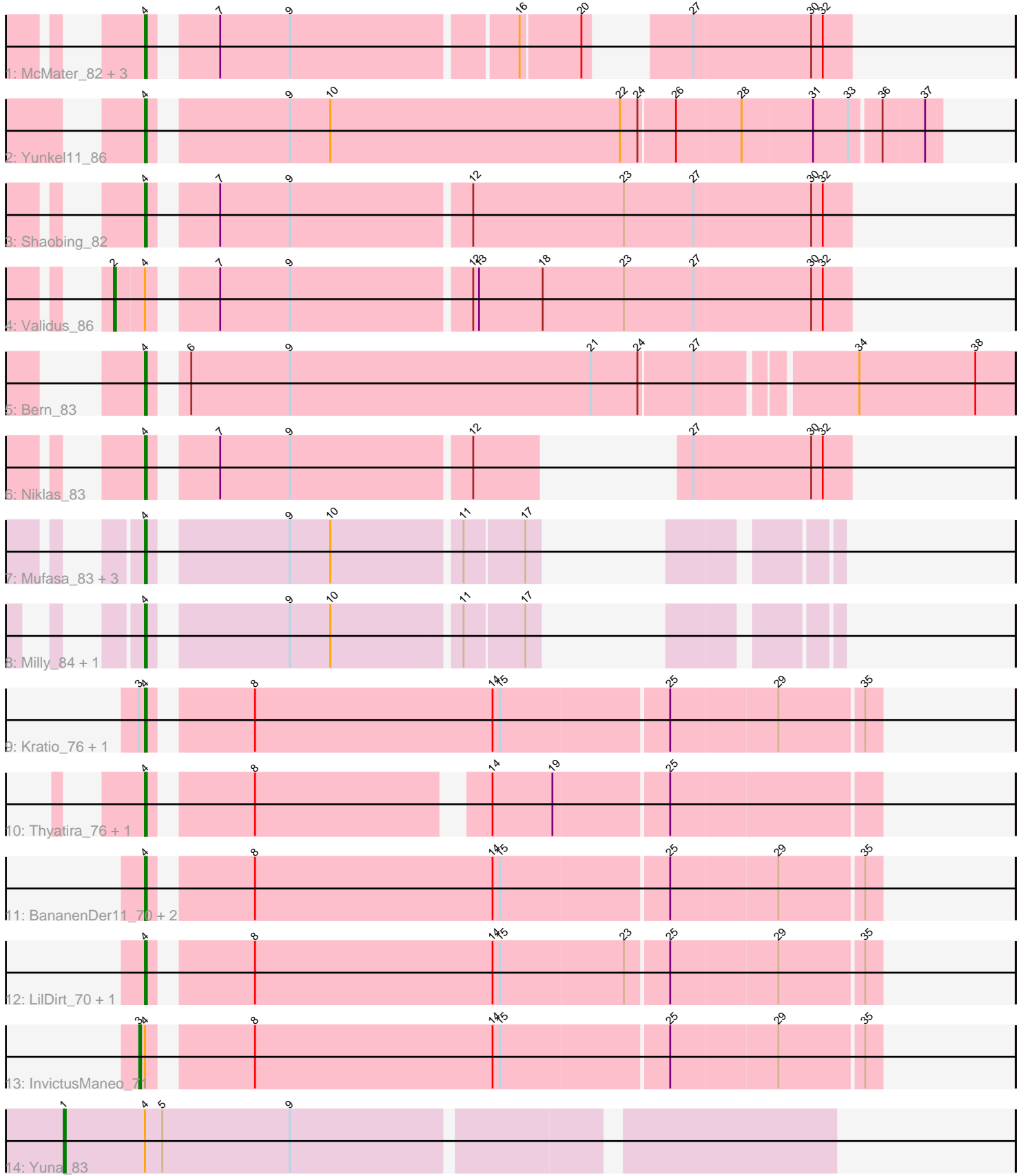


Pham 296866



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 296866 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296866 has 26 members, 6 are drafts.

Phages represented in each track:

- Track 1 : McMater\_82, Peanam\_83, Dartin\_82, Richo\_82
- Track 2 : Yunkel11\_86
- Track 3 : Shaobing\_82
- Track 4 : Validus\_86
- Track 5 : Bern\_83
- Track 6 : Niklas\_83
- Track 7 : Mufasa\_83, ZoeJ\_83, Doughnut\_84, BoostSeason\_83
- Track 8 : Milly\_84, TM4\_83
- Track 9 : Kratio\_76, Agent47\_73
- Track 10 : Thyatira\_76, Waterfoul\_75
- Track 11 : BananenDer11\_70, Collard\_71, DoubleChamp\_70
- Track 12 : LilDirt\_70, ViviJ\_79
- Track 13 : InvictusManeo\_71
- Track 14 : Yuna\_83

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

The start number called the most often in the published annotations is 4, it was called in 17 of the 20 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Agent47\_73, BananenDer11\_70, Bern\_83, BoostSeason\_83, Collard\_71, Dartin\_82, DoubleChamp\_70, Doughnut\_84, Kratio\_76, LilDirt\_70, McMater\_82, Milly\_84, Mufasa\_83, Niklas\_83, Peanam\_83, Richo\_82, Shaobing\_82, TM4\_83, Thyatira\_76, ViviJ\_79, Waterfoul\_75, Yunkel11\_86, ZoeJ\_83,

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

- InvictusManeo\_71, Validus\_86, Yuna\_83,

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

- 

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

Start 1:

- Found in 1 of 26 ( 3.8% ) 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: Yuna\_83 (K6),

Start 2:

- Found in 1 of 26 ( 3.8% ) 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: Validus\_86 (K1),

Start 3:

- Found in 3 of 26 ( 11.5% ) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called 33.3% of time when present
- Phage (with cluster) where this start called: InvictusManeo\_71 (K5),

Start 4:

- Found in 26 of 26 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 17 of 20
- Called 88.5% of time when present
- Phage (with cluster) where this start called: Agent47\_73 (K5), BananenDer11\_70 (K5), Bern\_83 (K1), BoostSeason\_83 (K2), Collard\_71 (K5), Dartin\_82 (K1), DoubleChamp\_70 (K5), Doughnut\_84 (K2), Kratio\_76 (K5), LilDirt\_70 (K5), McMater\_82 (K1), Milly\_84 (K2), Mufasa\_83 (K2), Niklas\_83 (K1), Peanam\_83 (K1), Richo\_82 (K1), Shaobing\_82 (K1), TM4\_83 (K2), Thyatira\_76 (K5), ViviJ\_79 (K5), Waterfoul\_75 (K5), Yunkel11\_86 (K1), ZoeJ\_83 (K2),

**Summary by clusters:**

There are 4 clusters represented in this pham: K2, K1, K6, K5,

Info for manual annotations of cluster K1:

- Start number 2 was manually annotated 1 time for cluster K1.
- Start number 4 was manually annotated 5 times for cluster K1.

Info for manual annotations of cluster K2:

- Start number 4 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.
- Start number 4 was manually annotated 6 times for cluster K5.

Info for manual annotations of cluster K6:

- Start number 1 was manually annotated 1 time for cluster K6.

**Gene Information:**

Gene: Agent47\_73 Start: 49176, Stop: 49535, Start Num: 4

Candidate Starts for Agent47\_73:

(Start: 3 @49173 has 1 MA's), (Start: 4 @49176 has 17 MA's), (8, 49221), (14, 49344), (15, 49347), (25, 49431), (29, 49485), (35, 49527),

Gene: BananenDer11\_70 Start: 49137, Stop: 49496, Start Num: 4

Candidate Starts for BananenDer11\_70:

(Start: 4 @49137 has 17 MA's), (8, 49182), (14, 49305), (15, 49308), (25, 49392), (29, 49446), (35, 49488),

Gene: Bern\_83 Start: 51564, Stop: 51989, Start Num: 4

Candidate Starts for Bern\_83:

(Start: 4 @51564 has 17 MA's), (6, 51576), (9, 51627), (21, 51783), (24, 51807), (27, 51834), (34, 51909), (38, 51969),

Gene: BoostSeason\_83 Start: 54198, Stop: 54458, Start Num: 4

Candidate Starts for BoostSeason\_83:

(Start: 4 @54198 has 17 MA's), (9, 54261), (10, 54282), (11, 54345), (17, 54375),

Gene: Collard\_71 Start: 49137, Stop: 49496, Start Num: 4

Candidate Starts for Collard\_71:

(Start: 4 @49137 has 17 MA's), (8, 49182), (14, 49305), (15, 49308), (25, 49392), (29, 49446), (35, 49488),

Gene: Dartin\_82 Start: 53736, Stop: 54047, Start Num: 4

Candidate Starts for Dartin\_82:

(Start: 4 @53736 has 17 MA's), (7, 53763), (9, 53799), (16, 53910), (20, 53940), (27, 53967), (30, 54027), (32, 54033),

Gene: DoubleChamp\_70 Start: 49137, Stop: 49496, Start Num: 4

Candidate Starts for DoubleChamp\_70:

(Start: 4 @49137 has 17 MA's), (8, 49182), (14, 49305), (15, 49308), (25, 49392), (29, 49446), (35, 49488),

Gene: Doughnut\_84 Start: 54378, Stop: 54641, Start Num: 4

Candidate Starts for Doughnut\_84:

(Start: 4 @54378 has 17 MA's), (9, 54441), (10, 54462), (11, 54525), (17, 54555),

Gene: InvictusManeo\_71 Start: 49177, Stop: 49539, Start Num: 3

Candidate Starts for InvictusManeo\_71:

(Start: 3 @49177 has 1 MA's), (Start: 4 @49180 has 17 MA's), (8, 49225), (14, 49348), (15, 49351), (25, 49435), (29, 49489), (35, 49531),

Gene: Kratio\_76 Start: 50738, Stop: 51097, Start Num: 4

Candidate Starts for Kratio\_76:

(Start: 3 @50735 has 1 MA's), (Start: 4 @50738 has 17 MA's), (8, 50783), (14, 50906), (15, 50909), (25, 50993), (29, 51047), (35, 51089),

Gene: LilDirt\_70 Start: 48938, Stop: 49297, Start Num: 4

Candidate Starts for LilDirt\_70:

(Start: 4 @48938 has 17 MA's), (8, 48983), (14, 49106), (15, 49109), (23, 49172), (25, 49193), (29, 49247), (35, 49289),

Gene: McMater\_82 Start: 53736, Stop: 54047, Start Num: 4

Candidate Starts for McMater\_82:

(Start: 4 @53736 has 17 MA's), (7, 53763), (9, 53799), (16, 53910), (20, 53940), (27, 53967), (30, 54027), (32, 54033),

Gene: Milly\_84 Start: 54701, Stop: 54961, Start Num: 4

Candidate Starts for Milly\_84:

(Start: 4 @54701 has 17 MA's), (9, 54764), (10, 54785), (11, 54848), (17, 54878),

Gene: Mufasa\_83 Start: 54185, Stop: 54445, Start Num: 4

Candidate Starts for Mufasa\_83:

(Start: 4 @54185 has 17 MA's), (9, 54248), (10, 54269), (11, 54332), (17, 54362),

Gene: Niklas\_83 Start: 53812, Stop: 54087, Start Num: 4

Candidate Starts for Niklas\_83:

(Start: 4 @53812 has 17 MA's), (7, 53839), (9, 53875), (12, 53965), (27, 54007), (30, 54067), (32, 54073),

Gene: Peanam\_83 Start: 53755, Stop: 54066, Start Num: 4

Candidate Starts for Peanam\_83:

(Start: 4 @53755 has 17 MA's), (7, 53782), (9, 53818), (16, 53929), (20, 53959), (27, 53986), (30, 54046), (32, 54052),

Gene: Richo\_82 Start: 53736, Stop: 54047, Start Num: 4

Candidate Starts for Richo\_82:

(Start: 4 @53736 has 17 MA's), (7, 53763), (9, 53799), (16, 53910), (20, 53940), (27, 53967), (30, 54027), (32, 54033),

Gene: Shaobing\_82 Start: 53787, Stop: 54134, Start Num: 4

Candidate Starts for Shaobing\_82:

(Start: 4 @53787 has 17 MA's), (7, 53814), (9, 53850), (12, 53940), (23, 54018), (27, 54054), (30, 54114), (32, 54120),

Gene: TM4\_83 Start: 49480, Stop: 49743, Start Num: 4

Candidate Starts for TM4\_83:

(Start: 4 @49480 has 17 MA's), (9, 49543), (10, 49564), (11, 49627), (17, 49657),

Gene: Thyatira\_76 Start: 53221, Stop: 53565, Start Num: 4

Candidate Starts for Thyatira\_76:

(Start: 4 @53221 has 17 MA's), (8, 53266), (14, 53374), (19, 53404), (25, 53461),

Gene: Validus\_86 Start: 54324, Stop: 54686, Start Num: 2

Candidate Starts for Validus\_86:

(Start: 2 @54324 has 1 MA's), (Start: 4 @54339 has 17 MA's), (7, 54366), (9, 54402), (12, 54492), (13, 54495), (18, 54528), (23, 54570), (27, 54606), (30, 54666), (32, 54672),

Gene: ViviJ\_79 Start: 51225, Stop: 51584, Start Num: 4

Candidate Starts for ViviJ\_79:

(Start: 4 @51225 has 17 MA's), (8, 51270), (14, 51393), (15, 51396), (23, 51459), (25, 51480), (29, 51534), (35, 51576),

Gene: Waterfoul\_75 Start: 51291, Stop: 51635, Start Num: 4

Candidate Starts for Waterfoul\_75:

(Start: 4 @51291 has 17 MA's), (8, 51336), (14, 51444), (19, 51474), (25, 51531),

Gene: Yuna\_83 Start: 54192, Stop: 54572, Start Num: 1

Candidate Starts for Yuna\_83:

(Start: 1 @54192 has 1 MA's), (Start: 4 @54234 has 17 MA's), (5, 54243), (9, 54309),

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

Candidate Starts for Yunkel11\_86:

(Start: 4 @52988 has 17 MA's), (9, 53051), (10, 53072), (22, 53222), (24, 53231), (26, 53249), (28, 53282), (31, 53318), (33, 53336), (36, 53351), (37, 53372),

Gene: ZoeJ\_83 Start: 54160, Stop: 54420, Start Num: 4

Candidate Starts for ZoeJ\_83:

(Start: 4 @54160 has 17 MA's), (9, 54223), (10, 54244), (11, 54307), (17, 54337),