

Pham 291399



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 291399 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291399 has 31 members, 2 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, Delton\_80, Butterscotch\_78, Penelope2018\_80, Chill\_82
- Track 9 : Prager\_80
- Track 10 : Phalaborwa\_82
- Track 11 : SuperheroCarly\_80
- Track 12 : Nova\_79
- Track 13 : Visconti\_81
- Track 14 : Hawkeye\_92
- Track 15 : 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 11, it was called in 21 of the 29 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, Phalaborwa\_82, Prager\_80, SirHarley\_82, Thoth\_80, Troll4\_79, Visconti\_81, WaldoWhy\_82,

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

- SuperheroCarly\_80,

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 10:

- Found in 1 of 31 ( 3.2% ) of genes in pham
- Manual Annotations of this start: 1 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hawkeye\_92 (D2),

### Start 11:

- Found in 23 of 31 ( 74.2% ) of genes in pham
- Manual Annotations of this start: 21 of 29
- Called 95.7% 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), Phalaborwa\_82 (D1), Prager\_80 (D1), SirHarley\_82 (D1), Thoth\_80 (D1), Troll4\_79 (D1), Visconti\_81 (D1), WaldoWhy\_82 (D1),

### Start 14:

- Found in 28 of 31 ( 90.3% ) of genes in pham
- Manual Annotations of this start: 4 of 29
- Called 17.9% of time when present
- Phage (with cluster) where this start called: Cuke\_99 (AC), Fowlmouth\_95 (AC), Indlulamithi\_87 (AC), MrMiyagi\_94 (AC), SuperheroCarly\_80 (D1),

### Start 17:

- Found in 2 of 31 ( 6.5% ) of genes in pham
- Manual Annotations of this start: 2 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Phrappuccino\_126 (AA), Settecandela\_126 (AA),

### Start 20:

- Found in 1 of 31 ( 3.2% ) of genes in pham
- Manual Annotations of this start: 1 of 29
- 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 17 was manually annotated 2 times for cluster AA.

Info for manual annotations of cluster AC:

- Start number 14 was manually annotated 4 times for cluster AC.

Info for manual annotations of cluster D1:

- Start number 11 was manually annotated 21 times for cluster D1.

Info for manual annotations of cluster D2:

•Start number 10 was manually annotated 1 time for cluster D2.

**Gene Information:**

Gene: Adjutor\_78 Start: 58520, Stop: 58834, Start Num: 11

Candidate Starts for Adjutor\_78:

(3, 58403), (5, 58466), (Start: 11 @58520 has 21 MA's), (Start: 14 @58529 has 4 MA's), (18, 58574), (21, 58583),

Gene: BigMama\_78 Start: 58605, Stop: 58919, Start Num: 11

Candidate Starts for BigMama\_78:

(3, 58488), (5, 58551), (Start: 11 @58605 has 21 MA's), (Start: 14 @58614 has 4 MA's), (18, 58659), (21, 58668),

Gene: Butterscotch\_78 Start: 58571, Stop: 58885, Start Num: 11

Candidate Starts for Butterscotch\_78:

(3, 58454), (5, 58517), (Start: 11 @58571 has 21 MA's), (Start: 14 @58580 has 4 MA's), (18, 58625), (21, 58634),

Gene: Chill\_82 Start: 58548, Stop: 58862, Start Num: 11

Candidate Starts for Chill\_82:

(3, 58431), (5, 58494), (Start: 11 @58548 has 21 MA's), (Start: 14 @58557 has 4 MA's), (18, 58602), (21, 58611),

Gene: Cuke\_99 Start: 56679, Stop: 56984, Start Num: 14

Candidate Starts for Cuke\_99:

(4, 56601), (6, 56613), (13, 56676), (Start: 14 @56679 has 4 MA's), (22, 56766), (25, 56823), (30, 56910), (33, 56958),

Gene: DS6A\_87 Start: 56210, Stop: 56485, Start Num: 20

Candidate Starts for DS6A\_87:

(Start: 20 @56210 has 1 MA's), (31, 56414),

Gene: Delton\_80 Start: 58981, Stop: 59295, Start Num: 11

Candidate Starts for Delton\_80:

(3, 58864), (5, 58927), (Start: 11 @58981 has 21 MA's), (Start: 14 @58990 has 4 MA's), (18, 59035), (21, 59044),

Gene: Erk16\_80 Start: 58641, Stop: 58955, Start Num: 11

Candidate Starts for Erk16\_80:

(3, 58524), (5, 58587), (Start: 11 @58641 has 21 MA's), (Start: 14 @58650 has 4 MA's), (18, 58695), (21, 58704),

Gene: Fowlmouth\_95 Start: 57786, Stop: 58094, Start Num: 14

Candidate Starts for Fowlmouth\_95:

(Start: 14 @57786 has 4 MA's), (19, 57837), (22, 57873), (23, 57885), (25, 57930), (31, 58020),

Gene: Giuseppe\_81 Start: 58355, Stop: 58669, Start Num: 11

Candidate Starts for Giuseppe\_81:

(2, 58211), (7, 58310), (8, 58328), (Start: 11 @58355 has 21 MA's), (Start: 14 @58364 has 4 MA's), (18, 58409), (21, 58418), (23, 58460),

Gene: Gumball\_80 Start: 58986, Stop: 59300, Start Num: 11

Candidate Starts for Gumball\_80:

(5, 58932), (Start: 11 @58986 has 21 MA's), (Start: 14 @58995 has 4 MA's), (18, 59040), (21, 59049), (23, 59091),

Gene: Hawkeye\_92 Start: 60485, Stop: 60838, Start Num: 10

Candidate Starts for Hawkeye\_92:

(Start: 10 @60485 has 1 MA's), (Start: 14 @60497 has 4 MA's), (27, 60683), (33, 60809),

Gene: Helpful\_82 Start: 58743, Stop: 59057, Start Num: 11

Candidate Starts for Helpful\_82:

(2, 58599), (7, 58698), (8, 58716), (Start: 11 @58743 has 21 MA's), (Start: 14 @58752 has 4 MA's), (18, 58797), (21, 58806), (23, 58848),

Gene: Indlulamithi\_87 Start: 59764, Stop: 60048, Start Num: 14

Candidate Starts for Indlulamithi\_87:

(Start: 14 @59764 has 4 MA's), (15, 59773), (18, 59809), (23, 59860), (24, 59872), (29, 59956),

Gene: KandZ\_77 Start: 58571, Stop: 58885, Start Num: 11

Candidate Starts for KandZ\_77:

(2, 58427), (7, 58526), (8, 58544), (Start: 11 @58571 has 21 MA's), (Start: 14 @58580 has 4 MA's), (18, 58625), (21, 58634), (23, 58676),

Gene: Mopey\_81 Start: 58381, Stop: 58695, Start Num: 11

Candidate Starts for Mopey\_81:

(2, 58237), (7, 58336), (8, 58354), (Start: 11 @58381 has 21 MA's), (Start: 14 @58390 has 4 MA's), (18, 58435), (21, 58444), (23, 58486),

Gene: MrMiyagi\_94 Start: 58054, Stop: 58362, Start Num: 14

Candidate Starts for MrMiyagi\_94:

(Start: 14 @58054 has 4 MA's), (19, 58105), (22, 58141), (25, 58198), (31, 58288),

Gene: Nova\_79 Start: 58848, Stop: 59162, Start Num: 11

Candidate Starts for Nova\_79:

(2, 58704), (7, 58803), (8, 58821), (Start: 11 @58848 has 21 MA's), (Start: 14 @58857 has 4 MA's), (18, 58902), (21, 58911), (23, 58953),

Gene: PBI1\_76 Start: 58502, Stop: 58816, Start Num: 11

Candidate Starts for PBI1\_76:

(3, 58385), (5, 58448), (Start: 11 @58502 has 21 MA's), (Start: 14 @58511 has 4 MA's), (18, 58556), (21, 58565),

Gene: PLOT\_80 Start: 58539, Stop: 58853, Start Num: 11

Candidate Starts for PLOT\_80:

(5, 58485), (Start: 11 @58539 has 21 MA's), (Start: 14 @58548 has 4 MA's), (18, 58593), (21, 58602), (23, 58644),

Gene: Penelope2018\_80 Start: 58570, Stop: 58884, Start Num: 11

Candidate Starts for Penelope2018\_80:

(3, 58453), (5, 58516), (Start: 11 @58570 has 21 MA's), (Start: 14 @58579 has 4 MA's), (18, 58624), (21, 58633),

Gene: Phalaborwa\_82 Start: 59041, Stop: 59355, Start Num: 11

Candidate Starts for Phalaborwa\_82:

(8, 59011), (Start: 11 @59041 has 21 MA's), (Start: 14 @59050 has 4 MA's), (18, 59095), (21, 59104),

Gene: Phrappuccino\_126 Start: 92677, Stop: 92982, Start Num: 17

Candidate Starts for Phrappuccino\_126:

(1, 92419), (9, 92605), (12, 92638), (16, 92659), (Start: 17 @92677 has 2 MA's), (26, 92800), (28, 92824), (32, 92944), (34, 92977),

Gene: Prager\_80 Start: 58475, Stop: 58789, Start Num: 11

Candidate Starts for Prager\_80:

(2, 58331), (7, 58430), (8, 58448), (Start: 11 @58475 has 21 MA's), (Start: 14 @58484 has 4 MA's), (18, 58529), (21, 58538),

Gene: Settecandela\_126 Start: 92677, Stop: 92982, Start Num: 17

Candidate Starts for Settecandela\_126:

(1, 92419), (9, 92605), (12, 92638), (16, 92659), (Start: 17 @92677 has 2 MA's), (26, 92800), (28, 92824), (32, 92944), (34, 92977),

Gene: SirHarley\_82 Start: 58970, Stop: 59284, Start Num: 11

Candidate Starts for SirHarley\_82:

(5, 58916), (Start: 11 @58970 has 21 MA's), (Start: 14 @58979 has 4 MA's), (18, 59024), (21, 59033), (23, 59075),

Gene: SuperheroCarly\_80 Start: 58569, Stop: 58877, Start Num: 14

Candidate Starts for SuperheroCarly\_80:

(2, 58416), (7, 58515), (8, 58533), (Start: 11 @58560 has 21 MA's), (Start: 14 @58569 has 4 MA's), (18, 58614), (21, 58623), (23, 58665),

Gene: Thoth\_80 Start: 58624, Stop: 58938, Start Num: 11

Candidate Starts for Thoth\_80:

(3, 58507), (5, 58570), (Start: 11 @58624 has 21 MA's), (Start: 14 @58633 has 4 MA's), (18, 58678), (21, 58687),

Gene: Troll4\_79 Start: 58537, Stop: 58851, Start Num: 11

Candidate Starts for Troll4\_79:

(2, 58393), (7, 58492), (8, 58510), (Start: 11 @58537 has 21 MA's), (Start: 14 @58546 has 4 MA's), (18, 58591), (21, 58600), (23, 58642),

Gene: Visconti\_81 Start: 58585, Stop: 58899, Start Num: 11

Candidate Starts for Visconti\_81:

(3, 58468), (5, 58531), (Start: 11 @58585 has 21 MA's), (Start: 14 @58594 has 4 MA's), (18, 58639), (21, 58648), (23, 58690),

Gene: WaldoWhy\_82 Start: 58548, Stop: 58862, Start Num: 11

Candidate Starts for WaldoWhy\_82:

(3, 58431), (5, 58494), (Start: 11 @58548 has 21 MA's), (Start: 14 @58557 has 4 MA's), (18, 58602), (21, 58611),