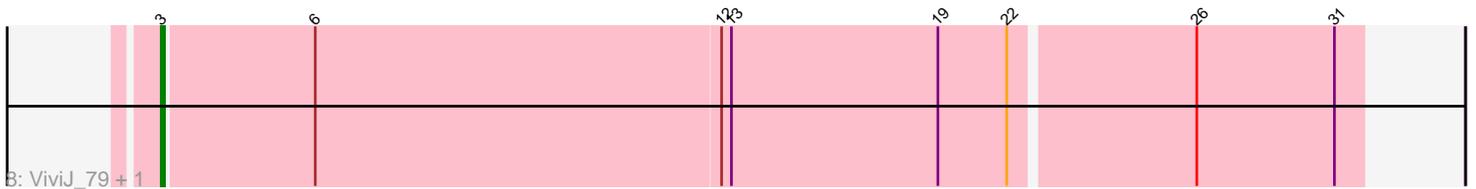
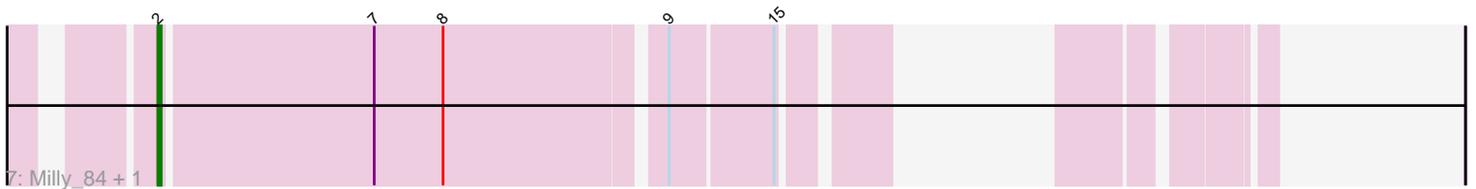
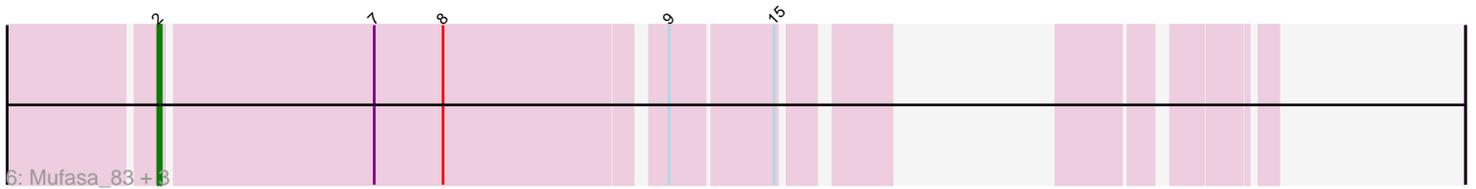
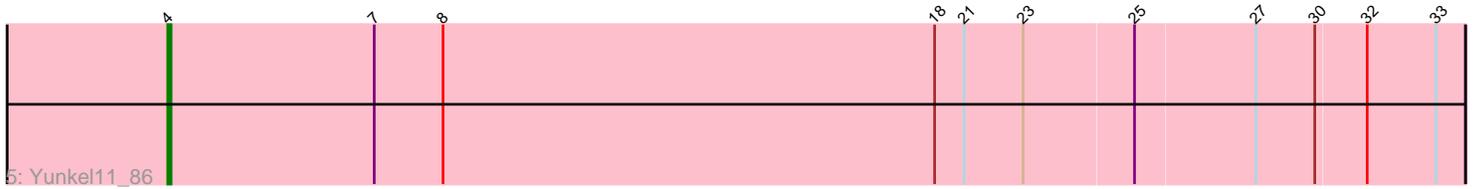
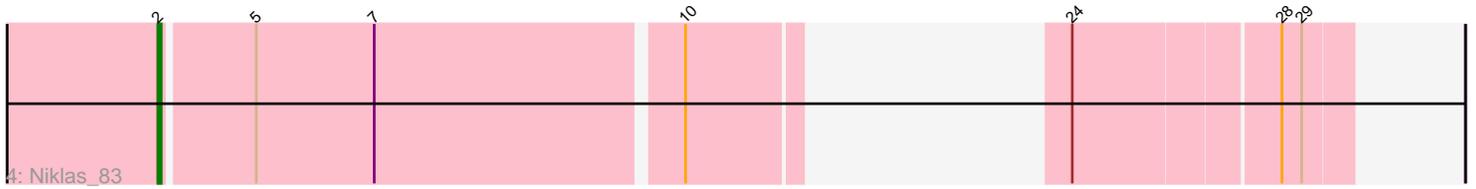
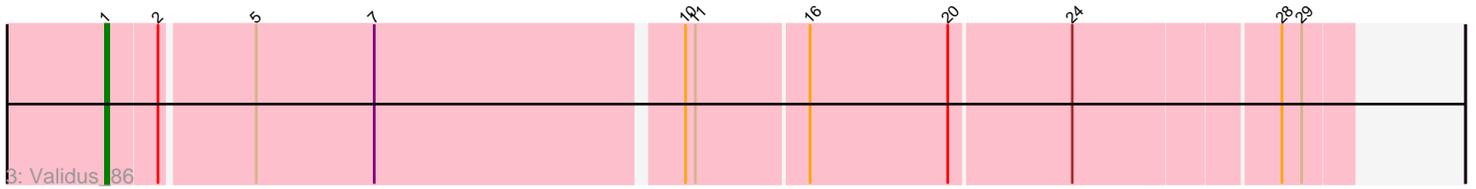
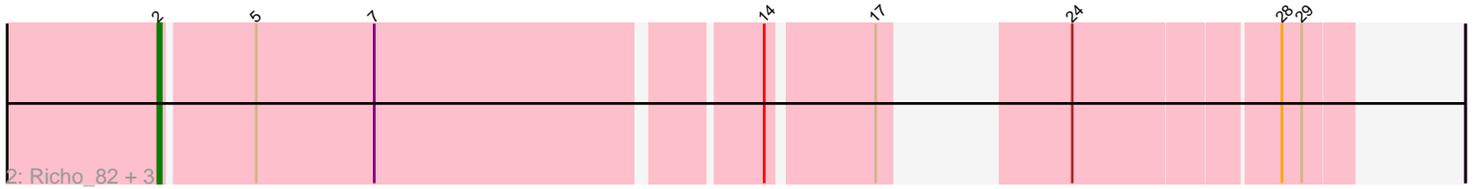
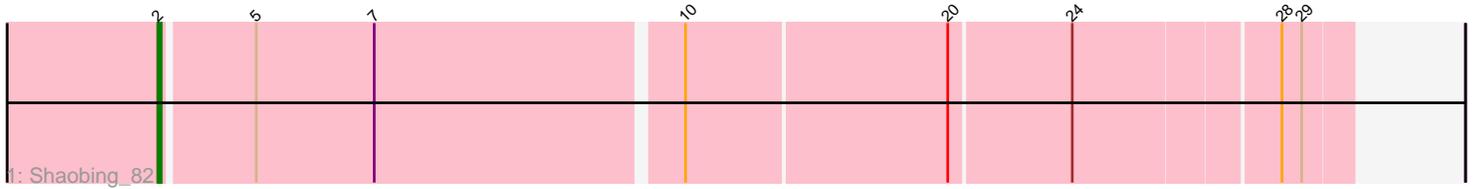


Pham 282557



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 282557 Report

This analysis was run 02/23/26 on database version 636.

Pham number 282557 has 16 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Shaobing\_82
- Track 2 : Richo\_82, Peanam\_83, McMater\_82, Dartin\_82
- Track 3 : Validus\_86
- Track 4 : Niklas\_83
- Track 5 : Yunkel11\_86
- Track 6 : Mufasa\_83, ZoeJ\_83, Doughnut\_84, BoostSeason\_83
- Track 7 : Milly\_84, TM4\_83
- Track 8 : ViviJ\_79, LilDirt\_70

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

The start number called the most often in the published annotations is 2, it was called in 9 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BoostSeason\_83, Dartin\_82, Doughnut\_84, McMater\_82, Milly\_84, Mufasa\_83, Niklas\_83, Peanam\_83, Richo\_82, Shaobing\_82, TM4\_83, ZoeJ\_83,

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

- Validus\_86,

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

- LilDirt\_70, ViviJ\_79, Yunkel11\_86,

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

Start 1:

- Found in 1 of 16 ( 6.2% ) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Validus\_86 (K1),

Start 2:

- Found in 13 of 16 ( 81.2% ) of genes in pham

- Manual Annotations of this start: 9 of 12
- Called 92.3% of time when present
- Phage (with cluster) where this start called: BoostSeason\_83 (K2), Dartin\_82 (K1), Doughnut\_84 (K2), McMater\_82 (K1), Milly\_84 (K2), Mufasa\_83 (K2), Niklas\_83 (K1), Peanam\_83 (K1), Richo\_82 (K1), Shaobing\_82 (K1), TM4\_83 (K2), ZoeJ\_83 (K2),

#### Start 3:

- Found in 2 of 16 ( 12.5% ) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LilDirt\_70 (K5), ViviJ\_79 (K5),

#### Start 4:

- Found in 1 of 16 ( 6.2% ) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yunkel11\_86 (K1),

### Summary by clusters:

There are 3 clusters represented in this pham: K2, K1, K5,

#### Info for manual annotations of cluster K1:

- Start number 1 was manually annotated 1 time for cluster K1.
- Start number 2 was manually annotated 3 times for cluster K1.
- Start number 4 was manually annotated 1 time for cluster K1.

#### Info for manual annotations of cluster K2:

- Start number 2 was manually annotated 6 times for cluster K2.

#### Info for manual annotations of cluster K5:

- Start number 3 was manually annotated 1 time for cluster K5.

### Gene Information:

Gene: BoostSeason\_83 Start: 54198, Stop: 54458, Start Num: 2

Candidate Starts for BoostSeason\_83:

(Start: 2 @54198 has 9 MA's), (7, 54261), (8, 54282), (9, 54345), (15, 54375),

Gene: Dartin\_82 Start: 53736, Stop: 54047, Start Num: 2

Candidate Starts for Dartin\_82:

(Start: 2 @53736 has 9 MA's), (5, 53763), (7, 53799), (14, 53910), (17, 53940), (24, 53967), (28, 54027), (29, 54033),

Gene: Doughnut\_84 Start: 54378, Stop: 54641, Start Num: 2

Candidate Starts for Doughnut\_84:

(Start: 2 @54378 has 9 MA's), (7, 54441), (8, 54462), (9, 54525), (15, 54555),

Gene: LilDirt\_70 Start: 48938, Stop: 49297, Start Num: 3

Candidate Starts for LilDirt\_70:

(Start: 3 @48938 has 1 MA's), (6, 48983), (12, 49106), (13, 49109), (19, 49172), (22, 49193), (26, 49247), (31, 49289),

Gene: McMater\_82 Start: 53736, Stop: 54047, Start Num: 2

Candidate Starts for McMater\_82:

(Start: 2 @53736 has 9 MA's), (5, 53763), (7, 53799), (14, 53910), (17, 53940), (24, 53967), (28, 54027), (29, 54033),

Gene: Milly\_84 Start: 54701, Stop: 54961, Start Num: 2

Candidate Starts for Milly\_84:

(Start: 2 @54701 has 9 MA's), (7, 54764), (8, 54785), (9, 54848), (15, 54878),

Gene: Mufasa\_83 Start: 54185, Stop: 54445, Start Num: 2

Candidate Starts for Mufasa\_83:

(Start: 2 @54185 has 9 MA's), (7, 54248), (8, 54269), (9, 54332), (15, 54362),

Gene: Niklas\_83 Start: 53812, Stop: 54087, Start Num: 2

Candidate Starts for Niklas\_83:

(Start: 2 @53812 has 9 MA's), (5, 53839), (7, 53875), (10, 53965), (24, 54007), (28, 54067), (29, 54073),

Gene: Peanam\_83 Start: 53755, Stop: 54066, Start Num: 2

Candidate Starts for Peanam\_83:

(Start: 2 @53755 has 9 MA's), (5, 53782), (7, 53818), (14, 53929), (17, 53959), (24, 53986), (28, 54046), (29, 54052),

Gene: Richo\_82 Start: 53736, Stop: 54047, Start Num: 2

Candidate Starts for Richo\_82:

(Start: 2 @53736 has 9 MA's), (5, 53763), (7, 53799), (14, 53910), (17, 53940), (24, 53967), (28, 54027), (29, 54033),

Gene: Shaobing\_82 Start: 53787, Stop: 54134, Start Num: 2

Candidate Starts for Shaobing\_82:

(Start: 2 @53787 has 9 MA's), (5, 53814), (7, 53850), (10, 53940), (20, 54018), (24, 54054), (28, 54114), (29, 54120),

Gene: TM4\_83 Start: 49480, Stop: 49743, Start Num: 2

Candidate Starts for TM4\_83:

(Start: 2 @49480 has 9 MA's), (7, 49543), (8, 49564), (9, 49627), (15, 49657),

Gene: Validus\_86 Start: 54324, Stop: 54686, Start Num: 1

Candidate Starts for Validus\_86:

(Start: 1 @54324 has 1 MA's), (Start: 2 @54339 has 9 MA's), (5, 54366), (7, 54402), (10, 54492), (11, 54495), (16, 54528), (20, 54570), (24, 54606), (28, 54666), (29, 54672),

Gene: ViviJ\_79 Start: 51225, Stop: 51584, Start Num: 3

Candidate Starts for ViviJ\_79:

(Start: 3 @51225 has 1 MA's), (6, 51270), (12, 51393), (13, 51396), (19, 51459), (22, 51480), (26, 51534), (31, 51576),

Gene: Yunkel11\_86 Start: 52988, Stop: 53380, Start Num: 4

Candidate Starts for Yunkel11\_86:

(Start: 4 @52988 has 1 MA's), (7, 53051), (8, 53072), (18, 53222), (21, 53231), (23, 53249), (25, 53282), (27, 53318), (30, 53336), (32, 53351), (33, 53372),

Gene: ZoeJ\_83 Start: 54160, Stop: 54420, Start Num: 2

Candidate Starts for ZoeJ\_83:

(Start: 2 @54160 has 9 MA's), (7, 54223), (8, 54244), (9, 54307), (15, 54337),