Pham 87396


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 87396 Report

This analysis was run 04/05/24 on database version 557.
Pham number 87396 has 11 members, 0 are drafts.
Phages represented in each track:

- Track 1 : PP_08
- Track 2 : Validus_97
- Track 3 : Shaobing_91, Niklas_92
- Track 4 : Peanam_92
- Track 5 : Ximenita-98
- Track 6 : Syra333_95
- Track 7 : Sunflower1121_96
- Track 8 : Phrank_99
- Track 9 : Shadow1_96
-Track 10 : Krueger_96


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

The start number called the most often in the published annotations is 26 , it was called in 8 of the 11 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Krueger_96, Niklas_92, Phrank_99, Shadow1_96, Shaobing_91, Sunflower1121_96, Syra333_95, Ximenita_98,

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

- PP_08, Peanam_92, Validus_97,


## Summary by start number:

Start 20:

- Found in 2 of 11 ( $18.2 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 11
- Called $50.0 \%$ of time when present
- Phage (with cluster) where this start called: Validus_97 (K1),

Start 22:

- Found in 4 of 11 ( $36.4 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 11
- Called $25.0 \%$ of time when present
- Phage (with cluster) where this start called: Peanam_92 (K1),

Start 23:

- Found in 1 of 11 ( $9.1 \%$ ) 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: PP_08 (A7),

Start 26:

- Found in 8 of 11 ( $72.7 \%$ ) of genes in pham
- Manual Annotations of this start: 8 of 11
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Krueger 96 (K6), Niklas 92 (K1), Phrank 99 (K6), Shadow1_96 (K6), Shaobing_91 (K1), Sunflower1121_96 (K6), Syra333̄_95 (K6), Ximenita_98 (K6),


## Summary by clusters:

There are 3 clusters represented in this pham: $\mathrm{K} 1, \mathrm{~K} 6, \mathrm{~A} 7$,
Info for manual annotations of cluster A7:
-Start number 23 was manually annotated 1 time for cluster A7.
Info for manual annotations of cluster K1:
-Start number 20 was manually annotated 1 time for cluster K1.
-Start number 22 was manually annotated 1 time for cluster K1.

- Start number 26 was manually annotated 2 times for cluster K1.

Info for manual annotations of cluster K6:
-Start number 26 was manually annotated 6 times for cluster K6.

## Gene Information:

Gene: Krueger_96 Start: 58128, Stop: 58328, Start Num: 26
Candidate Starts for Krueger_96:
(1, 57051), (2, 57471), (3, 57474), (4, 57564), (5, 57585), (9, 57765), (15, 57795), (21, 58050), (Start:
26 @58128 has 8 MA's), (28, 58149), (31, 58197), (32, 58206), (34, 58236),
Gene: Niklas_92 Start: 58400, Stop: 58600, Start Num: 26
Candidate Starts for Niklas_92:
( 6,57917 ), $(7,57953),(13,58055),(21,58322)$, (Start: $22 @ 58328$ has 1 MA's), ( 25,58391 ), (Start:
$26 @ 58400$ has 8 MA's), ( 28,58421 ), $(29,58439),(32,58478),(33,58487),(34,58508),(36,58553)$,
Gene: PP_08 Start: 2120, Stop: 1902, Start Num: 23
Candidate Starts for PP_08:
(16, 2363), (17, 2288), (Start: 23 @2120 has 1 MA's), (35, 1976), (37, 1922),

Gene: Peanam_92 Start: 58404, Stop: 58667, Start Num: 22
Candidate Starts for Peanam_92:
(18, 58326), (19, 58332), (Start: 20 @58395 has 1 MA's), (Start: 22 @58404 has 1 MA's), (24, 58452),
(27, 58473), (28, 58488), (29, 58506), (31, 58536), (32, 58545), (33, 58554), (34, 58575), (36, 58620),
Gene: Phrank_99 Start: 58920, Stop: 59120, Start Num: 26
Candidate Starts for Phrank_99:
( 4,58353 ), ( 5,58374 ), ( 11,58563 ), ( 13,58575 ), ( 21,58842 ), (Start: 26 @58920 has 8 MA's), (28, 58941), (30, 58980), (32, 58998), (33, 59007), (34, 59028),

Gene: Shadow1_96 Start: 58266, Stop: 58466, Start Num: 26
Candidate Starts for Shadow1_96:
$(4,57699),(5,57720),(11,57909),(13,57921),(21,58188),(S t a r t: 26 @ 58266$ has 8 MA's), (28, $58287),(32,58344),(33,58353),(34,58374)$,

Gene: Shaobing_91 Start: 58441, Stop: 58641, Start Num: 26
Candidate Starts for Shaobing_91:
( 6,57958 ), ( 7,57994 ), ( 13,58096 ), ( 21,58363 ), (Start: 22 @58369 has 1 MA's), ( 25,58432 ), (Start:
26 @58441 has 8 MA's), (28, 58462), (29, 58480), (32, 58519), (33, 58528), (34, 58549), (36, 58594),
Gene: Sunflower1121_96 Start: 58024, Stop: 58224, Start Num: 26
Candidate Starts for Sunflower1121_96:
(11, 57667), (13, 57679), (14, 57685), (21, 57946), (Start: 26 @58024 has 8 MA's), (28, 58045), (32, 58102), (33, 58111), (34, 58132),

Gene: Syra333_95 Start: 58084, Stop: 58284, Start Num: 26
Candidate Starts for Syra333_95:
( 21,58006 ), (Start: 26 @58084 has 8 MA's), ( 28,58105 ), ( 31,58153 ), ( 32,58162 ), ( 33,58171 ), (34, 58192),

Gene: Validus_97 Start: 59264, Stop: 59536, Start Num: 20
Candidate Starts for Validus_97:
(Start: 20 @59264 has 1 MA's), (Start: 22 @59273 has 1 MA's), ( 24,59321 ), ( 27,59342 ), ( 28,59357 ), (29, 59375), (31, 59405), (32, 59414), (33, 59423), (34, 59444), (36, 59489),

Gene: Ximenita_98 Start: 58840, Stop: 59040, Start Num: 26
Candidate Starts for Ximenita_98:
$(8,58453),(9,58477),(10,58483),(12,58495),(15,58507),(21,58762),(S t a r t: 26 @ 58840$ has 8 MA's), (28, 58861), (31, 58909), (32, 58918), (33, 58927), (34, 58948),

