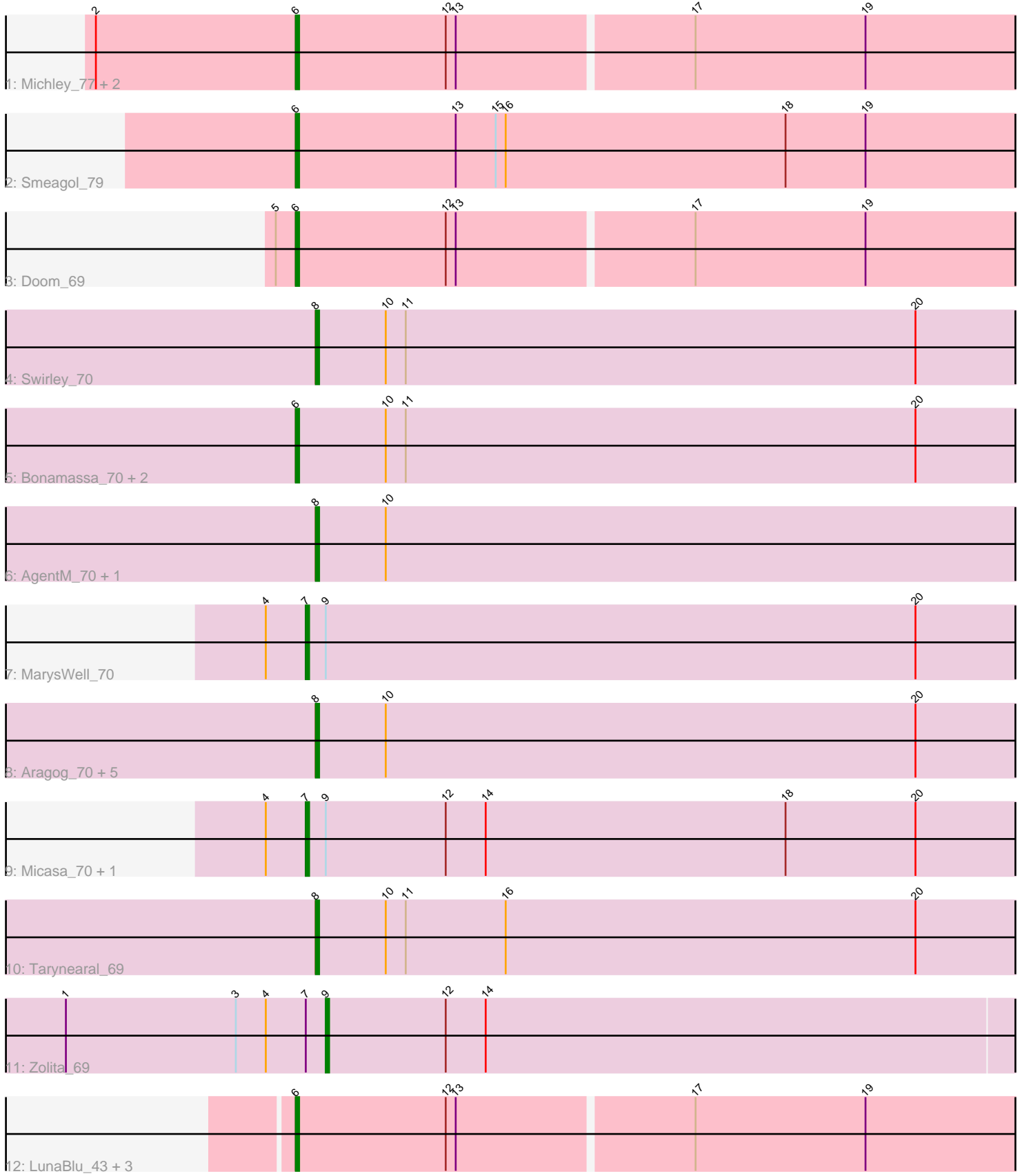


Pham 203241



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 203241 Report

This analysis was run 01/18/25 on database version 583.

Pham number 203241 has 26 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Michley\_77, Alvin\_74, ProMouse\_76
- Track 2 : Smeagol\_79
- Track 3 : Doom\_69
- Track 4 : Swirley\_70
- Track 5 : Bonamassa\_70, LittleCherry\_69, HuhtaEnerson15\_68
- Track 6 : AgentM\_70, Phlorence\_69
- Track 7 : MarysWell\_70
- Track 8 : Aragog\_70, Lev2\_71, ForGetIt\_71, Conspiracy\_71, Discoknowium\_68, PickleBack\_71
- Track 9 : Micasa\_70, Theia\_69
- Track 10 : Tarynearal\_69
- Track 11 : Zolita\_69
- Track 12 : LunaBlu\_43, Fruitloop\_38, Melissauren88\_39, Batiatus\_39

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

The start number called the most often in the published annotations is 6, it was called in 11 of the 25 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alvin\_74, Batiatus\_39, Bonamassa\_70, Doom\_69, Fruitloop\_38, HuhtaEnerson15\_68, LittleCherry\_69, LunaBlu\_43, Melissauren88\_39, Michley\_77, ProMouse\_76, Smeagol\_79,

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

- 

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

- AgentM\_70, Aragog\_70, Conspiracy\_71, Discoknowium\_68, ForGetIt\_71, Lev2\_71, MarysWell\_70, Micasa\_70, Phlorence\_69, PickleBack\_71, Swirley\_70, Tarynearal\_69, Theia\_69, Zolita\_69,

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

Start 6:

- Found in 12 of 26 ( 46.2% ) of genes in pham
- Manual Annotations of this start: 11 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alvin\_74 (A1), Batiatus\_39 (F1), Bonamassa\_70 (A5), Doom\_69 (A1), Fruitloop\_38 (F1), HuhtaEnerson15\_68 (A5), LittleCherry\_69 (A5), LunaBlu\_43 (F1), Melissauren88\_39 (F1), Michley\_77 (A1), ProMouse\_76 (A1), Smeagol\_79 (A1),

Start 7:

- Found in 4 of 26 ( 15.4% ) of genes in pham
- Manual Annotations of this start: 3 of 25
- Called 75.0% of time when present
- Phage (with cluster) where this start called: MarysWell\_70 (A5), Micasa\_70 (A5), Theia\_69 (A5),

Start 8:

- Found in 10 of 26 ( 38.5% ) of genes in pham
- Manual Annotations of this start: 10 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AgentM\_70 (A5), Aragog\_70 (A5), Conspiracy\_71 (A5), Discoknowium\_68 (A5), ForGetIt\_71 (A5), Lev2\_71 (A5), Phlorence\_69 (A5), PickleBack\_71 (A5), Swirley\_70 (A5), Tarynearal\_69 (A5),

Start 9:

- Found in 4 of 26 ( 15.4% ) of genes in pham
- Manual Annotations of this start: 1 of 25
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Zolita\_69 (A5),

**Summary by clusters:**

There are 3 clusters represented in this pham: A1, F1, A5,

Info for manual annotations of cluster A1:

- Start number 6 was manually annotated 4 times for cluster A1.

Info for manual annotations of cluster A5:

- Start number 6 was manually annotated 3 times for cluster A5.
- Start number 7 was manually annotated 3 times for cluster A5.
- Start number 8 was manually annotated 10 times for cluster A5.
- Start number 9 was manually annotated 1 time for cluster A5.

Info for manual annotations of cluster F1:

- Start number 6 was manually annotated 4 times for cluster F1.

**Gene Information:**

Gene: AgentM\_70 Start: 44113, Stop: 43817, Start Num: 8

Candidate Starts for AgentM\_70:

(Start: 8 @44113 has 10 MA's), (10, 44092),

Gene: Alvin\_74 Start: 46259, Stop: 45960, Start Num: 6  
Candidate Starts for Alvin\_74:  
(2, 46319), (Start: 6 @46259 has 11 MA's), (12, 46214), (13, 46211), (17, 46142), (19, 46091),

Gene: Aragog\_70 Start: 44131, Stop: 43835, Start Num: 8  
Candidate Starts for Aragog\_70:  
(Start: 8 @44131 has 10 MA's), (10, 44110), (20, 43951),

Gene: Batiatus\_39 Start: 31386, Stop: 31150, Start Num: 6  
Candidate Starts for Batiatus\_39:  
(Start: 6 @31386 has 11 MA's), (12, 31341), (13, 31338), (17, 31269), (19, 31218),

Gene: Bonamassa\_70 Start: 44301, Stop: 43999, Start Num: 6  
Candidate Starts for Bonamassa\_70:  
(Start: 6 @44301 has 11 MA's), (10, 44274), (11, 44268), (20, 44115),

Gene: Conspiracy\_71 Start: 44353, Stop: 44057, Start Num: 8  
Candidate Starts for Conspiracy\_71:  
(Start: 8 @44353 has 10 MA's), (10, 44332), (20, 44173),

Gene: Discoknowium\_68 Start: 43870, Stop: 43574, Start Num: 8  
Candidate Starts for Discoknowium\_68:  
(Start: 8 @43870 has 10 MA's), (10, 43849), (20, 43690),

Gene: Doom\_69 Start: 45750, Stop: 45451, Start Num: 6  
Candidate Starts for Doom\_69:  
(5, 45756), (Start: 6 @45750 has 11 MA's), (12, 45705), (13, 45702), (17, 45633), (19, 45582),

Gene: ForGetIt\_71 Start: 44378, Stop: 44082, Start Num: 8  
Candidate Starts for ForGetIt\_71:  
(Start: 8 @44378 has 10 MA's), (10, 44357), (20, 44198),

Gene: Fruitloop\_38 Start: 31549, Stop: 31313, Start Num: 6  
Candidate Starts for Fruitloop\_38:  
(Start: 6 @31549 has 11 MA's), (12, 31504), (13, 31501), (17, 31432), (19, 31381),

Gene: HuhtaEnerson15\_68 Start: 43954, Stop: 43652, Start Num: 6  
Candidate Starts for HuhtaEnerson15\_68:  
(Start: 6 @43954 has 11 MA's), (10, 43927), (11, 43921), (20, 43768),

Gene: Lev2\_71 Start: 44266, Stop: 43970, Start Num: 8  
Candidate Starts for Lev2\_71:  
(Start: 8 @44266 has 10 MA's), (10, 44245), (20, 44086),

Gene: LittleCherry\_69 Start: 43824, Stop: 43522, Start Num: 6  
Candidate Starts for LittleCherry\_69:  
(Start: 6 @43824 has 11 MA's), (10, 43797), (11, 43791), (20, 43638),

Gene: LunaBlu\_43 Start: 32418, Stop: 32182, Start Num: 6  
Candidate Starts for LunaBlu\_43:  
(Start: 6 @32418 has 11 MA's), (12, 32373), (13, 32370), (17, 32301), (19, 32250),

Gene: MarysWell\_70 Start: 44501, Stop: 44202, Start Num: 7  
Candidate Starts for MarysWell\_70:  
(4, 44513), (Start: 7 @44501 has 3 MA's), (Start: 9 @44495 has 1 MA's), (20, 44318),

Gene: Melissauren88\_39 Start: 31545, Stop: 31309, Start Num: 6  
Candidate Starts for Melissauren88\_39:  
(Start: 6 @31545 has 11 MA's), (12, 31500), (13, 31497), (17, 31428), (19, 31377),

Gene: Micasa\_70 Start: 44223, Stop: 43924, Start Num: 7  
Candidate Starts for Micasa\_70:  
(4, 44235), (Start: 7 @44223 has 3 MA's), (Start: 9 @44217 has 1 MA's), (12, 44181), (14, 44169), (18, 44079), (20, 44040),

Gene: Michley\_77 Start: 46813, Stop: 46514, Start Num: 6  
Candidate Starts for Michley\_77:  
(2, 46873), (Start: 6 @46813 has 11 MA's), (12, 46768), (13, 46765), (17, 46696), (19, 46645),

Gene: Phlorence\_69 Start: 44013, Stop: 43717, Start Num: 8  
Candidate Starts for Phlorence\_69:  
(Start: 8 @44013 has 10 MA's), (10, 43992),

Gene: PickleBack\_71 Start: 44188, Stop: 43892, Start Num: 8  
Candidate Starts for PickleBack\_71:  
(Start: 8 @44188 has 10 MA's), (10, 44167), (20, 44008),

Gene: ProMouse\_76 Start: 46599, Stop: 46300, Start Num: 6  
Candidate Starts for ProMouse\_76:  
(2, 46659), (Start: 6 @46599 has 11 MA's), (12, 46554), (13, 46551), (17, 46482), (19, 46431),

Gene: Smeagol\_79 Start: 49291, Stop: 48989, Start Num: 6  
Candidate Starts for Smeagol\_79:  
(Start: 6 @49291 has 11 MA's), (13, 49243), (15, 49231), (16, 49228), (18, 49144), (19, 49120),

Gene: Swirley\_70 Start: 44157, Stop: 43861, Start Num: 8  
Candidate Starts for Swirley\_70:  
(Start: 8 @44157 has 10 MA's), (10, 44136), (11, 44130), (20, 43977),

Gene: Tarynearal\_69 Start: 43993, Stop: 43697, Start Num: 8  
Candidate Starts for Tarynearal\_69:  
(Start: 8 @43993 has 10 MA's), (10, 43972), (11, 43966), (16, 43936), (20, 43813),

Gene: Theia\_69 Start: 44485, Stop: 44186, Start Num: 7  
Candidate Starts for Theia\_69:  
(4, 44497), (Start: 7 @44485 has 3 MA's), (Start: 9 @44479 has 1 MA's), (12, 44443), (14, 44431), (18, 44341), (20, 44302),

Gene: Zolita\_69 Start: 44339, Stop: 44049, Start Num: 9  
Candidate Starts for Zolita\_69:  
(1, 44417), (3, 44366), (4, 44357), (Start: 7 @44345 has 3 MA's), (Start: 9 @44339 has 1 MA's), (12, 44303), (14, 44291),