Pham 2192







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 2192 Report

This analysis was run 04/05/24 on database version 557.
Pham number 2192 has 42 members, 2 are drafts.
Phages represented in each track:

- Track 1 : ThreeRngTarjay_172, Superphikiman_174, MiaZeal_179,

Courthouse_173, Ariel_177

- Track 2 : K-ెein_178, ĒricMillard_172, Optimus_173, HokkenD_169, Kalah2_171, Schatzie_169, DmpstrDiver_175, JuicyJay 169, Duke13_177, Ejimix 165, Dove_169, Pound_168, Bō̄bitas_161, Dallas_174, Hallēy_175, NihilNomen_176, Minerva_174, Phoēbus_175, Redn̄o2_168, Yeèt_166, Beem_175, BAKA_180 Odette_178, Zelink_167, Wanda_172, Hughesyāng_173, Constella_170
- Track 3 : Bobby_167
- Track 4 : Lucky2013_172, Omega_184a, Porcelain_176
- Track 5 : Squint_170, Hannaconda_168, KashFlow_173
- Track 6 : Thibault_158
- Track 7 : Gaia_1 $\overline{42}$
- Track 8 : Nebkiss_139


## 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 40 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BAKA_180, Beem_175, Bombitas_161, Constella_170, Dallas_174, DmpstrD̄iver_175, Dove_169, Duke13_177, Ejimix_165, EricMil̄ard_172, Halley_175, HokkenD_169, Hughesyang_173, JuicyJay_169, Kalah2 171, Klein_178, Minerva_174, NihilNomen_176, Odette_178, Optimus_173, Phoebus_175, Pound_168, Redno2_168, Schatzie_169, Wanda_172, Yeet_166, Zelink_167,

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

- Thibault_158,

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

- Ariel_177, Bobby_167, Courthouse_173, Gaia_142, Hannaconda_168, KashF̄low_173, Lucky2013_172, MiaZ̄eal_179, N̄ebkiss_139, Omeḡa_184a, Porcelain_176, Squint_170, Superphikiman_174, ThreeRRngTarjay_17",


## Summary by start number:

Start 3:

- Found in 28 of 42 ( $66.7 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 40
- Called $3.6 \%$ of time when present
- Phage (with cluster) where this start called: Thibault_158 (J),


## Start 5:

- Found in 11 of 42 ( $26.2 \%$ ) of genes in pham
- Manual Annotations of this start: 11 of 40
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Ariel_177 (J), Courthouse_173 (J), Hannaconda_168 (J), KashFlow_173 (J), Lucky2013_172 (J), MiaZeal_179 (J), Omega_184a-(J), Porcelain_176 (J), Squint_170 (J), Superphikiman_174 (J), ThreeRngTarjay_172 (J),

Start 6:

- Found in 28 of 42 ( $66.7 \%$ ) of genes in pham
- Manual Annotations of this start: 25 of 40
- Called $96.4 \%$ of time when present
- Phage (with cluster) where this start called: BAKA 180 (J), Beem_175 (J),

Bombitas_161 (J), Constella_170 (J), Dallas_174 (J), DmpstrDiver_175 (J), Dove_169 (J), Duke13_177 (J), Ejimix_165 (J), EricMillard_172 (J), Halley_175 (J),
HokkēnD_169 (J), Hughesyang_173 (J), JuicyJay_169 (J), Kalah2_171 (J),
Klein_178 (J), Minerva_174 (J), NihilNomen_176 (J), Odette_178 (J), Optimus_173 (J), Phoebus_175 (J), P̄ound_168 (J), Rednō2_168 (J), Schātzie_169 (J),

Wanda_172 (J), Yeet_166 (J), Zelink_167 (J),
Start 7:

- Found in 2 of 42 ( $4.8 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 40
- Called $50.0 \%$ of time when present
- Phage (with cluster) where this start called: Gaia_142 (X),

Start 8:

- Found in 1 of 42 ( $2.4 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 40
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Bobby_167 (J),

Start 9:

- Found in 2 of 42 ( $4.8 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 40
- Called $50.0 \%$ of time when present
- Phage (with cluster) where this start called: Nebkiss_139 (X),


## Summary by clusters:

There are 2 clusters represented in this pham: $\mathrm{X}, \mathrm{J}$,
Info for manual annotations of cluster J:

- Start number 3 was manually annotated 1 time for cluster J.
- Start number 5 was manually annotated 11 times for cluster J.
- Start number 6 was manually annotated 25 times for cluster J.
- Start number 8 was manually annotated 1 time for cluster J.

Info for manual annotations of cluster X :

- Start number 7 was manually annotated 1 time for cluster $X$.
-Start number 9 was manually annotated 1 time for cluster X .


## Gene Information:

Gene: Ariel_177 Start: 88559, Stop: 88729, Start Num: 5
Candidate Starts for Ariel_177:
(Start: 5 @88559 has 11 MA's),
Gene: BAKA_180 Start: 93070, Stop: 93225, Start Num: 6 Candidate Starts for BAKA_180:
(Start: 3 @93040 has 1 MA's), (Start: 6 @93070 has 25 MA's),
Gene: Beem_175 Start: 92225, Stop: 92380, Start Num: 6
Candidate Starts for Beem_175:
(Start: 3 @92195 has 1 MA's), (Start: 6 @92225 has 25 MA's),
Gene: Bobby_167 Start: 93337, Stop: 93477, Start Num: 8
Candidate Starts for Bobby_167:
(Start: 8 @93337 has 1 MA's), (10, 93391),
Gene: Bombitas_161 Start: 88455, Stop: 88610, Start Num: 6 Candidate Starts for Bombitas_161:
(Start: 3 @88425 has 1 MA's), (Start: 6 @88455 has 25 MA's),
Gene: Constella_170 Start: 90959, Stop: 91114, Start Num: 6 Candidate Starts for Constella_170:
(Start: 3 @90929 has 1 MA's), (Start: 6 @90959 has 25 MA's),
Gene: Courthouse_173 Start: 89003, Stop: 89173, Start Num: 5
Candidate Starts for Courthouse_173:
(Start: 5 @89003 has 11 MA's),
Gene: Dallas_174 Start: 91448, Stop: 91603, Start Num: 6 Candidate Starts for Dallas_174:
(Start: 3 @91418 has 1 MA's), (Start: 6 @91448 has 25 MA's),
Gene: DmpstrDiver_175 Start: 90892, Stop: 91047, Start Num: 6
Candidate Starts for DmpstrDiver_175:
(Start: 3 @90862 has 1 MA's), (Start: 6 @90892 has 25 MA's),
Gene: Dove_169 Start: 86811, Stop: 86966, Start Num: 6
Candidate Starts for Dove_169:
(Start: 3 @86781 has 1 MA's), (Start: 6 @86811 has 25 MA's),
Gene: Duke13_177 Start: 91566, Stop: 91721, Start Num: 6

Candidate Starts for Duke13_177:
(Start: 3 @91536 has 1 MA's), (Start: 6 @91566 has 25 MA's),
Gene: Ejimix_165 Start: 90436, Stop: 90591, Start Num: 6 Candidate Starts for Ejimix_165:
(Start: 3 @90406 has 1 MA's), (Start: 6 @90436 has 25 MA's),
Gene: EricMillard_172 Start: 92146, Stop: 92301, Start Num: 6 Candidate Starts for EricMillard_172:
(Start: 3 @92116 has 1 MA's), (Start: 6 @92146 has 25 MA's),

Gene: Gaia_142 Start: 76473, Stop: 76628, Start Num: 7
Candidate Starts for Gaia_142:
(1, 76392), (2, 76395), (4, 76440), (Start: 7 @76473 has 1 MA's), (Start: 9 @76482 has 1 MA's), (10, 76533), (14, 76593), (15, 76620),

Gene: Halley_175 Start: 90752, Stop: 90907, Start Num: 6 Candidate Starts for Halley_175:
(Start: 3 @90722 has 1 MA's), (Start: 6 @90752 has 25 MA's),
Gene: Hannaconda_168 Start: 91494, Stop: 91664, Start Num: 5
Candidate Starts for Hannaconda_168:
(Start: 5 @91494 has 11 MA's), (12, 91596),

Gene: HokkenD_169 Start: 92533, Stop: 92688, Start Num: 6 Candidate Starts for HokkenD_169:
(Start: 3 @92503 has 1 MA's), (Start: 6 @92533 has 25 MA's),
Gene: Hughesyang_173 Start: 91234, Stop: 91389, Start Num: 6 Candidate Starts for Hughesyang_173:
(Start: 3 @91204 has 1 MA's), (Start: 6 @91234 has 25 MA's),

Gene: JuicyJay_169 Start: 92180, Stop: 92335, Start Num: 6 Candidate Starts for JuicyJay_169:
(Start: 3 @92150 has 1 MA's), (Start: 6 @92180 has 25 MA's),

Gene: Kalah2_171 Start: 92518, Stop: 92673, Start Num: 6 Candidate Starts for Kalah2_171:
(Start: 3 @92488 has 1 MA's), (Start: 6 @92518 has 25 MA's),
Gene: KashFlow_173 Start: 91307, Stop: 91477, Start Num: 5 Candidate Starts for KashFlow_173:
(Start: 5 @91307 has 11 MA's), (12, 91409),
Gene: Klein_178 Start: 90961, Stop: 91116, Start Num: 6
Candidate Starts for Klein_178:
(Start: 3 @90931 has 1 MA's), (Start: 6 @90961 has 25 MA's),
Gene: Lucky2013_172 Start: 88074, Stop: 88244, Start Num: 5
Candidate Starts for Lucky2013_172:
(Start: 5 @88074 has 11 MA's), (11, 88164),
Gene: MiaZeal_179 Start: 89221, Stop: 89391, Start Num: 5

Candidate Starts for MiaZeal_179:
(Start: 5 @89221 has 11 MA's),
Gene: Minerva_174 Start: 90598, Stop: 90753, Start Num: 6 Candidate Starts for Minerva_174:
(Start: 3 @90568 has 1 MA's), (Start: 6 @90598 has 25 MA's),
Gene: Nebkiss_139 Start: 72094, Stop: 72240, Start Num: 9 Candidate Starts for Nebkiss_139:
(4, 72052), (Start: 7 @72085 has 1 MA's), (Start: 9 @72094 has 1 MA's), (10, 72145), (13, 72166),
(14, 72205), (15, 72232),
Gene: NihilNomen_176 Start: 90306, Stop: 90461, Start Num: 6 Candidate Starts for NihilNomen_176:
(Start: 3 @90276 has 1 MA's), (Start: 6 @90306 has 25 MA's),
Gene: Odette_178 Start: 92987, Stop: 93142, Start Num: 6 Candidate Starts for Odette_178:
(Start: 3 @92957 has 1 MA's), (Start: 6 @92987 has 25 MA's),
Gene: Omega_184a Start: 93688, Stop: 93858, Start Num: 5
Candidate Starts for Omega_184a:
(Start: 5 @93688 has 11 MA's), (11, 93778),
Gene: Optimus_173 Start: 91513, Stop: 91668, Start Num: 6 Candidate Starts for Optimus_173:
(Start: 3 @91483 has 1 MA's), (Start: 6 @91513 has 25 MA's),
Gene: Phoebus_175 Start: 93993, Stop: 94148, Start Num: 6 Candidate Starts for Phoebus_175:
(Start: 3 @93963 has 1 MA's), (Start: 6 @93993 has 25 MA's),
Gene: Porcelain_176 Start: 89020, Stop: 89190, Start Num: 5 Candidate Starts for Porcelain_176:
(Start: 5 @89020 has 11 MA's), (11, 89110),
Gene: Pound_168 Start: 90042, Stop: 90197, Start Num: 6 Candidate Starts for Pound_168:
(Start: 3 @90012 has 1 MA's), (Start: 6 @90042 has 25 MA's),
Gene: Redno2_168 Start: 88106, Stop: 88261, Start Num: 6 Candidate Starts for Redno2_168:
(Start: 3 @88076 has 1 MA's), (Start: 6 @88106 has 25 MA's),
Gene: Schatzie_169 Start: 91041, Stop: 91196, Start Num: 6 Candidate Starts for Schatzie_169:
(Start: 3 @91011 has 1 MA's), (Start: 6 @91041 has 25 MA's),
Gene: Squint_170 Start: 89283, Stop: 89453, Start Num: 5
Candidate Starts for Squint_170:
(Start: 5 @89283 has 11 MA's), (12, 89385),
Gene: Superphikiman_174 Start: 88699, Stop: 88869, Start Num: 5

Candidate Starts for Superphikiman_174:
(Start: 5 @88699 has 11 MA's),
Gene: Thibault_158 Start: 87891, Stop: 88076, Start Num: 3 Candidate Starts for Thibault_158:
(Start: 3 @87891 has 1 MA's), (Start: 6 @87921 has 25 MA's),
Gene: ThreeRngTarjay_172 Start: 92322, Stop: 92492, Start Num: 5 Candidate Starts for ThreeRngTarjay_172:
(Start: 5 @92322 has 11 MA's),
Gene: Wanda_172 Start: 88610, Stop: 88765, Start Num: 6 Candidate Starts for Wanda_172:
(Start: 3 @88580 has 1 MA's), (Start: 6 @88610 has 25 MA's),
Gene: Yeet_166 Start: 89894, Stop: 90049, Start Num: 6
Candidate Starts for Yeet_166:
(Start: 3 @89864 has 1 MA's), (Start: 6 @89894 has 25 MA's),
Gene: Zelink_167 Start: 90229, Stop: 90384, Start Num: 6 Candidate Starts for Zelink_167:
(Start: 3 @90199 has 1 MA's), (Start: 6 @90229 has 25 MA's),

