

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 04/28/24 on database version 559.

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\_95Track 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),
  Syra333\_95 (K6), Ximenita\_98 (K6),

## **Summary by clusters:**

There are 3 clusters represented in this pham: K1, K6, A7,

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), (Start: 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), (Start: 26 @58840 has 8 MA's), (28, 58861), (31, 58909), (32, 58918), (33, 58927), (34, 58948),