Pham 156676


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 156676 Report

This analysis was run 04/12/24 on database version 558.
Pham number 156676 has 20 members, 0 are drafts.
Phages represented in each track:

- Track 1 : Killigrew 40
- Track 2 : Ariel_198̄, Courthouse_194, Minerva_192
- Track 3 : Beem_193, EricMillard_188, JuicyJaȳ186, Ejimix_181, Klein_196,

Duke13_192, Yeèt_182, Halley_192, Optimus_1 $\overline{9} 0$, Dallas_ $1 \overline{9} 1$

- Track $\overline{4}$ : Bobby_180
- Track 5 : Constella 188
- Track 6 : Kalah2_193
- Track 7 : KashFlōw_189
- Track 8 : Thibault_174
- Track 9 : Omega_200


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

The start number called the most often in the published annotations is 11, it was called in 10 of the 20 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Beem_193, Dallas_191, Duke13_192, Ejimix_181, EricMillard_188, Halley_192, JuicyJay__186, Klein_196, Optimus_190, Yeet_182,

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

- Ariel_198, Courthouse_194, Kalah2_193, Minerva_192,

Genes that do not have the "Most Annotated" start:
-Bobby_180, Constella_188, KashFlow_189, Killigrew_40, Omega_200,
Thibault_174,

## Summary by start number:

Start 6:

- Found in 3 of 20 ( $15.0 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called $33.3 \%$ of time when present
- Phage (with cluster) where this start called: Bobby_180 (J),

Start 7:

- Found in 3 of 20 ( $15.0 \%$ ) of genes in pham
- Manual Annotations of this start: 2 of 20
- Called $66.7 \%$ of time when present
- Phage (with cluster) where this start called: Omega_200 (J), Thibault_174 (J),

Start 8:

- Found in 2 of 20 ( $10.0 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called $50.0 \%$ of time when present
- Phage (with cluster) where this start called: Constella_188 (J),

Start 11:

- Found in 14 of 20 ( $70.0 \%$ ) of genes in pham
- Manual Annotations of this start: 10 of 20
- Called $71.4 \%$ of time when present
- Phage (with cluster) where this start called: Beem_193 (J), Dallas_191 (J),

Duke13_192 (J), Ejimix_181 (J), EricMillard_188 (J), Halley_192 (J), JuicyJay_186
(J), Klein_196 (J), Optimus_190 (J), Yeet_182 (J),

Start 12:

- Found in 1 of 20 ( $5.0 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called 100.0\% of time when present
- Phage (with cluster) where this start called: Killigrew_40 (A1),

Start 14:

- Found in 2 of 20 ( $10.0 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called $50.0 \%$ of time when present
- Phage (with cluster) where this start called: KashFlow_189 (J),

Start 15:

- Found in 14 of $20(70.0 \%)$ of genes in pham
- Manual Annotations of this start: 4 of 20
- Called $28.6 \%$ of time when present
- Phage (with cluster) where this start called: Ariel_198 (J), Courthouse_194 (J),

Kalah2_193 (J), Minerva_192 (J),

## Summary by clusters:

There are 2 clusters represented in this pham: A1, J,
Info for manual annotations of cluster A1:

- Start number 12 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster J:

- Start number 6 was manually annotated 1 time for cluster J.
- Start number 7 was manually annotated 2 times for cluster J.
-Start number 8 was manually annotated 1 time for cluster J.
-Start number 11 was manually annotated 10 times for cluster J.
-Start number 14 was manually annotated 1 time for cluster J.
- Start number 15 was manually annotated 4 times for cluster J.


## Gene Information:

Gene: Ariel_198 Start: 94883, Stop: 94761, Start Num: 15
Candidate Starts for Ariel_198:
(9, 94913), (Start: 11 @94898 has 10 MA's), (Start: 15 @94883 has 4 MA's), (19, 94859), (20, 94814),
Gene: Beem_193 Start: 97362, Stop: 97177, Start Num: 11
Candidate Starts for Beem_193:
(9, 97377), (Start: 11 @97362 has 10 MA's), (Start: 15 @97347 has 4 MA's), (19, 97323), (20, 97278),
Gene: Bobby_180 Start: 97296, Stop: 97087, Start Num: 6
Candidate Starts for Bobby_180:
(Start: 6 @97296 has 1 MA's), (Start: 7 @97293 has 2 MA's), (16, 97221), (17, 97209), (20, 97158),
Gene: Constella_188 Start: 96823, Stop: 96650, Start Num: 8
Candidate Starts for Constella_188:
(1, 97132), (2, 97090), (3, 96961), (4, 96904), (5, 96895), (Start: 8 @96823 has 1 MA's), (13, 96802), (Start: 14 @96799 has 1 MA's), (20, 96721),

Gene: Courthouse_194 Start: 95332, Stop: 95210, Start Num: 15
Candidate Starts for Courthouse_194:
(9, 95362), (Start: 11 @95347 has 10 MA's), (Start: 15 @95332 has 4 MA's), (19, 95308), (20, 95263),
Gene: Dallas_191 Start: 96382, Stop: 96197, Start Num: 11
Candidate Starts for Dallas_191:
(9, 96397), (Start: 11 @96382 has 10 MA's), (Start: 15 @96367 has 4 MA's), (19, 96343), (20, 96298),
Gene: Duke13_192 Start: 96651, Stop: 96496, Start Num: 11
Candidate Starts for Duke13_192:
(9, 96666), (Start: 11 @96651 has 10 MA's), (Start: 15 @96636 has 4 MA's), (19, 96612), (20, 96567),
Gene: Ejimix_181 Start: 95720, Stop: 95535, Start Num: 11
Candidate Starts for Ejimix_181:
(9, 95735), (Start: 11 @95720 has 10 MA's), (Start: 15 @95705 has 4 MA's), (19, 95681), (20, 95636),
Gene: EricMillard_188 Start: 97430, Stop: 97245, Start Num: 11
Candidate Starts for EricMillard_188:
(9, 97445), (Start: 11 @97430 has 10 MA's), (Start: 15 @97415 has 4 MA's), (19, 97391), (20, 97346),
Gene: Halley_192 Start: 95888, Stop: 95703, Start Num: 11
Candidate Starts for Halley_192:
(9, 95903), (Start: 11 @95888 has 10 MA's), (Start: 15 @95873 has 4 MA's), (19, 95849), (20, 95804),
Gene: JuicyJay_186 Start: 97314, Stop: 97132, Start Num: 11
Candidate Starts for JuicyJay_186:
(9, 97329), (Start: 11 @97314 has 10 MA's), (Start: 15 @97299 has 4 MA's), (19, 97275), (20, 97230),
Gene: Kalah2_193 Start: 98691, Stop: 98569, Start Num: 15
Candidate Starts for Kalah2_193:
(9, 98721), (Start: 11 @98706 has 10 MA's), (Start: 15 @98691 has 4 MA's), (18, 98670), (19, 98667), (20, 98622),

Gene: KashFlow_189 Start: 96734, Stop: 96537, Start Num: 14
Candidate Starts for KashFlow_189:
(1, 97067), (2, 97025), (3, 96896), (4, 96839), (5, 96830), (Start: 8 @96758 has 1 MA's), (13, 96737), (Start: 14 @96734 has 1 MA's), (20, 96656),

Gene: Killigrew_40 Start: 32035, Stop: 31868, Start Num: 12
Candidate Starts for Killigrew_40:
(10, 32044), (Start: 12 @32035 has 1 MA's), (17, 32002), (20, 31951),
Gene: Klein_196 Start: 96245, Stop: 96060, Start Num: 11
Candidate Starts for Klein_196:
(9, 96260), (Start: 11 @96245 has 10 MA's), (Start: 15 @96230 has 4 MA's), (19, 96206), (20, 96161),
Gene: Minerva_192 Start: 95866, Stop: 95696, Start Num: 15 Candidate Starts for Minerva_192:
(9, 95896), (Start: 11 @95881 has 10 MA's), (Start: 15 @95866 has 4 MA's), (19, 95842), (20, 95797),
Gene: Omega_200 Start: 98575, Stop: 98357, Start Num: 7
Candidate Starts for Omega_200:
(Start: 6 @98578 has 1 MA's), (Start: 7 @98575 has 2 MA's), (16, 98503), (20, 98440),
Gene: Optimus_190 Start: 96797, Stop: 96612, Start Num: 11 Candidate Starts for Optimus_190:
(9, 96812), (Start: 11 @96797 has 10 MA's), (Start: 15 @96782 has 4 MA's), (19, 96758), (20, 96713),
Gene: Thibault_174 Start: 93435, Stop: 93229, Start Num: 7 Candidate Starts for Thibault_174:
(Start: 6 @93438 has 1 MA's), (Start: 7 @93435 has 2 MA's), (16, 93363), (20, 93300), (21, 93237),
Gene: Yeet_182 Start: 95030, Stop: 94845, Start Num: 11
Candidate Starts for Yeet_182:
(9, 95045), (Start: 11 @95030 has 10 MA's), (Start: 15 @95015 has 4 MA's), (19, 94991), (20, 94946),

