Pham 86744


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 86744 Report

This analysis was run 03/30/24 on database version 556.
Pham number 86744 has 21 members, 1 are drafts.
Phages represented in each track:

- Track 1 : Magnito_92
- Track 2 : BeesKnees 96
- Track 3 : Squee_93, F̄enn_98, Naira_97, Ringer_91
- Track 4 : DreamCatcher 94
- Track 5 : McGuire_93, Jāsper_94, Dreamboat_94
- Track 6 : Ciao_88, Teodoridan_84, PinkPlastic_82, Arlo_89
- Track 7 : Topgun_84, Wilkins_ 85
- Track 8 : Dynamix_88
- Track 9 : Jasper_89, Dreamboat_89
- Track 10 : PherrisBueller_87
- Track 11 : Snazzy_89


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

The start number called the most often in the published annotations is 7 , it was called in 13 of the 20 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arlo_89, BeesKnees_96, Ciao_88, Fenn_98, Magnito_92, Naira_97, PherrisBueller_87, PinkPlastic_82, Ringer_91, Snazzy_89, Squee_93, Teodoridan_8 $\overline{4}$, Topgun_84, Wilkins_85,

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

- DreamCatcher_94, Dreamboat_89, Dreamboat_94, Dynamix_88, Jasper_89, Jasper_94, McGuire_93,

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

## Summary by start number:

Start 1:

- Found in 10 of 21 ( $47.6 \%$ ) of genes in pham
- Manual Annotations of this start: 2 of 20
- Called $20.0 \%$ of time when present
- Phage (with cluster) where this start called: Dreamboat_89 (A1), Jasper_89 (A1),

Start 2:

- Found in 1 of 21 ( $4.8 \%$ ) 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: Dynamix_88 (A1),

Start 3:

- Found in 4 of 21 ( $19.0 \%$ ) of genes in pham
- Manual Annotations of this start: 3 of 20
- Called $75.0 \%$ of time when present
- Phage (with cluster) where this start called: Dreamboat_94 (A1), Jasper_94 (A1), McGuire_93 (A1),

Start 4:

- Found in 11 of 21 ( $52.4 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called $9.1 \%$ of time when present
- Phage (with cluster) where this start called: DreamCatcher_94 (A1),

Start 7:

- Found in 21 of 21 ( $100.0 \%$ ) of genes in pham
- Manual Annotations of this start: 13 of 20
- Called $66.7 \%$ of time when present
- Phage (with cluster) where this start called: Arlo_89 (A1), BeesKnees_96 (A1), Ciao_88 (A1), Fenn_98 (A1), Magnito_92 (A1), Naira_97 (A1), PherrisBueller_87
(A1), PinkPlastic 82 (A1), Ringer_91 (A1), Snazzy 89 (A1), Squee_93 (A1),
Teodoridan_84 (A1), Topgun_84 (A1), Wilkins_85 (A1),


## Summary by clusters:

There is one cluster represented in this pham: A1
Info for manual annotations of cluster A1:

- Start number 1 was manually annotated 2 times for cluster A1.
- Start number 2 was manually annotated 1 time for cluster A1.
- Start number 3 was manually annotated 3 times for cluster A1.
- Start number 4 was manually annotated 1 time for cluster A1.
- Start number 7 was manually annotated 13 times for cluster A1.


## Gene Information:

Gene: Arlo_89 Start: 50244, Stop: 50071, Start Num: 7
Candidate Starts for Arlo_89:
(Start: 1 @ 50313 has 2 MA's), (Start: 4 @50280 has 1 MA's), (5, 50262), (Start: 7 @50244 has 13 MA's), (8, 50190), (9, 50142), (10, 50124), (11, 50109), (12, 50106),

Gene: BeesKnees_96 Start: 51309, Stop: 51136, Start Num: 7
Candidate Starts for BeesKnees_96:
(Start: 3 @51360 has 3 MA's), (Start: 7 @51309 has 13 MA's), (8, 51255), (10, 51189), (11, 51174), (12, 51171),

Gene: Ciao_88 Start: 48878, Stop: 48705, Start Num: 7
Candidate Starts for Ciao 88:
(Start: 1 @ 48947 has 2 MA's), (Start: 4 @48914 has 1 MA's), (5, 48896), (Start: 7 @ 48878 has 13 MA's), (8, 48824), (9, 48776), (10, 48758), (11, 48743), (12, 48740),

Gene: DreamCatcher_94 Start: 50561, Stop: 50352, Start Num: 4
Candidate Starts for DreamCatcher_94:
(Start: 1 @50594 has 2 MA's), (Start: 4 @ 50561 has 1 MA's), (5, 50543), (Start: 7 @50525 has 13
MA's), (8, 50471), $(9,50423),(10,50405),(11,50390),(12,50387)$,
Gene: Dreamboat_89 Start: 49029, Stop: 48787, Start Num: 1
Candidate Starts for Dreamboat_89:
(Start: 1 @49029 has 2 MA's), (Start: 4 @ 48996 has 1 MA's), (Start: 7 @ 48960 has 13 MA's), (8, 48906), (9, 48858), (10, 48840), (11, 48825), (12, 48822),

Gene: Dreamboat_94 Start: 50738, Stop: 50514, Start Num: 3
Candidate Starts for Dreamboat_94:
(Start: 3 @50738 has 3 MA's), (Start: 7 @50687 has 13 MA's), (8, 50633), (10, 50567), (11, 50552), $(12,50549)$,

Gene: Dynamix_88 Start: 49088, Stop: 48852, Start Num: 2
Candidate Starts for Dynamix_88:
(Start: 2 @49088 has 1 MA's), (Start: 4 @49061 has 1 MA's), (5, 49043), (Start: 7 @49025 has 13 MA's), (8, 48971), (9, 48923), (10, 48905), (11, 48890), (12, 48887),

Gene: Fenn_98 Start: 53066, Stop: 52893, Start Num: 7
Candidate Starts for Fenn 98:
(Start: 7 @ 53066 has 13 MA's), ( 8,53012 ), (10, 52946), (11, 52931), (12, 52928),
Gene: Jasper_94 Start: 50624, Stop: 50400, Start Num: 3
Candidate Starts for Jasper_94:
(Start: 3 @50624 has 3 MA's), (Start: 7 @50573 has 13 MA's), (8, 50519), (10, 50453), (11, 50438), (12, 50435),

Gene: Jasper_89 Start: 48915, Stop: 48673, Start Num: 1
Candidate Starts for Jasper_89:
(Start: 1 @48915 has 2 MA's), (Start: 4 @48882 has 1 MA's), (Start: 7 @48846 has 13 MA's), (8, 48792), (9, 48744), (10, 48726), (11, 48711), (12, 48708),

Gene: Magnito_92 Start: 51406, Stop: 51233, Start Num: 7
Candidate Starts for Magnito_92:
(Start: 7 @51406 has 13 MA's), (8, 51352), (10, 51286), (11, 51271), (12, 51268),
Gene: McGuire_93 Start: 51177, Stop: 50953, Start Num: 3
Candidate Starts for McGuire_93:
(Start: 3 @51177 has 3 MA's), (Start: 7 @51126 has 13 MA's), (8, 51072), (10, 51006), (11, 50991), (12, 50988),

Gene: Naira_97 Start: 53198, Stop: 53025, Start Num: 7
Candidate Starts for Naira_97:
(Start: 7 @53198 has 13 MA's), (8, 53144), (10, 53078), (11, 53063), (12, 53060),
Gene: PherrisBueller_87 Start: 48497, Stop: 48324, Start Num: 7
Candidate Starts for PherrisBueller 87:
(6, 48512), (Start: 7 @48497 has 13 MA's), ( 8,48443 ), (9, 48395), (10, 48377), (11, 48362), (12, 48359),

Gene: PinkPlastic_82 Start: 48069, Stop: 47896, Start Num: 7
Candidate Starts for PinkPlastic_82:
(Start: 1 @48138 has 2 MA's), (Start: 4 @48105 has 1 MA's), (5, 48087), (Start: 7 @48069 has 13 MA's), (8, 48015), (9, 47967), (10, 47949), (11, 47934), (12, 47931),

Gene: Ringer_91 Start: 51630, Stop: 51457, Start Num: 7
Candidate Starts for Ringer_91:
(Start: 7 @ 51630 has 13 MĀ's), ( 8,51576 ), (10, 51510), (11, 51495), (12, 51492),
Gene: Snazzy_89 Start: 50750, Stop: 50577, Start Num: 7
Candidate Starts for Snazzy_89:
(Start: 1 @50819 has 2 MA's), (Start: 4 @50786 has 1 MA's), (Start: 7 @50750 has 13 MA's), (8, 50696), (9, 50648), ( 10,50630 ), ( 11,50615 ), ( 12,50612 ),

Gene: Squee_93 Start: 52168, Stop: 51995, Start Num: 7
Candidate Starts for Squee_93:
(Start: 7 @ 52168 has 13 MA's), ( 8,52114 ), (10, 52048), (11, 52033), (12, 52030),
Gene: Teodoridan_84 Start: 47836, Stop: 47663, Start Num: 7
Candidate Starts for Teodoridan_84:
(Start: 1 @47905 has 2 MA's), (Start: 4 @47872 has 1 MA's), (5, 47854), (Start: 7 @47836 has 13 MA's), (8, 47782), (9, 47734), (10, 47716), (11, 47701), (12, 47698),

Gene: Topgun_84 Start: 48155, Stop: 47982, Start Num: 7
Candidate Starts for Topgun_84:
(Start: 1 @48224 has 2 MA's), (Start: 4 @48191 has 1 MA's), (5, 48173), (Start: 7 @48155 has 13 MA's), (8, 48101), (9, 48053), (10, 48035), (11, 48020), (12, 48017),

Gene: Wilkins_85 Start: 48085, Stop: 47912, Start Num: 7
Candidate Starts for Wilkins_85:
(Start: 1 @48154 has 2 MA's), (Start: 4 @48121 has 1 MA's), (5, 48103), (Start: 7 @48085 has 13 MA's), (8, 48031), (9, 47983), (10, 47965), (11, 47950), (12, 47947),

