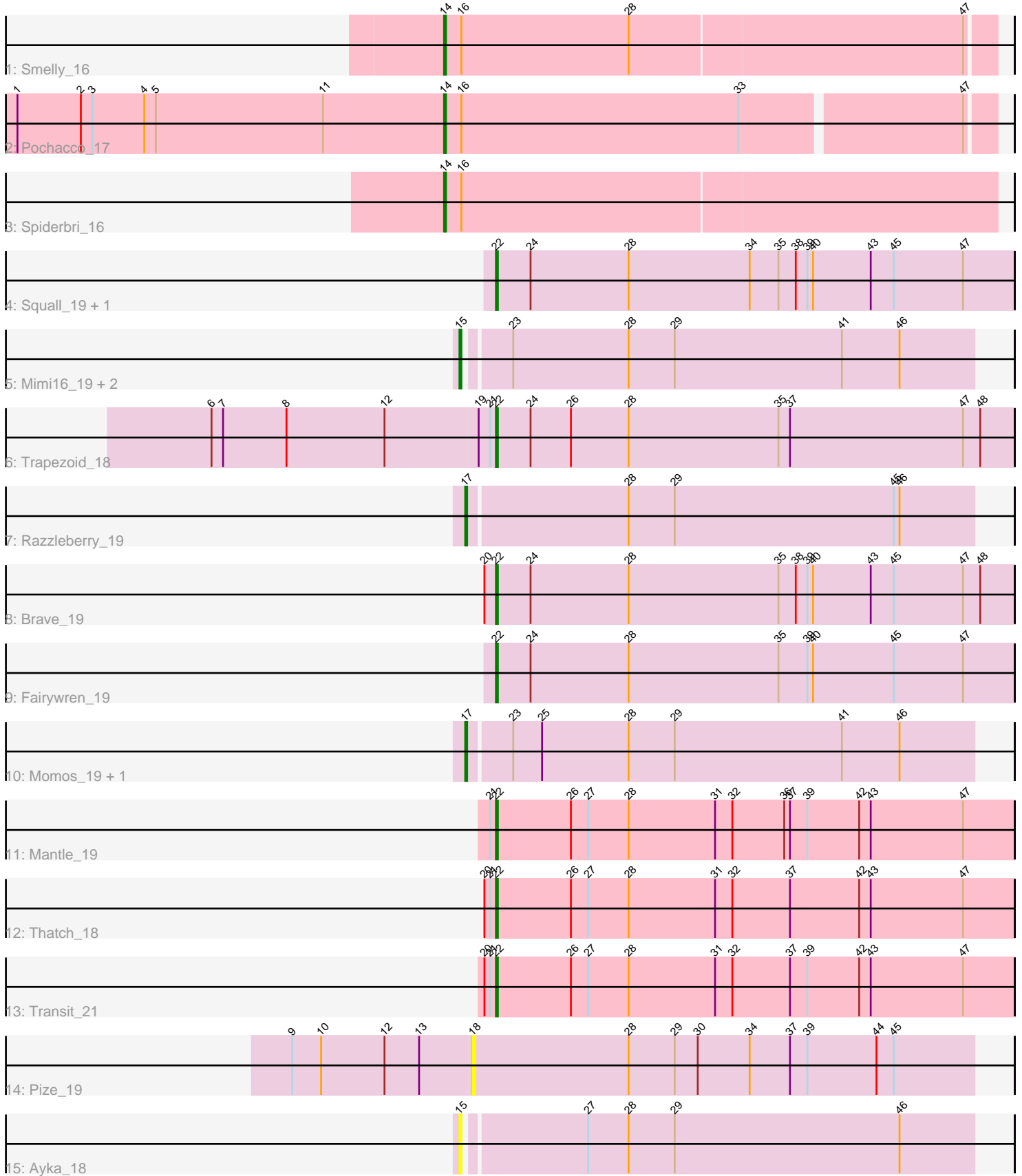


Pham 295129



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 295129 Report

This analysis was run 04/18/26 on database version 643.

Pham number 295129 has 19 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Smelly\_16
- Track 2 : Pochacco\_17
- Track 3 : Spiderbri\_16
- Track 4 : Squall\_19, Penne\_19
- Track 5 : Mimi16\_19, Prophecy\_19, Grotle\_19
- Track 6 : Trapezoid\_18
- Track 7 : Razzleberry\_19
- Track 8 : Brave\_19
- Track 9 : Fairywren\_19
- Track 10 : Momos\_19, Ellison17\_19
- Track 11 : Mantle\_19
- Track 12 : Thatch\_18
- Track 13 : Transit\_21
- Track 14 : Pize\_19
- Track 15 : Ayka\_18

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

The start number called the most often in the published annotations is 22, it was called in 8 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Brave\_19, Fairywren\_19, Mantle\_19, Penne\_19, Squall\_19, Thatch\_18, Transit\_21, Trapezoid\_18,

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

- 

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

- Ayka\_18, Ellison17\_19, Grotle\_19, Mimi16\_19, Momos\_19, Pize\_19, Pochacco\_17, Prophecy\_19, Razzleberry\_19, Smelly\_16, Spiderbri\_16,

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

Start 14:

- Found in 3 of 19 ( 15.8% ) of genes in pham
- Manual Annotations of this start: 3 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pochacco\_17 (GK), Smelly\_16 (GK), Spiderbri\_16 (GK),

Start 15:

- Found in 4 of 19 ( 21.1% ) of genes in pham
- Manual Annotations of this start: 3 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ayka\_18 (UNK), Grotle\_19 (JB1), Mimi16\_19 (JB1), Prophecy\_19 (JB1),

Start 17:

- Found in 3 of 19 ( 15.8% ) of genes in pham
- Manual Annotations of this start: 3 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ellison17\_19 (JB1), Momos\_19 (JB1), Razzleberry\_19 (JB1),

Start 18:

- Found in 1 of 19 ( 5.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pize\_19 (UNK),

Start 22:

- Found in 8 of 19 ( 42.1% ) of genes in pham
- Manual Annotations of this start: 8 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Brave\_19 (JB1), Fairywren\_19 (JB1), Mantle\_19 (JB2), Penne\_19 (JB1), Squall\_19 (JB1), Thatch\_18 (JB2), Transit\_21 (JB2), Trapezoid\_18 (JB1),

**Summary by clusters:**

There are 4 clusters represented in this pham: UNK, GK, JB2, JB1,

Info for manual annotations of cluster GK:

- Start number 14 was manually annotated 3 times for cluster GK.

Info for manual annotations of cluster JB1:

- Start number 15 was manually annotated 3 times for cluster JB1.
- Start number 17 was manually annotated 3 times for cluster JB1.
- Start number 22 was manually annotated 5 times for cluster JB1.

Info for manual annotations of cluster JB2:

- Start number 22 was manually annotated 3 times for cluster JB2.

**Gene Information:**

Gene: Ayka\_18 Start: 17062, Stop: 17322, Start Num: 15

Candidate Starts for Ayka\_18:

(Start: 15 @17062 has 3 MA's), (27, 17122), (28, 17143), (29, 17167), (46, 17284),

Gene: Brave\_19 Start: 16494, Stop: 16763, Start Num: 22

Candidate Starts for Brave\_19:

(20, 16488), (Start: 22 @16494 has 8 MA's), (24, 16512), (28, 16563), (35, 16641), (38, 16650), (39, 16656), (40, 16659), (43, 16689), (45, 16701), (47, 16737), (48, 16746),

Gene: Ellison17\_19 Start: 16885, Stop: 17145, Start Num: 17

Candidate Starts for Ellison17\_19:

(Start: 17 @16885 has 3 MA's), (23, 16906), (25, 16921), (28, 16966), (29, 16990), (41, 17077), (46, 17107),

Gene: Fairywren\_19 Start: 16442, Stop: 16711, Start Num: 22

Candidate Starts for Fairywren\_19:

(Start: 22 @16442 has 8 MA's), (24, 16460), (28, 16511), (35, 16589), (39, 16604), (40, 16607), (45, 16649), (47, 16685),

Gene: Grotle\_19 Start: 16841, Stop: 17101, Start Num: 15

Candidate Starts for Grotle\_19:

(Start: 15 @16841 has 3 MA's), (23, 16862), (28, 16922), (29, 16946), (41, 17033), (46, 17063),

Gene: Mantle\_19 Start: 17905, Stop: 18174, Start Num: 22

Candidate Starts for Mantle\_19:

(21, 17902), (Start: 22 @17905 has 8 MA's), (26, 17944), (27, 17953), (28, 17974), (31, 18019), (32, 18028), (36, 18055), (37, 18058), (39, 18067), (42, 18094), (43, 18100), (47, 18148),

Gene: Mimi16\_19 Start: 16892, Stop: 17152, Start Num: 15

Candidate Starts for Mimi16\_19:

(Start: 15 @16892 has 3 MA's), (23, 16913), (28, 16973), (29, 16997), (41, 17084), (46, 17114),

Gene: Momos\_19 Start: 16885, Stop: 17145, Start Num: 17

Candidate Starts for Momos\_19:

(Start: 17 @16885 has 3 MA's), (23, 16906), (25, 16921), (28, 16966), (29, 16990), (41, 17077), (46, 17107),

Gene: Penne\_19 Start: 16494, Stop: 16763, Start Num: 22

Candidate Starts for Penne\_19:

(Start: 22 @16494 has 8 MA's), (24, 16512), (28, 16563), (34, 16626), (35, 16641), (38, 16650), (39, 16656), (40, 16659), (43, 16689), (45, 16701), (47, 16737),

Gene: Pize\_19 Start: 16706, Stop: 16966, Start Num: 18

Candidate Starts for Pize\_19:

(9, 16613), (10, 16628), (12, 16661), (13, 16679), (18, 16706), (28, 16787), (29, 16811), (30, 16823), (34, 16850), (37, 16871), (39, 16880), (44, 16916), (45, 16925),

Gene: Pochacco\_17 Start: 14534, Stop: 14812, Start Num: 14

Candidate Starts for Pochacco\_17:

(1, 14312), (2, 14345), (3, 14351), (4, 14378), (5, 14384), (11, 14471), (Start: 14 @14534 has 3 MA's), (16, 14543), (33, 14687), (47, 14798),

Gene: Prophecy\_19 Start: 16892, Stop: 17152, Start Num: 15  
Candidate Starts for Prophecy\_19:  
(Start: 15 @16892 has 3 MA's), (23, 16913), (28, 16973), (29, 16997), (41, 17084), (46, 17114),

Gene: Razzleberry\_19 Start: 16976, Stop: 17236, Start Num: 17  
Candidate Starts for Razzleberry\_19:  
(Start: 17 @16976 has 3 MA's), (28, 17057), (29, 17081), (45, 17195), (46, 17198),

Gene: Smelly\_16 Start: 14230, Stop: 14511, Start Num: 14  
Candidate Starts for Smelly\_16:  
(Start: 14 @14230 has 3 MA's), (16, 14239), (28, 14326), (47, 14497),

Gene: Spiderbri\_16 Start: 14458, Stop: 14742, Start Num: 14  
Candidate Starts for Spiderbri\_16:  
(Start: 14 @14458 has 3 MA's), (16, 14467),

Gene: Squall\_19 Start: 16464, Stop: 16733, Start Num: 22  
Candidate Starts for Squall\_19:  
(Start: 22 @16464 has 8 MA's), (24, 16482), (28, 16533), (34, 16596), (35, 16611), (38, 16620), (39, 16626), (40, 16629), (43, 16659), (45, 16671), (47, 16707),

Gene: Thatch\_18 Start: 17448, Stop: 17717, Start Num: 22  
Candidate Starts for Thatch\_18:  
(20, 17442), (21, 17445), (Start: 22 @17448 has 8 MA's), (26, 17487), (27, 17496), (28, 17517), (31, 17562), (32, 17571), (37, 17601), (42, 17637), (43, 17643), (47, 17691),

Gene: Transit\_21 Start: 17942, Stop: 18211, Start Num: 22  
Candidate Starts for Transit\_21:  
(20, 17936), (21, 17939), (Start: 22 @17942 has 8 MA's), (26, 17981), (27, 17990), (28, 18011), (31, 18056), (32, 18065), (37, 18095), (39, 18104), (42, 18131), (43, 18137), (47, 18185),

Gene: Trapezoid\_18 Start: 16228, Stop: 16497, Start Num: 22  
Candidate Starts for Trapezoid\_18:  
(6, 16081), (7, 16087), (8, 16120), (12, 16171), (19, 16219), (21, 16225), (Start: 22 @16228 has 8 MA's), (24, 16246), (26, 16267), (28, 16297), (35, 16375), (37, 16381), (47, 16471), (48, 16480),