

# Pham 3768



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 3768 Report

This analysis was run 04/28/24 on database version 559.

Pham number 3768 has 31 members, 10 are drafts.

Phages represented in each track:

- Track 1 : Pepy6\_089
- Track 2 : Avazak\_56, Captrips\_56
- Track 3 : Avazak\_45
- Track 4 : Roney\_55, Kerry\_54, Tanis\_55, Copybara\_56, Gravy\_54, Gill\_55, Magel\_56
- Track 5 : Rickmore\_52
- Track 6 : Artorias\_44, FortCran\_48
- Track 7 : Petito\_44
- Track 8 : Pherobrine\_57
- Track 9 : Conley\_54
- Track 10 : Untouchable\_57
- Track 11 : OhMyWard\_54
- Track 12 : Perkunas\_57
- Track 13 : Artorias\_55, FortCran\_59
- Track 14 : Pherobrine\_47
- Track 15 : Hortihabitatio\_56
- Track 16 : Odesza\_54
- Track 17 : Paella\_172, Qui\_172, Elver\_168
- Track 18 : Qui\_75, Paella\_75, Elver\_72

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

The start number called the most often in the published annotations is 3, it was called in 11 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Copybara\_56, Conley\_54, Gill\_55, Gravy\_54, Hortihabitatio\_56, Kerry\_54, Magel\_56, Odesza\_54, OhMyWard\_54, Pherobrine\_57, Roney\_55, Tanis\_55, Untouchable\_57,

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

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

- Artorias\_44, Artorias\_55, Avazak\_45, Avazak\_56, Captrips\_56, Elver\_168, Elver\_72, FortCran\_48, FortCran\_59, Paella\_172, Paella\_75, Pepy6\_089, Perkunas\_57, Petite\_44, Pherobrine\_47, Qui\_172, Qui\_75, Rickmore\_52,

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

#### **Start 2:**

- Found in 5 of 31 ( 16.1% ) of genes in pham
- Manual Annotations of this start: 2 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Artorias\_55 (DJ), Avazak\_56 (DJ), Captrips\_56 (DJ), FortCran\_59 (DJ), Perkunas\_57 (DJ),

#### **Start 3:**

- Found in 13 of 31 ( 41.9% ) of genes in pham
- Manual Annotations of this start: 11 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cappybara\_56 (DJ), Conley\_54 (DJ), Gill\_55 (DJ), Gravy\_54 (DJ), Hortihabitatio\_56 (DJ), Kerry\_54 (DJ), Magel\_56 (DJ), Odesza\_54 (DJ), OhMyWard\_54 (DJ), Pherobrine\_57 (DJ), Roney\_55 (DJ), Tanis\_55 (DJ), Untouchable\_57 (DJ),

#### **Start 4:**

- Found in 4 of 31 ( 12.9% ) of genes in pham
- Manual Annotations of this start: 1 of 21
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Rickmore\_52 (DJ),

#### **Start 7:**

- Found in 7 of 31 ( 22.6% ) of genes in pham
- Manual Annotations of this start: 4 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Elver\_168 (FK), Elver\_72 (FK), Paella\_172 (FK), Paella\_75 (FK), Pepy6\_089 (CC), Qui\_172 (FK), Qui\_75 (FK),

#### **Start 8:**

- Found in 4 of 31 ( 12.9% ) of genes in pham
- Manual Annotations of this start: 2 of 21
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Artorias\_44 (DJ), Avazak\_45 (DJ), FortCran\_48 (DJ),

#### **Start 9:**

- Found in 2 of 31 ( 6.5% ) of genes in pham
- Manual Annotations of this start: 1 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Petite\_44 (DJ), Pherobrine\_47 (DJ),

### **Summary by clusters:**

There are 3 clusters represented in this pham: CC, FK, DJ,

Info for manual annotations of cluster DJ:

- Start number 2 was manually annotated 2 times for cluster DJ.
- Start number 3 was manually annotated 11 times for cluster DJ.
- Start number 4 was manually annotated 1 time for cluster DJ.
- Start number 8 was manually annotated 2 times for cluster DJ.
- Start number 9 was manually annotated 1 time for cluster DJ.

Info for manual annotations of cluster FK:

- Start number 7 was manually annotated 4 times for cluster FK.

### ***Gene Information:***

Gene: Artorias\_44 Start: 31882, Stop: 32283, Start Num: 8

Candidate Starts for Artorias\_44:

(5, 31870), (Start: 8 @31882 has 2 MA's), (10, 31894), (24, 32011), (25, 32014), (33, 32122), (36, 32170), (42, 32203), (45, 32239), (51, 32266),

Gene: Artorias\_55 Start: 37739, Stop: 38137, Start Num: 2

Candidate Starts for Artorias\_55:

(Start: 2 @37739 has 2 MA's), (15, 37832), (22, 37877), (27, 37943), (35, 38021), (38, 38054), (42, 38075), (45, 38108),

Gene: Avazak\_56 Start: 38066, Stop: 38461, Start Num: 2

Candidate Starts for Avazak\_56:

(Start: 2 @38066 has 2 MA's), (15, 38159), (22, 38204), (27, 38270), (35, 38348), (38, 38381), (45, 38435), (47, 38444),

Gene: Avazak\_45 Start: 32247, Stop: 32642, Start Num: 8

Candidate Starts for Avazak\_45:

(5, 32235), (Start: 8 @32247 has 2 MA's), (10, 32259), (11, 32271), (13, 32310), (25, 32379), (26, 32406), (48, 32607),

Gene: Captrips\_56 Start: 37214, Stop: 37609, Start Num: 2

Candidate Starts for Captrips\_56:

(Start: 2 @37214 has 2 MA's), (15, 37307), (22, 37352), (27, 37418), (35, 37496), (38, 37529), (45, 37583), (47, 37592),

Gene: Capybara\_56 Start: 37547, Stop: 37951, Start Num: 3

Candidate Starts for Capybara\_56:

(Start: 3 @37547 has 11 MA's), (18, 37652), (26, 37724), (42, 37880), (48, 37925),

Gene: Conley\_54 Start: 38363, Stop: 38791, Start Num: 3

Candidate Starts for Conley\_54:

(Start: 3 @38363 has 11 MA's), (33, 38633), (50, 38771),

Gene: Elver\_168 Start: 84470, Stop: 84856, Start Num: 7

Candidate Starts for Elver\_168:

(Start: 7 @84470 has 4 MA's), (25, 84611), (29, 84671), (30, 84677), (32, 84704), (43, 84806),

Gene: Elver\_72 Start: 45601, Stop: 45972, Start Num: 7

Candidate Starts for Elver\_72:

(Start: 4 @45586 has 1 MA's), (Start: 7 @45601 has 4 MA's), (17, 45682), (19, 45697), (20, 45700), (23, 45730), (49, 45964),

Gene: FortCran\_48 Start: 31882, Stop: 32283, Start Num: 8

Candidate Starts for FortCran\_48:

(5, 31870), (Start: 8 @31882 has 2 MA's), (10, 31894), (24, 32011), (25, 32014), (33, 32122), (36, 32170), (42, 32203), (45, 32239), (51, 32266),

Gene: FortCran\_59 Start: 37739, Stop: 38137, Start Num: 2

Candidate Starts for FortCran\_59:

(Start: 2 @37739 has 2 MA's), (15, 37832), (22, 37877), (27, 37943), (35, 38021), (38, 38054), (42, 38075), (45, 38108),

Gene: Gill\_55 Start: 37564, Stop: 37968, Start Num: 3

Candidate Starts for Gill\_55:

(Start: 3 @37564 has 11 MA's), (18, 37669), (26, 37741), (42, 37897), (48, 37942),

Gene: Gravy\_54 Start: 37237, Stop: 37641, Start Num: 3

Candidate Starts for Gravy\_54:

(Start: 3 @37237 has 11 MA's), (18, 37342), (26, 37414), (42, 37570), (48, 37615),

Gene: Hortihabitatio\_56 Start: 38657, Stop: 39073, Start Num: 3

Candidate Starts for Hortihabitatio\_56:

(Start: 3 @38657 has 11 MA's), (12, 38738), (18, 38768), (19, 38780), (21, 38798), (41, 38984),

Gene: Kerry\_54 Start: 37237, Stop: 37641, Start Num: 3

Candidate Starts for Kerry\_54:

(Start: 3 @37237 has 11 MA's), (18, 37342), (26, 37414), (42, 37570), (48, 37615),

Gene: Magel\_56 Start: 37480, Stop: 37884, Start Num: 3

Candidate Starts for Magel\_56:

(Start: 3 @37480 has 11 MA's), (18, 37585), (26, 37657), (42, 37813), (48, 37858),

Gene: Odesza\_54 Start: 37310, Stop: 37723, Start Num: 3

Candidate Starts for Odesza\_54:

(Start: 3 @37310 has 11 MA's), (15, 37403), (26, 37487), (36, 37610), (37, 37616),

Gene: OhMyWard\_54 Start: 39448, Stop: 39867, Start Num: 3

Candidate Starts for OhMyWard\_54:

(Start: 3 @39448 has 11 MA's), (12, 39529), (21, 39589), (26, 39631), (46, 39829), (51, 39850),

Gene: Paella\_172 Start: 85344, Stop: 85730, Start Num: 7

Candidate Starts for Paella\_172:

(Start: 7 @85344 has 4 MA's), (25, 85485), (29, 85545), (30, 85551), (32, 85578), (43, 85680),

Gene: Paella\_75 Start: 46194, Stop: 46565, Start Num: 7

Candidate Starts for Paella\_75:

(Start: 4 @46179 has 1 MA's), (Start: 7 @46194 has 4 MA's), (17, 46275), (19, 46290), (20, 46293), (23, 46323), (49, 46557),

Gene: Pepy6\_089 Start: 48054, Stop: 48440, Start Num: 7

Candidate Starts for Pepy6\_089:

(Start: 7 @48054 has 4 MA's), (23, 48183), (26, 48210), (27, 48234), (29, 48240), (36, 48333), (42, 48366), (44, 48387), (48, 48411),

Gene: Perkunas\_57 Start: 37604, Stop: 38002, Start Num: 2

Candidate Starts for Perkunas\_57:

(Start: 2 @37604 has 2 MA's), (15, 37697), (22, 37742), (27, 37808), (31, 37823), (35, 37886), (45, 37973),

Gene: Petito\_44 Start: 33391, Stop: 33765, Start Num: 9

Candidate Starts for Petito\_44:

(6, 33379), (Start: 9 @33391 has 1 MA's), (10, 33403), (22, 33505), (35, 33649), (45, 33736), (47, 33745), (48, 33748),

Gene: Pherobrine\_57 Start: 39398, Stop: 39814, Start Num: 3

Candidate Starts for Pherobrine\_57:

(Start: 3 @39398 has 11 MA's), (Start: 8 @39422 has 2 MA's), (26, 39587),

Gene: Pherobrine\_47 Start: 34910, Stop: 35284, Start Num: 9

Candidate Starts for Pherobrine\_47:

(Start: 9 @34910 has 1 MA's), (28, 35093), (30, 35102), (39, 35204),

Gene: Qui\_75 Start: 46194, Stop: 46565, Start Num: 7

Candidate Starts for Qui\_75:

(Start: 4 @46179 has 1 MA's), (Start: 7 @46194 has 4 MA's), (17, 46275), (19, 46290), (20, 46293), (23, 46323), (49, 46557),

Gene: Qui\_172 Start: 85342, Stop: 85728, Start Num: 7

Candidate Starts for Qui\_172:

(Start: 7 @85342 has 4 MA's), (25, 85483), (29, 85543), (30, 85549), (32, 85576), (43, 85678),

Gene: Rickmore\_52 Start: 36287, Stop: 36688, Start Num: 4

Candidate Starts for Rickmore\_52:

(Start: 4 @36287 has 1 MA's), (12, 36362), (14, 36377), (34, 36560), (35, 36575), (40, 36614), (42, 36629), (45, 36662),

Gene: Roney\_55 Start: 37590, Stop: 37994, Start Num: 3

Candidate Starts for Roney\_55:

(Start: 3 @37590 has 11 MA's), (18, 37695), (26, 37767), (42, 37923), (48, 37968),

Gene: Tanis\_55 Start: 37410, Stop: 37814, Start Num: 3

Candidate Starts for Tanis\_55:

(Start: 3 @37410 has 11 MA's), (18, 37515), (26, 37587), (42, 37743), (48, 37788),

Gene: Untouchable\_57 Start: 38856, Stop: 39275, Start Num: 3

Candidate Starts for Untouchable\_57:

(1, 38799), (Start: 3 @38856 has 11 MA's), (10, 38907), (16, 38967), (20, 38991), (26, 39042), (46, 39237),