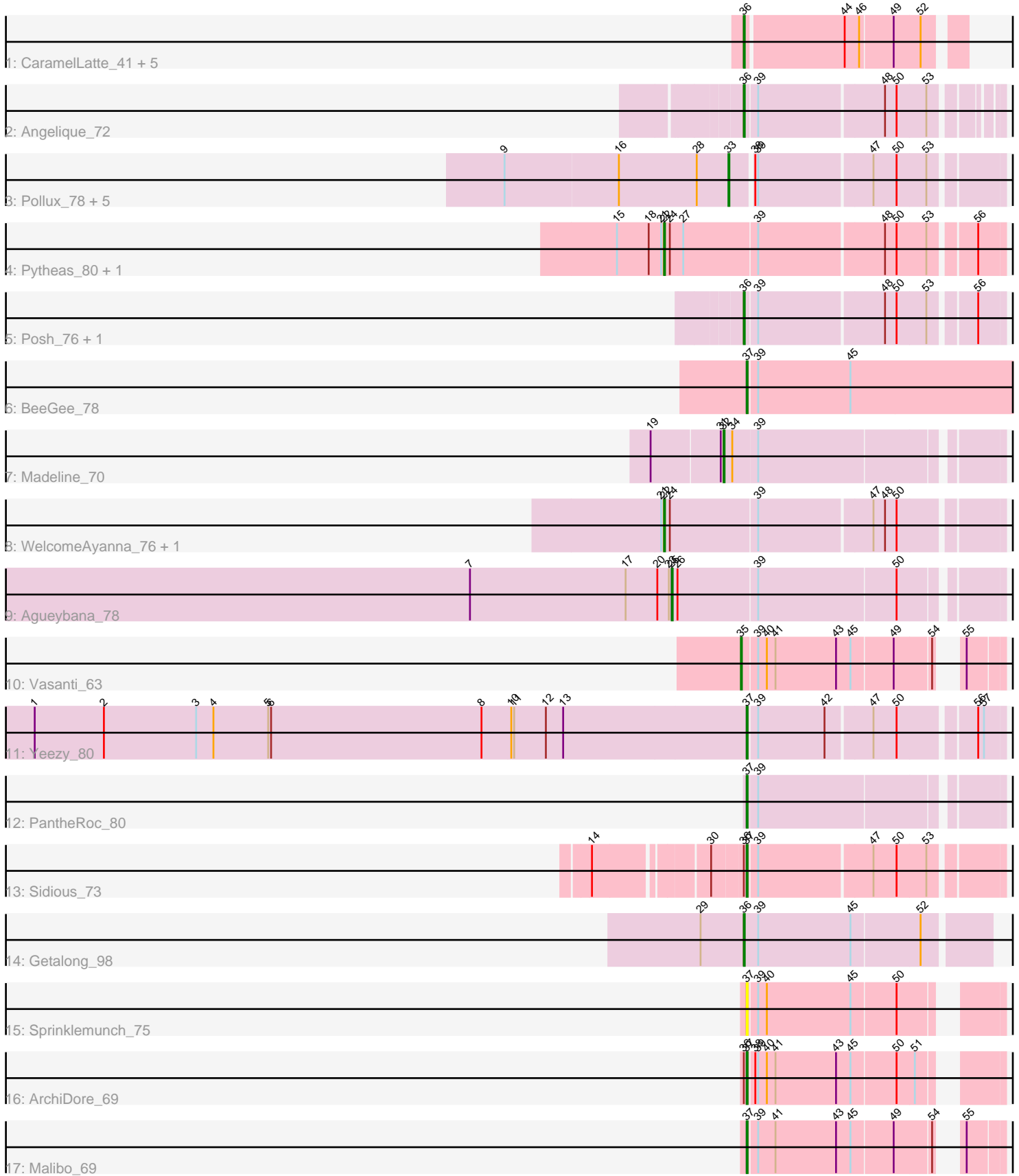


Pham 309036



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 309036 Report

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

Pham number 309036 has 30 members, 4 are drafts.

Phages represented in each track:

- Track 1 : CaramellLatte\_41, CanesSauce\_41, Tolls\_43, Yarn\_39, AndPeggy\_39, ChocoMunchkin\_41
- Track 2 : Angelique\_72
- Track 3 : Pollux\_78, Floral\_76, Marteena\_74, Lilas\_72, EnalisNailo\_71, EMSquaredA\_75
- Track 4 : Pytheas\_80, Jablanski\_79
- Track 5 : Posh\_76, Wrigley\_78
- Track 6 : BeeGee\_78
- Track 7 : Madeline\_70
- Track 8 : WelcomeAyanna\_76, ThankyouJordi\_76
- Track 9 : Agueybana\_78
- Track 10 : Vasanti\_63
- Track 11 : Yeezy\_80
- Track 12 : PantheRoc\_80
- Track 13 : Sidious\_73
- Track 14 : Getalong\_98
- Track 15 : Sprinklemunch\_75
- Track 16 : ArchiDore\_69
- Track 17 : Malibo\_69

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

The start number called the most often in the published annotations is 36, it was called in 7 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AndPeggy\_39, Angelique\_72, CanesSauce\_41, CaramellLatte\_41, ChocoMunchkin\_41, Getalong\_98, Posh\_76, Tolls\_43, Wrigley\_78, Yarn\_39,

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

- ArchiDore\_69, Sidious\_73,

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

- Agueybana\_78, BeeGee\_78, EMSquaredA\_75, EnalisNailo\_71, Floral\_76, Jablanski\_79, Lilas\_72, Madeline\_70, Malibo\_69, Marteena\_74, PantheRoc\_80, Pollux\_78, Pytheas\_80, Sprinklemunch\_75, ThankyouJordi\_76, Vasanti\_63, WelcomeAyanna\_76, Yeezy\_80,

### Summary by start number:

#### Start 22:

- Found in 4 of 30 ( 13.3% ) of genes in pham
- Manual Annotations of this start: 4 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jablanski\_79 (CY3), Pytheas\_80 (CY3), ThankyouJordi\_76 (CZ1), WelcomeAyanna\_76 (CZ1),

#### Start 25:

- Found in 1 of 30 ( 3.3% ) 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: Agueybana\_78 (CZ1),

#### Start 32:

- Found in 1 of 30 ( 3.3% ) 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: Madeline\_70 (CZ1),

#### Start 33:

- Found in 6 of 30 ( 20.0% ) of genes in pham
- Manual Annotations of this start: 6 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EMSquaredA\_75 (CY1), EnalisNailo\_71 (CY1), Floral\_76 (CY1), Lilas\_72 (CY1), Marteena\_74 (CY1), Pollux\_78 (CY1),

#### Start 35:

- Found in 1 of 30 ( 3.3% ) 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: Vasanti\_63 (CZ2),

#### Start 36:

- Found in 12 of 30 ( 40.0% ) of genes in pham
- Manual Annotations of this start: 7 of 26
- Called 83.3% of time when present
- Phage (with cluster) where this start called: AndPeggy\_39 (CT), Angelique\_72 (CY1), CanesSauce\_41 (CT), CaramelLatte\_41 (CT), ChocoMunchkin\_41 (CT), Getalong\_98 (DN1), Posh\_76 (CY4), Tolls\_43 (CT), Wrigley\_78 (CY4), Yarn\_39 (CT),

#### Start 37:

- Found in 7 of 30 ( 23.3% ) of genes in pham
- Manual Annotations of this start: 6 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ArchiDore\_69 (DW), BeeGee\_78 (CY5), Malibo\_69 (DW), PantheRoc\_80 (CZ3), Sidious\_73 (CZ7), Sprinklemunch\_75 (DW),

Yeezy\_80 (CZ3),

### **Summary by clusters:**

There are 11 clusters represented in this pham: CY3, CY1, CY5, CY4, CZ2, CZ3, CZ1, CZ7, DN1, DW, CT,

Info for manual annotations of cluster CT:

- Start number 36 was manually annotated 3 times for cluster CT.

Info for manual annotations of cluster CY1:

- Start number 33 was manually annotated 6 times for cluster CY1.
- Start number 36 was manually annotated 1 time for cluster CY1.

Info for manual annotations of cluster CY3:

- Start number 22 was manually annotated 2 times for cluster CY3.

Info for manual annotations of cluster CY4:

- Start number 36 was manually annotated 2 times for cluster CY4.

Info for manual annotations of cluster CY5:

- Start number 37 was manually annotated 1 time for cluster CY5.

Info for manual annotations of cluster CZ1:

- Start number 22 was manually annotated 2 times for cluster CZ1.
- Start number 25 was manually annotated 1 time for cluster CZ1.
- Start number 32 was manually annotated 1 time for cluster CZ1.

Info for manual annotations of cluster CZ2:

- Start number 35 was manually annotated 1 time for cluster CZ2.

Info for manual annotations of cluster CZ3:

- Start number 37 was manually annotated 2 times for cluster CZ3.

Info for manual annotations of cluster CZ7:

- Start number 37 was manually annotated 1 time for cluster CZ7.

Info for manual annotations of cluster DN1:

- Start number 36 was manually annotated 1 time for cluster DN1.

Info for manual annotations of cluster DW:

- Start number 37 was manually annotated 2 times for cluster DW.

### **Gene Information:**

Gene: Agueybana\_78 Start: 49983, Stop: 50303, Start Num: 25

Candidate Starts for Agueybana\_78:

(7, 49773), (17, 49935), (20, 49968), (23, 49980), (Start: 25 @49983 has 1 MA's), (26, 49989), (39, 50070), (50, 50211),

Gene: AndPeggy\_39 Start: 29751, Stop: 29542, Start Num: 36

Candidate Starts for AndPeggy\_39:

(Start: 36 @29751 has 7 MA's), (44, 29652), (46, 29637), (49, 29604), (52, 29577),

Gene: Angelique\_72 Start: 49148, Stop: 49384, Start Num: 36

Candidate Starts for Angelique\_72:

(Start: 36 @49148 has 7 MA's), (39, 49160), (48, 49286), (50, 49298), (53, 49328),

Gene: ArchiDore\_69 Start: 47950, Stop: 48180, Start Num: 37

Candidate Starts for ArchiDore\_69:

(Start: 36 @47947 has 7 MA's), (Start: 37 @47950 has 6 MA's), (38, 47956), (39, 47959), (40, 47968), (41, 47977), (43, 48040), (45, 48055), (50, 48100), (51, 48118),

Gene: BeeGee\_78 Start: 49466, Stop: 49747, Start Num: 37

Candidate Starts for BeeGee\_78:

(Start: 37 @49466 has 6 MA's), (39, 49475), (45, 49571),

Gene: CanesSauce\_41 Start: 29924, Stop: 29715, Start Num: 36

Candidate Starts for CanesSauce\_41:

(Start: 36 @29924 has 7 MA's), (44, 29825), (46, 29810), (49, 29777), (52, 29750),

Gene: CaramellLatte\_41 Start: 29924, Stop: 29715, Start Num: 36

Candidate Starts for CaramellLatte\_41:

(Start: 36 @29924 has 7 MA's), (44, 29825), (46, 29810), (49, 29777), (52, 29750),

Gene: ChocoMunchkin\_41 Start: 29924, Stop: 29715, Start Num: 36

Candidate Starts for ChocoMunchkin\_41:

(Start: 36 @29924 has 7 MA's), (44, 29825), (46, 29810), (49, 29777), (52, 29750),

Gene: EMSquaredA\_75 Start: 48515, Stop: 48775, Start Num: 33

Candidate Starts for EMSquaredA\_75:

(9, 48284), (16, 48401), (28, 48482), (Start: 33 @48515 has 6 MA's), (38, 48536), (39, 48539), (47, 48653), (50, 48677), (53, 48707),

Gene: EnalisNailo\_71 Start: 49007, Stop: 49267, Start Num: 33

Candidate Starts for EnalisNailo\_71:

(9, 48776), (16, 48893), (28, 48974), (Start: 33 @49007 has 6 MA's), (38, 49028), (39, 49031), (47, 49145), (50, 49169), (53, 49199),

Gene: Floral\_76 Start: 50472, Stop: 50732, Start Num: 33

Candidate Starts for Floral\_76:

(9, 50241), (16, 50358), (28, 50439), (Start: 33 @50472 has 6 MA's), (38, 50493), (39, 50496), (47, 50610), (50, 50634), (53, 50664),

Gene: Getalong\_98 Start: 53180, Stop: 53425, Start Num: 36

Candidate Starts for Getalong\_98:

(29, 53135), (Start: 36 @53180 has 7 MA's), (39, 53195), (45, 53291), (52, 53360),

Gene: Jablanski\_79 Start: 51879, Stop: 52208, Start Num: 22

Candidate Starts for Jablanski\_79:

(15, 51831), (18, 51864), (21, 51876), (Start: 22 @51879 has 4 MA's), (24, 51885), (27, 51897), (39, 51972), (48, 52098), (50, 52110), (53, 52140), (56, 52182),

Gene: Lilas\_72 Start: 50545, Stop: 50805, Start Num: 33

Candidate Starts for Lilas\_72:

(9, 50314), (16, 50431), (28, 50512), (Start: 33 @50545 has 6 MA's), (38, 50566), (39, 50569), (47, 50683), (50, 50707), (53, 50737),

Gene: Madeline\_70 Start: 49023, Stop: 49289, Start Num: 32

Candidate Starts for Madeline\_70:

(19, 48951), (31, 49020), (Start: 32 @49023 has 1 MA's), (34, 49032), (39, 49056),

Gene: Malibo\_69 Start: 46043, Stop: 46270, Start Num: 37

Candidate Starts for Malibo\_69:

(Start: 37 @46043 has 6 MA's), (39, 46052), (41, 46070), (43, 46133), (45, 46148), (49, 46190), (54, 46226), (55, 46235),

Gene: Marteena\_74 Start: 48515, Stop: 48775, Start Num: 33

Candidate Starts for Marteena\_74:

(9, 48284), (16, 48401), (28, 48482), (Start: 33 @48515 has 6 MA's), (38, 48536), (39, 48539), (47, 48653), (50, 48677), (53, 48707),

Gene: PantheRoc\_80 Start: 50418, Stop: 50660, Start Num: 37

Candidate Starts for PantheRoc\_80:

(Start: 37 @50418 has 6 MA's), (39, 50427),

Gene: Pollux\_78 Start: 50472, Stop: 50732, Start Num: 33

Candidate Starts for Pollux\_78:

(9, 50241), (16, 50358), (28, 50439), (Start: 33 @50472 has 6 MA's), (38, 50493), (39, 50496), (47, 50610), (50, 50634), (53, 50664),

Gene: Posh\_76 Start: 50733, Stop: 50981, Start Num: 36

Candidate Starts for Posh\_76:

(Start: 36 @50733 has 7 MA's), (39, 50745), (48, 50871), (50, 50883), (53, 50913), (56, 50955),

Gene: Pytheas\_80 Start: 51878, Stop: 52207, Start Num: 22

Candidate Starts for Pytheas\_80:

(15, 51830), (18, 51863), (21, 51875), (Start: 22 @51878 has 4 MA's), (24, 51884), (27, 51896), (39, 51971), (48, 52097), (50, 52109), (53, 52139), (56, 52181),

Gene: Sidious\_73 Start: 49089, Stop: 49334, Start Num: 37

Candidate Starts for Sidious\_73:

(14, 48951), (30, 49056), (Start: 36 @49086 has 7 MA's), (Start: 37 @49089 has 6 MA's), (39, 49098), (47, 49212), (50, 49236), (53, 49266),

Gene: Sprinklemunch\_75 Start: 48095, Stop: 48325, Start Num: 37

Candidate Starts for Sprinklemunch\_75:

(Start: 37 @48095 has 6 MA's), (39, 48104), (40, 48113), (45, 48200), (50, 48245),

Gene: ThankyouJordi\_76 Start: 50792, Stop: 51121, Start Num: 22

Candidate Starts for ThankyouJordi\_76:

(21, 50789), (Start: 22 @50792 has 4 MA's), (24, 50798), (39, 50885), (47, 50999), (48, 51011), (50, 51023),

Gene: Tolls\_43 Start: 29996, Stop: 29787, Start Num: 36

Candidate Starts for Tolls\_43:

(Start: 36 @29996 has 7 MA's), (44, 29897), (46, 29882), (49, 29849), (52, 29822),

Gene: Vasanti\_63 Start: 42619, Stop: 42852, Start Num: 35

Candidate Starts for Vasanti\_63:

(Start: 35 @42619 has 1 MA's), (39, 42634), (40, 42643), (41, 42652), (43, 42715), (45, 42730), (49, 42772), (54, 42808), (55, 42817),

Gene: WelcomeAyanna\_76 Start: 50939, Stop: 51268, Start Num: 22

Candidate Starts for WelcomeAyanna\_76:

(21, 50936), (Start: 22 @50939 has 4 MA's), (24, 50945), (39, 51032), (47, 51146), (48, 51158), (50, 51170),

Gene: Wrigley\_78 Start: 50316, Stop: 50564, Start Num: 36

Candidate Starts for Wrigley\_78:

(Start: 36 @50316 has 7 MA's), (39, 50328), (48, 50454), (50, 50466), (53, 50496), (56, 50538),

Gene: Yarn\_39 Start: 29756, Stop: 29547, Start Num: 36

Candidate Starts for Yarn\_39:

(Start: 36 @29756 has 7 MA's), (44, 29657), (46, 29642), (49, 29609), (52, 29582),

Gene: Yeezy\_80 Start: 48934, Stop: 49179, Start Num: 37

Candidate Starts for Yeezy\_80:

(1, 48196), (2, 48268), (3, 48364), (4, 48382), (5, 48439), (6, 48442), (8, 48661), (10, 48691), (11, 48694), (12, 48727), (13, 48745), (Start: 37 @48934 has 6 MA's), (39, 48943), (42, 49012), (47, 49057), (50, 49081), (56, 49153), (57, 49159),