

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 86984 Report

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

Pham number 86984 has 18 members, 7 are drafts.

Phages represented in each track:

• Track 1 : Jflix2 43

• Track 2 : Daredevil 131

Track 3 : SpeedDemon\_1410

• Track 4 : Bantam\_138

Track 5 : DatBoi\_135

• Track 6 : Kabocha\_95, Oogie\_92, Schomber\_92, Pakusa\_89, Chidiebere\_94,

Gray\_94, Aloki\_88, Hanem\_93
• Track 7: ChisanaKitsune 91

• Track 8: UBSmoodge 98, ScarletRaider 95

Track 9 : FlyingTortilla\_95

Track 10 : GMA6\_73

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

The start number called the most often in the published annotations is 19, it was called in 6 of the 11 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Aloki\_88, Chidiebere\_94, ChisanaKitsune\_91, FlyingTortilla\_95, Gray\_94, Hanem\_93, Kabocha\_95, Oogie\_92, Pakusa\_89, ScarletRaider\_95, Schomber\_92, UBSmoodge\_98,

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:

Bantam\_138, Daredevil\_131, DatBoi\_135, GMA6\_73, Jflix2\_43, SpeedDemon\_1410,

## **Summary by start number:**

#### Start 16:

- Found in 1 of 18 (5.6%) of genes in pham
- No Manual Annotations of this start.

- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA6\_73 (DQ),

#### Start 17:

- Found in 2 of 18 (11.1%) of genes in pham
- Manual Annotations of this start: 2 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bantam\_138 (DL), SpeedDemon\_1410 (DL),

#### Start 18:

- Found in 1 of 18 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DatBoi\_135 (DL),

#### Start 19:

- Found in 12 of 18 (66.7%) of genes in pham
- Manual Annotation's of this start: 6 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aloki\_88 (DQ), Chidiebere\_94 (DQ), ChisanaKitsune\_91 (DQ), FlyingTortilla\_95 (DQ), Gray\_94 (DQ), Hanem\_93 (DQ), Kabocha\_95 (DQ), Oogie\_92 (DQ), Pakusa\_89 (DQ), ScarletRaider\_95 (DQ), Schomber\_92 (DQ), UBSmoodge\_98 (DQ),

## Start 20:

- Found in 2 of 18 (11.1%) of genes in pham
- Manual Annotations of this start: 2 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Daredevil\_131 (DL), Jflix2\_43 (CF),

### **Summary by clusters:**

There are 3 clusters represented in this pham: DL, CF, DQ,

Info for manual annotations of cluster CF:

•Start number 20 was manually annotated 1 time for cluster CF.

Info for manual annotations of cluster DL:

- •Start number 17 was manually annotated 2 times for cluster DL.
- •Start number 18 was manually annotated 1 time for cluster DL.
- •Start number 20 was manually annotated 1 time for cluster DL.

Info for manual annotations of cluster DQ:

•Start number 19 was manually annotated 6 times for cluster DQ.

#### Gene Information:

Gene: Aloki\_88 Start: 69015, Stop: 69224, Start Num: 19

Candidate Starts for Aloki 88:

(7, 68922), (11, 68958), (15, 68982), (Start: 19 @69015 has 6 MA's), (24, 69099), (25, 69102), (26, 69114), (27, 69150), (30, 69180), (35, 69216),

Gene: Bantam\_138 Start: 80839, Stop: 80630, Start Num: 17

Candidate Starts for Bantam\_138:

(Start: 17 @80839 has 2 MA's), (28, 80698),

Gene: Chidiebere 94 Start: 69548, Stop: 69757, Start Num: 19

Candidate Starts for Chidiebere\_94:

(7, 69455), (11, 69491), (15, 69515), (Start: 19 @69548 has 6 MA's), (24, 69632), (25, 69635), (26, 69647), (27, 69683), (30, 69713), (35, 69749),

Gene: ChisanaKitsune\_91 Start: 68493, Stop: 68702, Start Num: 19

Candidate Starts for ChisanaKitsune\_91:

(7, 68400), (11, 68436), (15, 68460), (Start: 19 @68493 has 6 MA's), (24, 68577), (25, 68580), (26, 68592), (27, 68628), (30, 68658), (35, 68694),

Gene: Daredevil\_131 Start: 77436, Stop: 77239, Start Num: 20

Candidate Starts for Daredevil 131:

(3, 77661), (4, 77628), (9, 77511), (10, 77505), (12, 77490), (13, 77484), (14, 77478), (Start: 20 @77436 has 2 MA's),

Gene: DatBoi\_135 Start: 79816, Stop: 79607, Start Num: 18

Candidate Starts for DatBoi 135:

(1, 80068), (6, 79909), (9, 79876), (Start: 18 @79816 has 1 MA's), (28, 79675),

Gene: FlyingTortilla\_95 Start: 73248, Stop: 73457, Start Num: 19

Candidate Starts for FlyingTortilla 95:

(7, 73152), (15, 73212), (Start: 19 @73248 has 6 MA's), (22, 73311), (26, 73344), (27, 73380), (29, 73395),

Gene: GMA6\_73 Start: 58715, Stop: 58966, Start Num: 16

Candidate Starts for GMA6\_73:

(2, 58466), (5, 58556), (8, 58652), (16, 58715), (21, 58775), (31, 58895), (32, 58898), (34, 58910), (36, 58937).

Gene: Gray\_94 Start: 69276, Stop: 69485, Start Num: 19

Candidate Starts for Gray\_94:

(7, 69183), (11, 69219), (15, 69243), (Start: 19 @69276 has 6 MA's), (24, 69360), (25, 69363), (26, 69375), (27, 69411), (30, 69441), (35, 69477),

Gene: Hanem\_93 Start: 69015, Stop: 69224, Start Num: 19

Candidate Starts for Hanem 93:

(7, 68922), (11, 68958), (15, 68982), (Start: 19 @69015 has 6 MA's), (24, 69099), (25, 69102), (26, 69114), (27, 69150), (30, 69180), (35, 69216),

Gene: Jflix2\_43 Start: 32256, Stop: 32062, Start Num: 20

Candidate Starts for Jflix2\_43:

(Start: 20 @32256 has 2 MA's), (33, 32088),

Gene: Kabocha 95 Start: 70361, Stop: 70570, Start Num: 19

Candidate Starts for Kabocha 95:

(7, 70268), (11, 70304), (15, 70328), (Start: 19 @70361 has 6 MA's), (24, 70445), (25, 70448), (26, 70460), (27, 70496), (30, 70526), (35, 70562),

Gene: Oogie\_92 Start: 70952, Stop: 71161, Start Num: 19

Candidate Starts for Oogie\_92:

(7, 70859), (11, 70895), (15, 70919), (Start: 19 @70952 has 6 MA's), (24, 71036), (25, 71039), (26, 71051), (27, 71087), (30, 71117), (35, 71153),

Gene: Pakusa\_89 Start: 68741, Stop: 68950, Start Num: 19

Candidate Starts for Pakusa\_89:

(7, 68648), (11, 68684), (15, 68708), (Start: 19 @68741 has 6 MA's), (24, 68825), (25, 68828), (26, 68840), (27, 68876), (30, 68906), (35, 68942),

Gene: ScarletRaider\_95 Start: 72516, Stop: 72728, Start Num: 19

Candidate Starts for ScarletRaider\_95:

(7, 72420), (15, 72480), (Start: 19 @72516 has 6 MA's), (22, 72582), (23, 72594), (26, 72615), (27, 72651), (29, 72666),

Gene: Schomber 92 Start: 68749, Stop: 68958, Start Num: 19

Candidate Starts for Schomber\_92:

(7, 68656), (11, 68692), (15, 68716), (Start: 19 @68749 has 6 MA's), (24, 68833), (25, 68836), (26, 68848), (27, 68884), (30, 68914), (35, 68950),

Gene: SpeedDemon\_1410 Start: 83933, Stop: 83724, Start Num: 17

Candidate Starts for SpeedDemon\_1410: (Start: 17 @83933 has 2 MA's), (28, 83792),

Gene: UBSmoodge 98 Start: 72957, Stop: 73169, Start Num: 19

Candidate Starts for UBSmoodge\_98:

(7, 72861), (15, 72921), (Start: 19 @72957 has 6 MA's), (22, 73023), (23, 73035), (26, 73056), (27, 73092), (29, 73107),