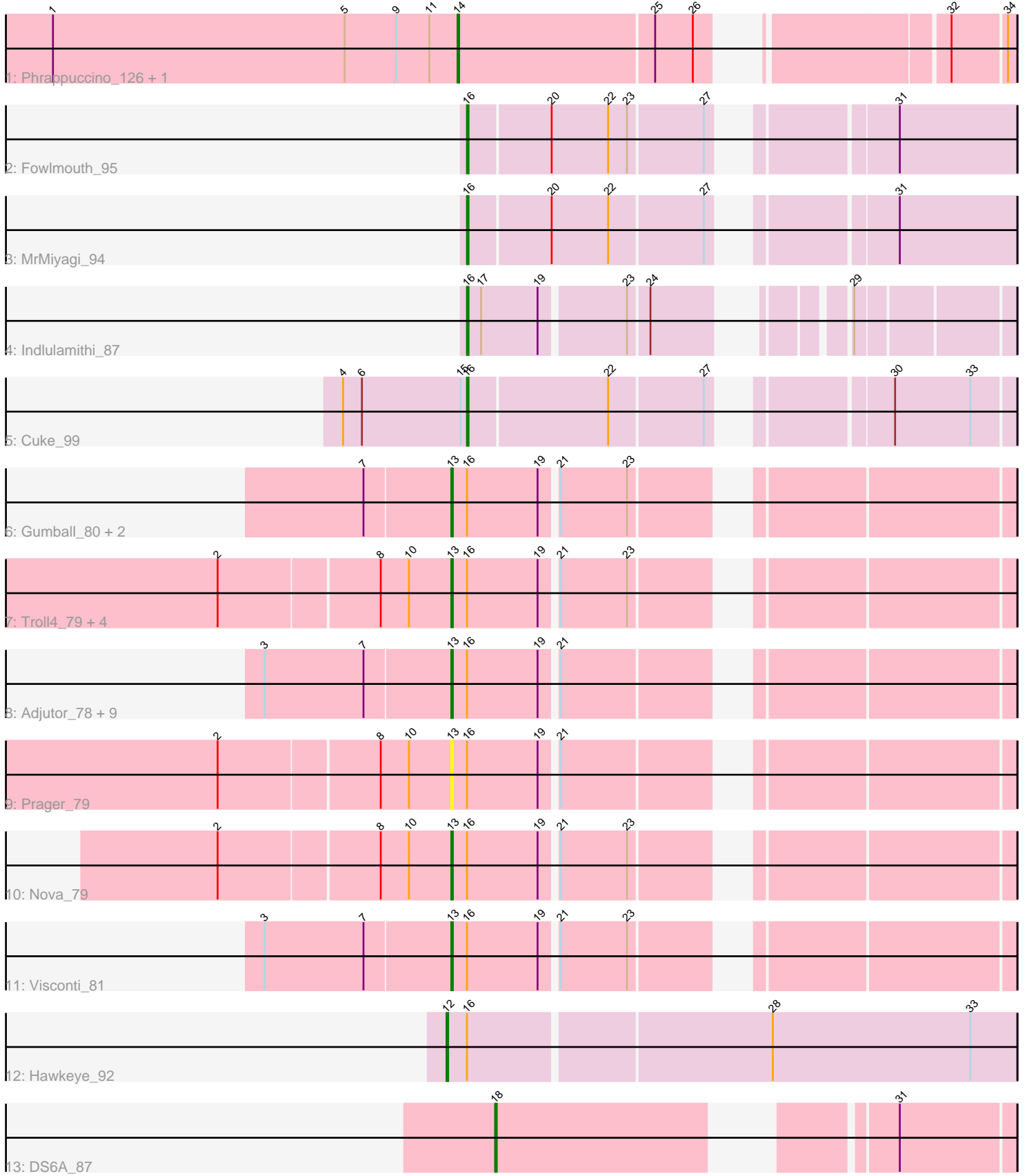


Pham 196739



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 196739 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196739 has 29 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Phrappuccino\_126, Settecandela\_126
- Track 2 : Fowlmouth\_95
- Track 3 : MrMiyagi\_94
- Track 4 : Indlulamithi\_87
- Track 5 : Cuke\_99
- Track 6 : Gumball\_80, SirHarley\_82, PLOT\_80
- Track 7 : Troll4\_79, Helpful\_82, Mopey\_81, KandZ\_77, Giuseppe\_81
- Track 8 : Adjutor\_78, Thoth\_80, WaldoWhy\_82, PBI1\_76, BigMama\_78, Erk16\_80, Chill\_82, Delton\_80, Butterscotch\_78, Penelope2018\_80
- Track 9 : Prager\_79
- Track 10 : Nova\_79
- Track 11 : Visconti\_81
- Track 12 : Hawkeye\_92
- Track 13 : DS6A\_87

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

The start number called the most often in the published annotations is 13, it was called in 20 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adjutor\_78, BigMama\_78, Butterscotch\_78, Chill\_82, Delton\_80, Erk16\_80, Giuseppe\_81, Gumball\_80, Helpful\_82, KandZ\_77, Mopey\_81, Nova\_79, PBI1\_76, PLOT\_80, Penelope2018\_80, Prager\_79, SirHarley\_82, Thoth\_80, Troll4\_79, Visconti\_81, WaldoWhy\_82,

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

- 

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

- Cuke\_99, DS6A\_87, Fowlmouth\_95, Hawkeye\_92, Indlulamithi\_87, MrMiyagi\_94, Phrappuccino\_126, Settecandela\_126,

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

Start 12:

- Found in 1 of 29 ( 3.4% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hawkeye\_92 (D2),

Start 13:

- Found in 21 of 29 ( 72.4% ) of genes in pham
- Manual Annotations of this start: 20 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adjutor\_78 (D1), BigMama\_78 (D1), Butterscotch\_78 (D1), Chill\_82 (D1), Delton\_80 (D1), Erk16\_80 (D1), Giuseppe\_81 (D1), Gumball\_80 (D1), Helpful\_82 (D1), KandZ\_77 (D1), Mopey\_81 (D1), Nova\_79 (D1), PBI1\_76 (D1), PLOT\_80 (D1), Penelope2018\_80 (D1), Prager\_79 (D1), SirHarley\_82 (D1), Thoth\_80 (D1), Troll4\_79 (D1), Visconti\_81 (D1), WaldoWhy\_82 (D1),

Start 14:

- Found in 2 of 29 ( 6.9% ) of genes in pham
- Manual Annotations of this start: 2 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Phrappuccino\_126 (AA), Settecandela\_126 (AA),

Start 16:

- Found in 26 of 29 ( 89.7% ) of genes in pham
- Manual Annotations of this start: 4 of 28
- Called 15.4% of time when present
- Phage (with cluster) where this start called: Cuke\_99 (AC), Fowlmouth\_95 (AC), Indlulamithi\_87 (AC), MrMiyagi\_94 (AC),

Start 18:

- Found in 1 of 29 ( 3.4% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DS6A\_87 (singleton),

**Summary by clusters:**

There are 5 clusters represented in this pham: AA, AC, D2, singleton, D1,

Info for manual annotations of cluster AA:

- Start number 14 was manually annotated 2 times for cluster AA.

Info for manual annotations of cluster AC:

- Start number 16 was manually annotated 4 times for cluster AC.

Info for manual annotations of cluster D1:

- Start number 13 was manually annotated 20 times for cluster D1.

Info for manual annotations of cluster D2:

- Start number 12 was manually annotated 1 time for cluster D2.

**Gene Information:**

Gene: Adjutor\_78 Start: 58520, Stop: 58834, Start Num: 13

Candidate Starts for Adjutor\_78:

(3, 58403), (7, 58466), (Start: 13 @58520 has 20 MA's), (Start: 16 @58529 has 4 MA's), (19, 58574), (21, 58583),

Gene: BigMama\_78 Start: 58605, Stop: 58919, Start Num: 13

Candidate Starts for BigMama\_78:

(3, 58488), (7, 58551), (Start: 13 @58605 has 20 MA's), (Start: 16 @58614 has 4 MA's), (19, 58659), (21, 58668),

Gene: Butterscotch\_78 Start: 58571, Stop: 58885, Start Num: 13

Candidate Starts for Butterscotch\_78:

(3, 58454), (7, 58517), (Start: 13 @58571 has 20 MA's), (Start: 16 @58580 has 4 MA's), (19, 58625), (21, 58634),

Gene: Chill\_82 Start: 58548, Stop: 58862, Start Num: 13

Candidate Starts for Chill\_82:

(3, 58431), (7, 58494), (Start: 13 @58548 has 20 MA's), (Start: 16 @58557 has 4 MA's), (19, 58602), (21, 58611),

Gene: Cuke\_99 Start: 56679, Stop: 56984, Start Num: 16

Candidate Starts for Cuke\_99:

(4, 56601), (6, 56613), (15, 56676), (Start: 16 @56679 has 4 MA's), (22, 56766), (27, 56823), (30, 56910), (33, 56958),

Gene: DS6A\_87 Start: 56210, Stop: 56485, Start Num: 18

Candidate Starts for DS6A\_87:

(Start: 18 @56210 has 1 MA's), (31, 56414),

Gene: Delton\_80 Start: 58981, Stop: 59295, Start Num: 13

Candidate Starts for Delton\_80:

(3, 58864), (7, 58927), (Start: 13 @58981 has 20 MA's), (Start: 16 @58990 has 4 MA's), (19, 59035), (21, 59044),

Gene: Erk16\_80 Start: 58641, Stop: 58955, Start Num: 13

Candidate Starts for Erk16\_80:

(3, 58524), (7, 58587), (Start: 13 @58641 has 20 MA's), (Start: 16 @58650 has 4 MA's), (19, 58695), (21, 58704),

Gene: Fowlmouth\_95 Start: 57786, Stop: 58094, Start Num: 16

Candidate Starts for Fowlmouth\_95:

(Start: 16 @57786 has 4 MA's), (20, 57837), (22, 57873), (23, 57885), (27, 57930), (31, 58020),

Gene: Giuseppe\_81 Start: 58355, Stop: 58669, Start Num: 13

Candidate Starts for Giuseppe\_81:

(2, 58211), (8, 58310), (10, 58328), (Start: 13 @58355 has 20 MA's), (Start: 16 @58364 has 4 MA's), (19, 58409), (21, 58418), (23, 58460),

Gene: Gumball\_80 Start: 58986, Stop: 59300, Start Num: 13

Candidate Starts for Gumball\_80:

(7, 58932), (Start: 13 @58986 has 20 MA's), (Start: 16 @58995 has 4 MA's), (19, 59040), (21, 59049), (23, 59091),

Gene: Hawkeye\_92 Start: 60485, Stop: 60838, Start Num: 12

Candidate Starts for Hawkeye\_92:

(Start: 12 @60485 has 1 MA's), (Start: 16 @60497 has 4 MA's), (28, 60683), (33, 60809),

Gene: Helpful\_82 Start: 58743, Stop: 59057, Start Num: 13

Candidate Starts for Helpful\_82:

(2, 58599), (8, 58698), (10, 58716), (Start: 13 @58743 has 20 MA's), (Start: 16 @58752 has 4 MA's), (19, 58797), (21, 58806), (23, 58848),

Gene: Indlulamithi\_87 Start: 59764, Stop: 60048, Start Num: 16

Candidate Starts for Indlulamithi\_87:

(Start: 16 @59764 has 4 MA's), (17, 59773), (19, 59809), (23, 59860), (24, 59872), (29, 59956),

Gene: KandZ\_77 Start: 58571, Stop: 58885, Start Num: 13

Candidate Starts for KandZ\_77:

(2, 58427), (8, 58526), (10, 58544), (Start: 13 @58571 has 20 MA's), (Start: 16 @58580 has 4 MA's), (19, 58625), (21, 58634), (23, 58676),

Gene: Mopey\_81 Start: 58381, Stop: 58695, Start Num: 13

Candidate Starts for Mopey\_81:

(2, 58237), (8, 58336), (10, 58354), (Start: 13 @58381 has 20 MA's), (Start: 16 @58390 has 4 MA's), (19, 58435), (21, 58444), (23, 58486),

Gene: MrMiyagi\_94 Start: 58054, Stop: 58362, Start Num: 16

Candidate Starts for MrMiyagi\_94:

(Start: 16 @58054 has 4 MA's), (20, 58105), (22, 58141), (27, 58198), (31, 58288),

Gene: Nova\_79 Start: 58848, Stop: 59162, Start Num: 13

Candidate Starts for Nova\_79:

(2, 58704), (8, 58803), (10, 58821), (Start: 13 @58848 has 20 MA's), (Start: 16 @58857 has 4 MA's), (19, 58902), (21, 58911), (23, 58953),

Gene: PBI1\_76 Start: 58502, Stop: 58816, Start Num: 13

Candidate Starts for PBI1\_76:

(3, 58385), (7, 58448), (Start: 13 @58502 has 20 MA's), (Start: 16 @58511 has 4 MA's), (19, 58556), (21, 58565),

Gene: PLOT\_80 Start: 58539, Stop: 58853, Start Num: 13

Candidate Starts for PLOT\_80:

(7, 58485), (Start: 13 @58539 has 20 MA's), (Start: 16 @58548 has 4 MA's), (19, 58593), (21, 58602), (23, 58644),

Gene: Penelope2018\_80 Start: 58570, Stop: 58884, Start Num: 13

Candidate Starts for Penelope2018\_80:

(3, 58453), (7, 58516), (Start: 13 @58570 has 20 MA's), (Start: 16 @58579 has 4 MA's), (19, 58624), (21, 58633),

Gene: Phrappuccino\_126 Start: 92677, Stop: 92982, Start Num: 14

Candidate Starts for Phrappuccino\_126:

(1, 92419), (5, 92605), (9, 92638), (11, 92659), (Start: 14 @92677 has 2 MA's), (25, 92800), (26, 92824), (32, 92944), (34, 92977),

Gene: Prager\_79 Start: 58475, Stop: 58789, Start Num: 13

Candidate Starts for Prager\_79:

(2, 58331), (8, 58430), (10, 58448), (Start: 13 @58475 has 20 MA's), (Start: 16 @58484 has 4 MA's), (19, 58529), (21, 58538),

Gene: Settecandela\_126 Start: 92677, Stop: 92982, Start Num: 14

Candidate Starts for Settecandela\_126:

(1, 92419), (5, 92605), (9, 92638), (11, 92659), (Start: 14 @92677 has 2 MA's), (25, 92800), (26, 92824), (32, 92944), (34, 92977),

Gene: SirHarley\_82 Start: 58970, Stop: 59284, Start Num: 13

Candidate Starts for SirHarley\_82:

(7, 58916), (Start: 13 @58970 has 20 MA's), (Start: 16 @58979 has 4 MA's), (19, 59024), (21, 59033), (23, 59075),

Gene: Thoth\_80 Start: 58624, Stop: 58938, Start Num: 13

Candidate Starts for Thoth\_80:

(3, 58507), (7, 58570), (Start: 13 @58624 has 20 MA's), (Start: 16 @58633 has 4 MA's), (19, 58678), (21, 58687),

Gene: Troll4\_79 Start: 58537, Stop: 58851, Start Num: 13

Candidate Starts for Troll4\_79:

(2, 58393), (8, 58492), (10, 58510), (Start: 13 @58537 has 20 MA's), (Start: 16 @58546 has 4 MA's), (19, 58591), (21, 58600), (23, 58642),

Gene: Visconti\_81 Start: 58585, Stop: 58899, Start Num: 13

Candidate Starts for Visconti\_81:

(3, 58468), (7, 58531), (Start: 13 @58585 has 20 MA's), (Start: 16 @58594 has 4 MA's), (19, 58639), (21, 58648), (23, 58690),

Gene: WaldoWhy\_82 Start: 58548, Stop: 58862, Start Num: 13

Candidate Starts for WaldoWhy\_82:

(3, 58431), (7, 58494), (Start: 13 @58548 has 20 MA's), (Start: 16 @58557 has 4 MA's), (19, 58602), (21, 58611),