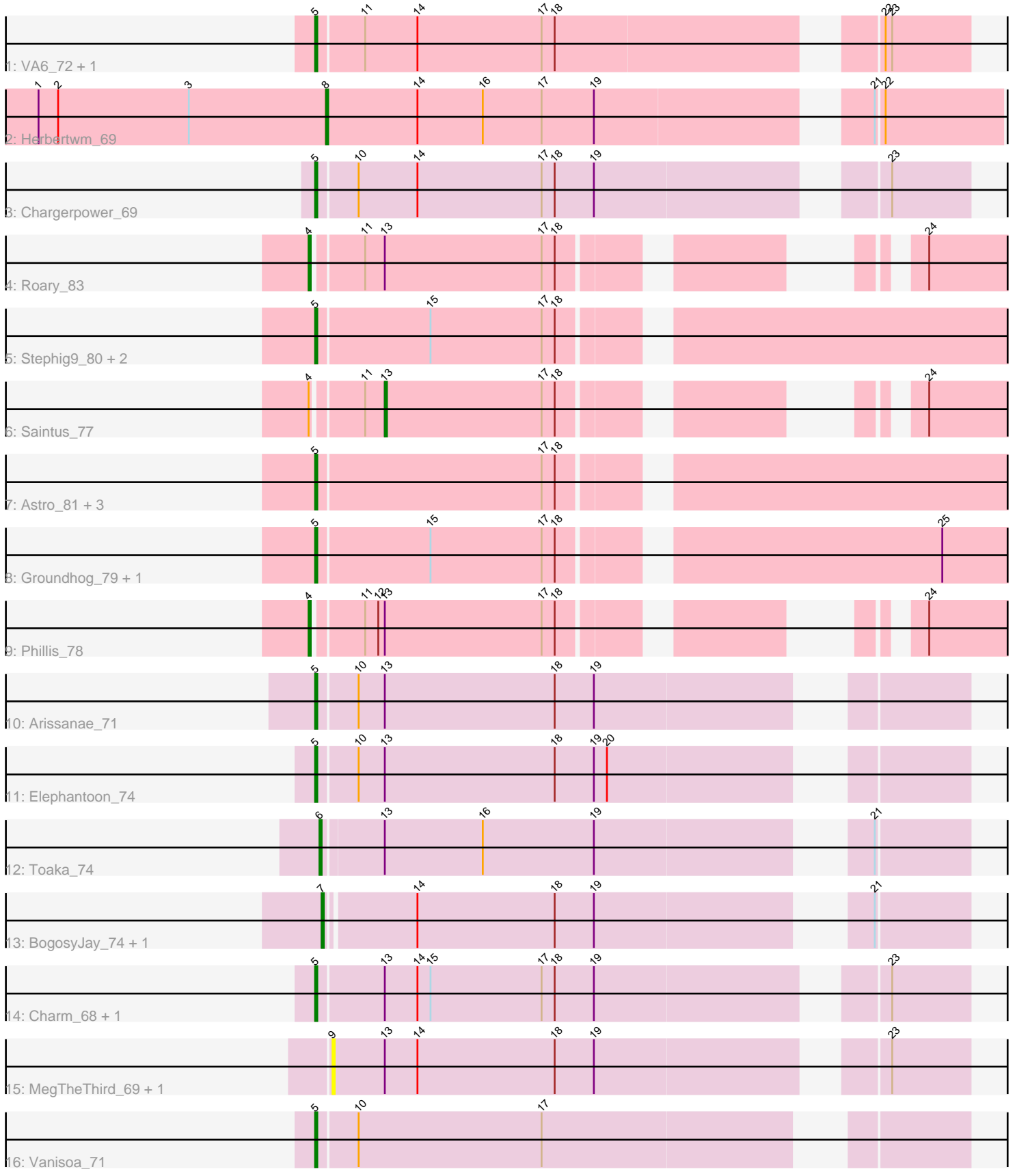


Pham 303617



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 303617 Report

This analysis was run 06/08/26 on database version 649.

Pham number 303617 has 26 members, 4 are drafts.

Phages represented in each track:

- Track 1 : VA6\_72, AN3\_74
- Track 2 : Herbertwm\_69
- Track 3 : Chargerpower\_69
- Track 4 : Roary\_83
- Track 5 : Stephig9\_80, NearlyHeadless\_82, Danforth\_82
- Track 6 : Saintus\_77
- Track 7 : Astro\_81, Caitlin\_79, Expelliarmus\_78, Dixon\_80
- Track 8 : Groundhog\_79, Smeadley\_81
- Track 9 : Phillis\_78
- Track 10 : Arissanae\_71
- Track 11 : Elephantoon\_74
- Track 12 : Toaka\_74
- Track 13 : BogosyJay\_74, Maminaiaina\_74
- Track 14 : Charm\_68, Klodlith\_69
- Track 15 : MegTheThird\_69, Celestiallunch\_69
- Track 16 : Vanisoa\_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 15 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AN3\_74, Arissanae\_71, Astro\_81, Caitlin\_79, Chargerpower\_69, Charm\_68, Danforth\_82, Dixon\_80, Elephantoon\_74, Expelliarmus\_78, Groundhog\_79, Klodlith\_69, NearlyHeadless\_82, Smeadley\_81, Stephig9\_80, VA6\_72, Vanisoa\_71,

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

- 

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

- BogosyJay\_74, Celestiallunch\_69, Herbertwm\_69, Maminaiaina\_74, MegTheThird\_69, Phillis\_78, Roary\_83, Saintus\_77, Toaka\_74,

## Summary by start number:

### Start 4:

- Found in 3 of 26 ( 11.5% ) of genes in pham
- Manual Annotations of this start: 2 of 22
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Phillis\_78 (A8), Roary\_83 (A8),

### Start 5:

- Found in 17 of 26 ( 65.4% ) of genes in pham
- Manual Annotations of this start: 15 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AN3\_74 (A2), Arissanae\_71 (A9), Astro\_81 (A8), Caitlin\_79 (A8), Chargerpower\_69 (A22), Charm\_68 (A9), Danforth\_82 (A8), Dixon\_80 (A8), Elephantoon\_74 (A9), Expelliarmus\_78 (A8), Groundhog\_79 (A8), Klodlith\_69 (A9), NearlyHeadless\_82 (A8), Smeadley\_81 (A8), Stephig9\_80 (A8), VA6\_72 (A2), Vanisoa\_71 (A9),

### Start 6:

- Found in 1 of 26 ( 3.8% ) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Toaka\_74 (A9),

### Start 7:

- Found in 2 of 26 ( 7.7% ) of genes in pham
- Manual Annotations of this start: 2 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BogosyJay\_74 (A9), Maminiaina\_74 (A9),

### Start 8:

- Found in 1 of 26 ( 3.8% ) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Herbertwm\_69 (A2),

### Start 9:

- Found in 2 of 26 ( 7.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Celestiallunch\_69 (A9), MegTheThird\_69 (A9),

### Start 13:

- Found in 10 of 26 ( 38.5% ) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Saintus\_77 (A8),

## Summary by clusters:

There are 4 clusters represented in this pham: A9, A8, A22, A2,

Info for manual annotations of cluster A2:

- Start number 5 was manually annotated 2 times for cluster A2.
- Start number 8 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster A22:

- Start number 5 was manually annotated 1 time for cluster A22.

Info for manual annotations of cluster A8:

- Start number 4 was manually annotated 2 times for cluster A8.
- Start number 5 was manually annotated 8 times for cluster A8.
- Start number 13 was manually annotated 1 time for cluster A8.

Info for manual annotations of cluster A9:

- Start number 5 was manually annotated 4 times for cluster A9.
- Start number 6 was manually annotated 1 time for cluster A9.
- Start number 7 was manually annotated 2 times for cluster A9.

**Gene Information:**

Gene: AN3\_74 Start: 42283, Stop: 42008, Start Num: 5

Candidate Starts for AN3\_74:

(Start: 5 @42283 has 15 MA's), (11, 42262), (14, 42238), (17, 42181), (18, 42175), (22, 42046), (23, 42043),

Gene: Arissanae\_71 Start: 43153, Stop: 42884, Start Num: 5

Candidate Starts for Arissanae\_71:

(Start: 5 @43153 has 15 MA's), (10, 43135), (Start: 13 @43123 has 1 MA's), (18, 43045), (19, 43027),

Gene: Astro\_81 Start: 44417, Stop: 44070, Start Num: 5

Candidate Starts for Astro\_81:

(Start: 5 @44417 has 15 MA's), (17, 44315), (18, 44309),

Gene: BogosyJay\_74 Start: 43112, Stop: 42849, Start Num: 7

Candidate Starts for BogosyJay\_74:

(Start: 7 @43112 has 2 MA's), (14, 43073), (18, 43010), (19, 42992), (21, 42890),

Gene: Caitlin\_79 Start: 44109, Stop: 43762, Start Num: 5

Candidate Starts for Caitlin\_79:

(Start: 5 @44109 has 15 MA's), (17, 44007), (18, 44001),

Gene: Celestiallunch\_69 Start: 42045, Stop: 41776, Start Num: 9

Candidate Starts for Celestiallunch\_69:

(9, 42045), (Start: 13 @42021 has 1 MA's), (14, 42006), (18, 41943), (19, 41925), (23, 41811),

Gene: Chargerpower\_69 Start: 41165, Stop: 40890, Start Num: 5

Candidate Starts for Chargerpower\_69:

(Start: 5 @41165 has 15 MA's), (10, 41147), (14, 41120), (17, 41063), (18, 41057), (19, 41039), (23, 40925),

Gene: Charm\_68 Start: 41975, Stop: 41700, Start Num: 5

Candidate Starts for Charm\_68:

(Start: 5 @41975 has 15 MA's), (Start: 13 @41945 has 1 MA's), (14, 41930), (15, 41924), (17, 41873), (18, 41867), (19, 41849), (23, 41735),

Gene: Danforth\_82 Start: 44494, Stop: 44147, Start Num: 5

Candidate Starts for Danforth\_82:

(Start: 5 @44494 has 15 MA's), (15, 44443), (17, 44392), (18, 44386),

Gene: Dixon\_80 Start: 43976, Stop: 43629, Start Num: 5

Candidate Starts for Dixon\_80:

(Start: 5 @43976 has 15 MA's), (17, 43874), (18, 43868),

Gene: Elephantoon\_74 Start: 42749, Stop: 42480, Start Num: 5

Candidate Starts for Elephantoon\_74:

(Start: 5 @42749 has 15 MA's), (10, 42731), (Start: 13 @42719 has 1 MA's), (18, 42641), (19, 42623), (20, 42617),

Gene: Expelliarmus\_78 Start: 44190, Stop: 43843, Start Num: 5

Candidate Starts for Expelliarmus\_78:

(Start: 5 @44190 has 15 MA's), (17, 44088), (18, 44082),

Gene: Groundhog\_79 Start: 44246, Stop: 43899, Start Num: 5

Candidate Starts for Groundhog\_79:

(Start: 5 @44246 has 15 MA's), (15, 44195), (17, 44144), (18, 44138), (25, 43979),

Gene: Herbertwm\_69 Start: 43036, Stop: 42749, Start Num: 8

Candidate Starts for Herbertwm\_69:

(1, 43168), (2, 43159), (3, 43099), (Start: 8 @43036 has 1 MA's), (14, 42994), (16, 42964), (17, 42937), (19, 42913), (21, 42805), (22, 42802),

Gene: Klodlith\_69 Start: 42042, Stop: 41767, Start Num: 5

Candidate Starts for Klodlith\_69:

(Start: 5 @42042 has 15 MA's), (Start: 13 @42012 has 1 MA's), (14, 41997), (15, 41991), (17, 41940), (18, 41934), (19, 41916), (23, 41802),

Gene: Maminiaina\_74 Start: 43094, Stop: 42831, Start Num: 7

Candidate Starts for Maminiaina\_74:

(Start: 7 @43094 has 2 MA's), (14, 43055), (18, 42992), (19, 42974), (21, 42872),

Gene: MegTheThird\_69 Start: 42044, Stop: 41775, Start Num: 9

Candidate Starts for MegTheThird\_69:

(9, 42044), (Start: 13 @42020 has 1 MA's), (14, 42005), (18, 41942), (19, 41924), (23, 41810),

Gene: NearlyHeadless\_82 Start: 44260, Stop: 43913, Start Num: 5

Candidate Starts for NearlyHeadless\_82:

(Start: 5 @44260 has 15 MA's), (15, 44209), (17, 44158), (18, 44152),

Gene: Phillis\_78 Start: 43167, Stop: 42865, Start Num: 4

Candidate Starts for Phillis\_78:

(Start: 4 @43167 has 2 MA's), (11, 43146), (12, 43140), (Start: 13 @43137 has 1 MA's), (17, 43065), (18, 43059), (24, 42951),

Gene: Roary\_83 Start: 44451, Stop: 44149, Start Num: 4

Candidate Starts for Roary\_83:

(Start: 4 @44451 has 2 MA's), (11, 44430), (Start: 13 @44421 has 1 MA's), (17, 44349), (18, 44343), (24, 44235),

Gene: Saintus\_77 Start: 41069, Stop: 40797, Start Num: 13

Candidate Starts for Saintus\_77:

(Start: 4 @41099 has 2 MA's), (11, 41078), (Start: 13 @41069 has 1 MA's), (17, 40997), (18, 40991), (24, 40883),

Gene: Smeadley\_81 Start: 44312, Stop: 43965, Start Num: 5

Candidate Starts for Smeadley\_81:

(Start: 5 @44312 has 15 MA's), (15, 44261), (17, 44210), (18, 44204), (25, 44045),

Gene: Stephig9\_80 Start: 44251, Stop: 43904, Start Num: 5

Candidate Starts for Stephig9\_80:

(Start: 5 @44251 has 15 MA's), (15, 44200), (17, 44149), (18, 44143),

Gene: Toaka\_74 Start: 43128, Stop: 42862, Start Num: 6

Candidate Starts for Toaka\_74:

(Start: 6 @43128 has 1 MA's), (Start: 13 @43101 has 1 MA's), (16, 43056), (19, 43005), (21, 42903),

Gene: VA6\_72 Start: 43461, Stop: 43186, Start Num: 5

Candidate Starts for VA6\_72:

(Start: 5 @43461 has 15 MA's), (11, 43440), (14, 43416), (17, 43359), (18, 43353), (22, 43224), (23, 43221),

Gene: Vanisoa\_71 Start: 43466, Stop: 43197, Start Num: 5

Candidate Starts for Vanisoa\_71:

(Start: 5 @43466 has 15 MA's), (10, 43448), (17, 43364),