 7682),

Gene: Shida_18 Start: 7368, Stop: 7595, Start Num: 2
Candidate Starts for Shida_18:
(Start: 1 @ 7359 has 2 MA's), (Start: 2 @ 7368 has 23 MA's), (Start: 4 @ 7395 has 1 MA's), (5, 7431), (6, 7455), (7, 7485), (8, 7491), (9, 7587),

Gene: Smooch_19 Start: 7617, Stop: 7844, Start Num: 2
Candidate Starts for Smooch_19:
(Start: 1 @ 7608 has 2 MA's), (Start: 2 @ 7617 has 23 MA's), (Start: 4 @7644 has 1 MA's), (5, 7680), (7, 7734), (8, 7740), (9, 7836),

Gene: TelAviv_17 Start: 7068, Stop: 7295, Start Num: 2
Candidate Starts for TelAviv_17:
(Start: 1 @ 7059 has 2 MA's), (Start: 2 @ 7068 has 23 MA's), (Start: 4 @ 7095 has 1 MA's), (5, 7131), (6, 7155), (7, 7185), (8, 7191), (9, 7287),

Gene: Vorrps_18 Start: 7302, Stop: 7529, Start Num: 2
Candidate Starts for Vorrps_18:
(Start: 1 @7293 has 2 MA's), (Start: 2 @7302 has 23 MA's), (Start: 4 @7329 has 1 MA's), (5, 7365), (6, 7389), (7, 7419), (8, 7425), (9, 7521),

Gene: Wildflower_18 Start: 7325, Stop: 7552, Start Num: 2
Candidate Starts for Wildflower_18:
(Start: 1 @ 7316 has 2 MA's), (Start: 2 @ 7325 has 23 MA's), (3, 7349), (Start: 4 @7352 has 1 MA's), $(5,7388),(6,7412),(7,7442),(8,7448),(9,7544)$,

Gene: Winget_18 Start: 7344, Stop: 7571, Start Num: 2
Candidate Starts for Winget_18:
(Start: 1 @7335 has 2 MA's), (Start: 2 @ 7344 has 23 MA's), (Start: 4 @7371 has 1 MA's), (5, 7407), (6, 7431), (7, 7461), (8, 7467), (9, 7563),

Gene: YungJamal_19 Start: 7680, Stop: 7880, Start Num: 4
Candidate Starts for YungJamal_19:
(Start: 1 @ 7644 has 2 MA's), (Start: 2 @ 7653 has 23 MA's), (Start: 4 @7680 has 1 MA's), (5, 7716), (6, 7740), (7, 7770), (8, 7776), (9, 7872),

Gene: Zakhe101_19 Start: 7665, Stop: 7892, Start Num: 2
Candidate Starts for Zakhe101_19:
(Start: 1 @ 7656 has 2 MA's), (Start: 2 @ 7665 has 23 MA's), (Start: 4 @ 7692 has 1 MA's), (5, 7728), (7, 7782), (8, 7788), (9, 7884),

