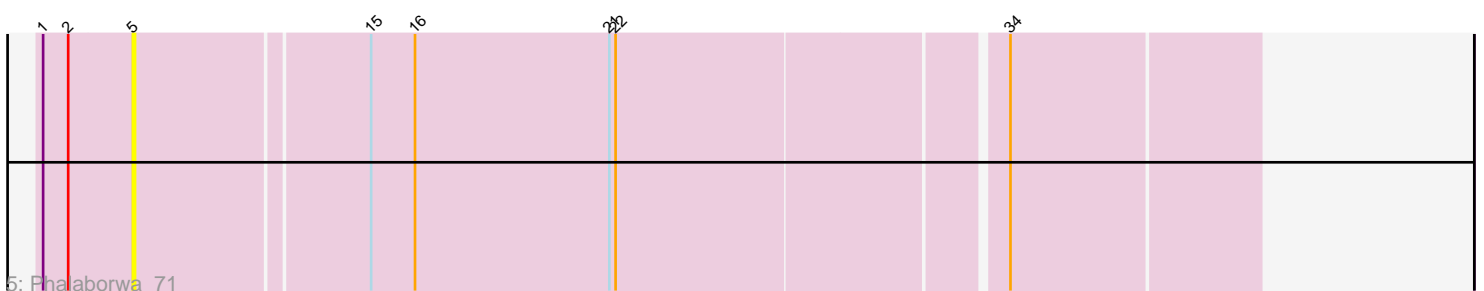
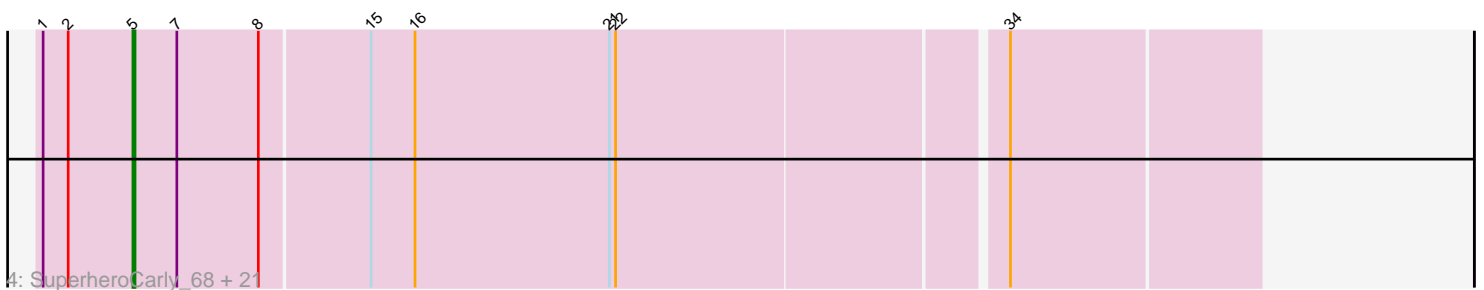
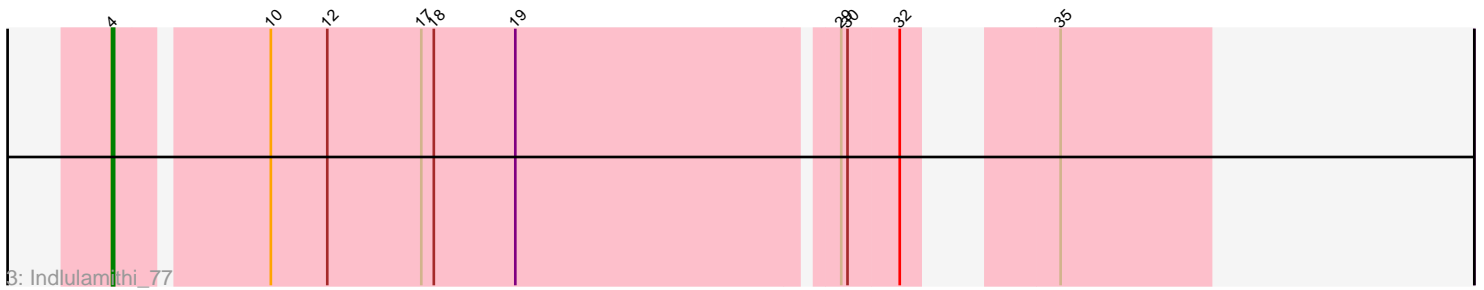
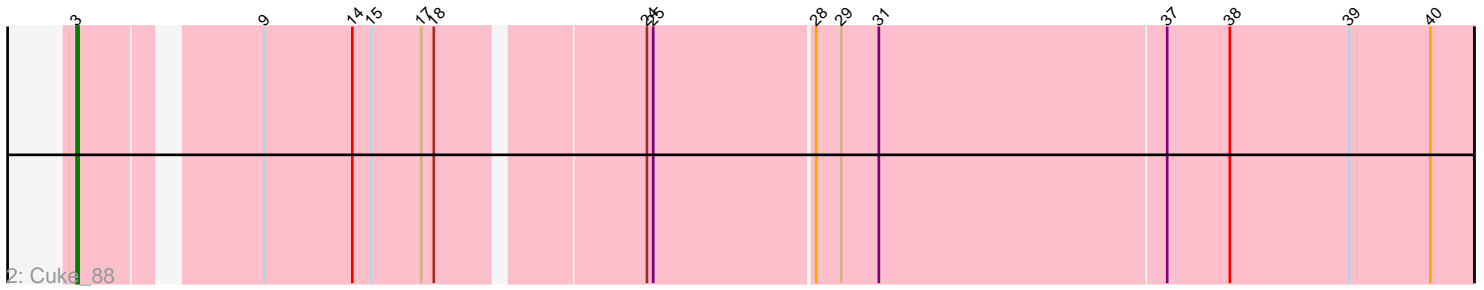
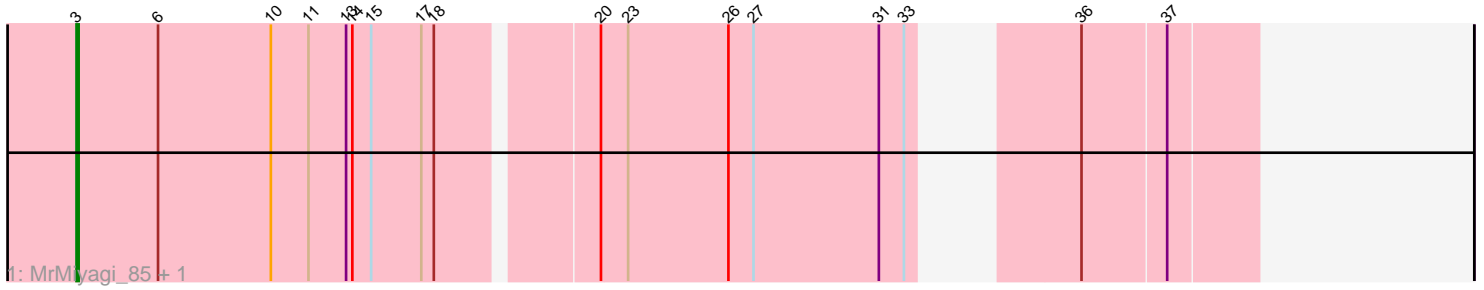


Pham 309095



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 309095 Report

This analysis was run 06/27/26 on database version 652.

Pham number 309095 has 27 members, 1 are drafts.

Phages represented in each track:

- Track 1 : MrMiyagi\_85, Fowlmouth\_87
- Track 2 : Cuke\_88
- Track 3 : Indlulamithi\_77
- Track 4 : SuperheroCarly\_68, Helpful\_71, Visconti\_69, SirHarley\_70, Penelope2018\_68, Gumball\_67, Prager\_68, Adjutor\_66, KandZ\_66, Nova\_67, PLOT\_67, Troll4\_67, Erk16\_67, WaldoWhy\_70, Butterscotch\_66, Giuseppe\_69, Chill\_70, Thoth\_68, BigMama\_66, Mopey\_69, PBI1\_64, Delton\_68
- Track 5 : Phalaborwa\_71

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

The start number called the most often in the published annotations is 5, it was called in 22 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adjutor\_66, BigMama\_66, Butterscotch\_66, Chill\_70, Delton\_68, Erk16\_67, Giuseppe\_69, Gumball\_67, Helpful\_71, KandZ\_66, Mopey\_69, Nova\_67, PBI1\_64, PLOT\_67, Penelope2018\_68, Phalaborwa\_71, Prager\_68, SirHarley\_70, SuperheroCarly\_68, Thoth\_68, Troll4\_67, Visconti\_69, WaldoWhy\_70,

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

- 

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

- Cuke\_88, Fowlmouth\_87, Indlulamithi\_77, MrMiyagi\_85,

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

Start 3:

- Found in 3 of 27 ( 11.1% ) of genes in pham
- Manual Annotations of this start: 3 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cuke\_88 (AC), Fowlmouth\_87 (AC), MrMiyagi\_85 (AC),

Start 4:

- Found in 1 of 27 ( 3.7% ) of genes in pham
- Manual Annotations of this start: 1 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Indlulamithi\_77 (AC),

Start 5:

- Found in 23 of 27 ( 85.2% ) of genes in pham
- Manual Annotations of this start: 22 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adjutor\_66 (D1), BigMama\_66 (D1), Butterscotch\_66 (D1), Chill\_70 (D1), Delton\_68 (D1), Erk16\_67 (D1), Giuseppe\_69 (D1), Gumball\_67 (D1), Helpful\_71 (D1), KandZ\_66 (D1), Mopey\_69 (D1), Nova\_67 (D1), PBI1\_64 (D1), PLOT\_67 (D1), Penelope2018\_68 (D1), Phalaborwa\_71 (D1), Prager\_68 (D1), SirHarley\_70 (D1), SuperheroCarly\_68 (D1), Thoth\_68 (D1), Troll4\_67 (D1), Visconti\_69 (D1), WaldoWhy\_70 (D1),

**Summary by clusters:**

There are 2 clusters represented in this pham: AC, D1,

Info for manual annotations of cluster AC:

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

Info for manual annotations of cluster D1:

- Start number 5 was manually annotated 22 times for cluster D1.

**Gene Information:**

Gene: Adjutor\_66 Start: 53003, Stop: 53524, Start Num: 5

Candidate Starts for Adjutor\_66:

(1, 52961), (2, 52973), (Start: 5 @53003 has 22 MA's), (7, 53024), (8, 53063), (15, 53114), (16, 53135), (21, 53228), (22, 53231), (34, 53408),

Gene: BigMama\_66 Start: 53076, Stop: 53597, Start Num: 5

Candidate Starts for BigMama\_66:

(1, 53034), (2, 53046), (Start: 5 @53076 has 22 MA's), (7, 53097), (8, 53136), (15, 53187), (16, 53208), (21, 53301), (22, 53304), (34, 53481),

Gene: Butterscotch\_66 Start: 53054, Stop: 53575, Start Num: 5

Candidate Starts for Butterscotch\_66:

(1, 53012), (2, 53024), (Start: 5 @53054 has 22 MA's), (7, 53075), (8, 53114), (15, 53165), (16, 53186), (21, 53279), (22, 53282), (34, 53459),

Gene: Chill\_70 Start: 53087, Stop: 53611, Start Num: 5

Candidate Starts for Chill\_70:

(1, 53045), (2, 53057), (Start: 5 @53087 has 22 MA's), (7, 53108), (8, 53147), (15, 53201), (16, 53222), (21, 53315), (22, 53318), (34, 53495),

Gene: Cuke\_88 Start: 52914, Stop: 53546, Start Num: 3

Candidate Starts for Cuke\_88:

(Start: 3 @52914 has 3 MA's), (9, 52986), (14, 53028), (15, 53037), (17, 53061), (18, 53067), (24, 53157), (25, 53160), (28, 53235), (29, 53247), (31, 53265), (37, 53400), (38, 53430), (39, 53487), (40, 53526),

Gene: Delton\_68 Start: 53452, Stop: 53973, Start Num: 5

Candidate Starts for Delton\_68:

(1, 53410), (2, 53422), (Start: 5 @53452 has 22 MA's), (7, 53473), (8, 53512), (15, 53563), (16, 53584), (21, 53677), (22, 53680), (34, 53857),

Gene: Erk16\_67 Start: 53169, Stop: 53690, Start Num: 5

Candidate Starts for Erk16\_67:

(1, 53127), (2, 53139), (Start: 5 @53169 has 22 MA's), (7, 53190), (8, 53229), (15, 53280), (16, 53301), (21, 53394), (22, 53397), (34, 53574),

Gene: Fowlmouth\_87 Start: 55140, Stop: 55649, Start Num: 3

Candidate Starts for Fowlmouth\_87:

(Start: 3 @55140 has 3 MA's), (6, 55179), (10, 55233), (11, 55251), (13, 55269), (14, 55272), (15, 55281), (17, 55305), (18, 55311), (20, 55380), (23, 55392), (26, 55440), (27, 55452), (31, 55512), (33, 55524), (36, 55569), (37, 55608),

Gene: Giuseppe\_69 Start: 52981, Stop: 53502, Start Num: 5

Candidate Starts for Giuseppe\_69:

(1, 52939), (2, 52951), (Start: 5 @52981 has 22 MA's), (7, 53002), (8, 53041), (15, 53092), (16, 53113), (21, 53206), (22, 53209), (34, 53386),

Gene: Gumball\_67 Start: 53523, Stop: 54044, Start Num: 5

Candidate Starts for Gumball\_67:

(1, 53481), (2, 53493), (Start: 5 @53523 has 22 MA's), (7, 53544), (8, 53583), (15, 53634), (16, 53655), (21, 53748), (22, 53751), (34, 53928),

Gene: Helpful\_71 Start: 53363, Stop: 53884, Start Num: 5

Candidate Starts for Helpful\_71:

(1, 53321), (2, 53333), (Start: 5 @53363 has 22 MA's), (7, 53384), (8, 53423), (15, 53474), (16, 53495), (21, 53588), (22, 53591), (34, 53768),

Gene: Indlulamithi\_77 Start: 56102, Stop: 56575, Start Num: 4

Candidate Starts for Indlulamithi\_77:

(Start: 4 @56102 has 1 MA's), (10, 56168), (12, 56195), (17, 56240), (18, 56246), (19, 56285), (29, 56432), (30, 56435), (32, 56459), (35, 56504),

Gene: KandZ\_66 Start: 53198, Stop: 53719, Start Num: 5

Candidate Starts for KandZ\_66:

(1, 53156), (2, 53168), (Start: 5 @53198 has 22 MA's), (7, 53219), (8, 53258), (15, 53309), (16, 53330), (21, 53423), (22, 53426), (34, 53603),

Gene: Mopey\_69 Start: 53007, Stop: 53528, Start Num: 5

Candidate Starts for Mopey\_69:

(1, 52965), (2, 52977), (Start: 5 @53007 has 22 MA's), (7, 53028), (8, 53067), (15, 53118), (16, 53139), (21, 53232), (22, 53235), (34, 53412),

Gene: MrMiyagi\_85 Start: 55405, Stop: 55914, Start Num: 3

Candidate Starts for MrMiyagi\_85:

(Start: 3 @55405 has 3 MA's), (6, 55444), (10, 55498), (11, 55516), (13, 55534), (14, 55537), (15, 55546), (17, 55570), (18, 55576), (20, 55645), (23, 55657), (26, 55705), (27, 55717), (31, 55777), (33, 55789), (36, 55834), (37, 55873),

Gene: Nova\_67 Start: 53546, Stop: 54067, Start Num: 5

Candidate Starts for Nova\_67:

(1, 53504), (2, 53516), (Start: 5 @53546 has 22 MA's), (7, 53567), (8, 53606), (15, 53657), (16, 53678), (21, 53771), (22, 53774), (34, 53951),

Gene: PBI1\_64 Start: 52985, Stop: 53506, Start Num: 5

Candidate Starts for PBI1\_64:

(1, 52943), (2, 52955), (Start: 5 @52985 has 22 MA's), (7, 53006), (8, 53045), (15, 53096), (16, 53117), (21, 53210), (22, 53213), (34, 53390),

Gene: PLOT\_67 Start: 53007, Stop: 53528, Start Num: 5

Candidate Starts for PLOT\_67:

(1, 52965), (2, 52977), (Start: 5 @53007 has 22 MA's), (7, 53028), (8, 53067), (15, 53118), (16, 53139), (21, 53232), (22, 53235), (34, 53412),

Gene: Penelope2018\_68 Start: 53041, Stop: 53562, Start Num: 5

Candidate Starts for Penelope2018\_68:

(1, 52999), (2, 53011), (Start: 5 @53041 has 22 MA's), (7, 53062), (8, 53101), (15, 53152), (16, 53173), (21, 53266), (22, 53269), (34, 53446),

Gene: Phalaborwa\_71 Start: 53655, Stop: 54173, Start Num: 5

Candidate Starts for Phalaborwa\_71:

(1, 53613), (2, 53625), (Start: 5 @53655 has 22 MA's), (15, 53763), (16, 53784), (21, 53877), (22, 53880), (34, 54057),

Gene: Prager\_68 Start: 53101, Stop: 53622, Start Num: 5

Candidate Starts for Prager\_68:

(1, 53059), (2, 53071), (Start: 5 @53101 has 22 MA's), (7, 53122), (8, 53161), (15, 53212), (16, 53233), (21, 53326), (22, 53329), (34, 53506),

Gene: SirHarley\_70 Start: 53506, Stop: 54027, Start Num: 5

Candidate Starts for SirHarley\_70:

(1, 53464), (2, 53476), (Start: 5 @53506 has 22 MA's), (7, 53527), (8, 53566), (15, 53617), (16, 53638), (21, 53731), (22, 53734), (34, 53911),

Gene: SuperheroCarly\_68 Start: 53189, Stop: 53710, Start Num: 5

Candidate Starts for SuperheroCarly\_68:

(1, 53147), (2, 53159), (Start: 5 @53189 has 22 MA's), (7, 53210), (8, 53249), (15, 53300), (16, 53321), (21, 53414), (22, 53417), (34, 53594),

Gene: Thoth\_68 Start: 53095, Stop: 53616, Start Num: 5

Candidate Starts for Thoth\_68:

(1, 53053), (2, 53065), (Start: 5 @53095 has 22 MA's), (7, 53116), (8, 53155), (15, 53206), (16, 53227), (21, 53320), (22, 53323), (34, 53500),

Gene: Troll4\_67 Start: 53163, Stop: 53684, Start Num: 5

Candidate Starts for Troll4\_67:

(1, 53121), (2, 53133), (Start: 5 @53163 has 22 MA's), (7, 53184), (8, 53223), (15, 53274), (16, 53295), (21, 53388), (22, 53391), (34, 53568),

Gene: Visconti\_69 Start: 53071, Stop: 53592, Start Num: 5

Candidate Starts for Visconti\_69:

(1, 53029), (2, 53041), (Start: 5 @53071 has 22 MA's), (7, 53092), (8, 53131), (15, 53182), (16, 53203), (21, 53296), (22, 53299), (34, 53476),

Gene: WaldoWhy\_70 Start: 53087, Stop: 53611, Start Num: 5

Candidate Starts for WaldoWhy\_70:

(1, 53045), (2, 53057), (Start: 5 @53087 has 22 MA's), (7, 53108), (8, 53147), (15, 53201), (16, 53222), (21, 53315), (22, 53318), (34, 53495),