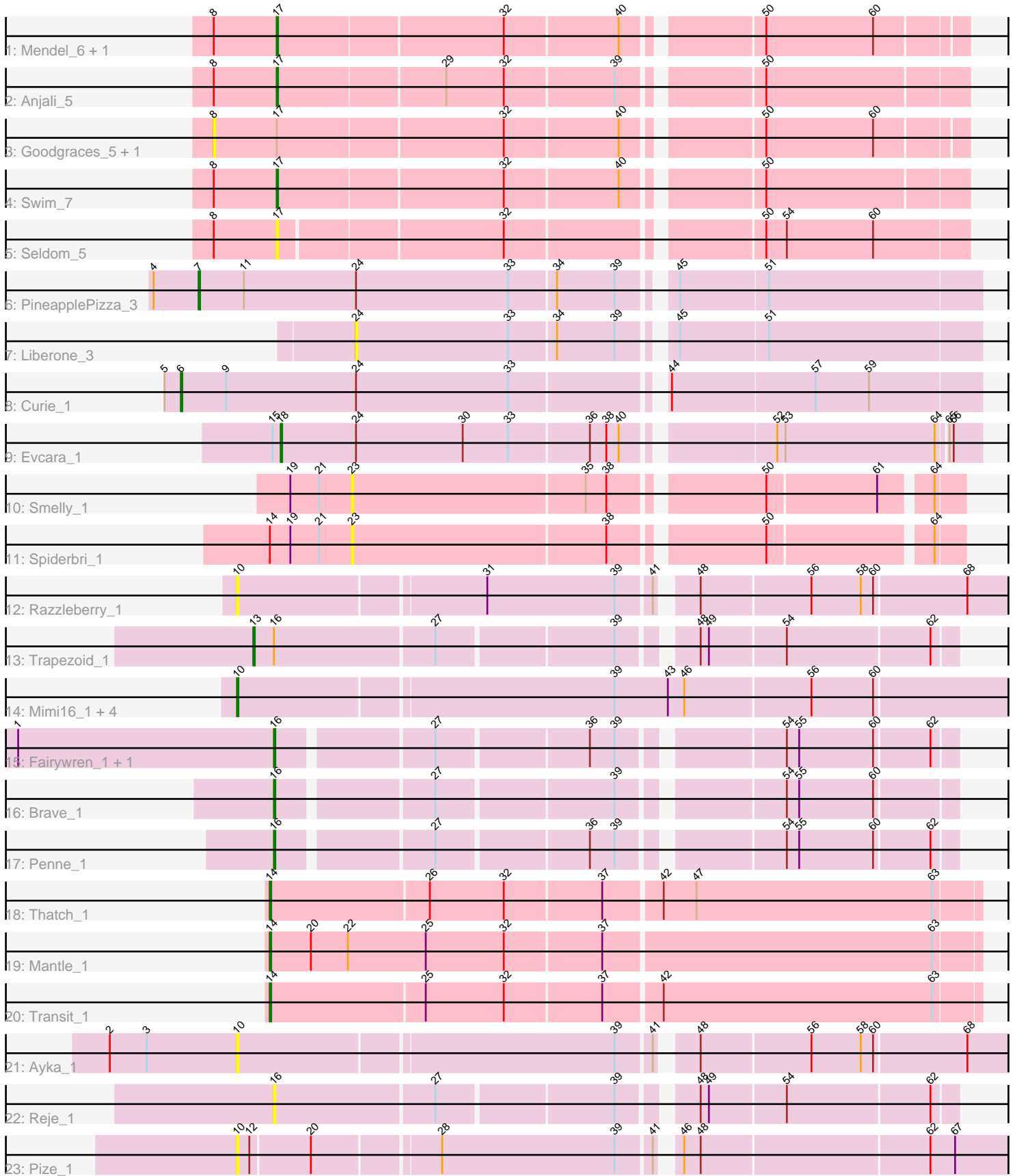


Pham 224795



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 224795 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224795 has 30 members, 10 are drafts.

Phages represented in each track:

- Track 1 : Mendel\_6, Tillums\_7
- Track 2 : Anjali\_5
- Track 3 : Goodgraces\_5, Dunamis\_6
- Track 4 : Swim\_7
- Track 5 : Seldom\_5
- Track 6 : PineapplePizza\_3
- Track 7 : Liberone\_3
- Track 8 : Curie\_1
- Track 9 : Evcara\_1
- Track 10 : Smelly\_1
- Track 11 : Spiderbri\_1
- Track 12 : Razzleberry\_1
- Track 13 : Trapezoid\_1
- Track 14 : Mimi16\_1, Momos\_1, Ellison17\_1, Prophecy\_1, Grotle\_1
- Track 15 : Fairywren\_1, Squall\_1
- Track 16 : Brave\_1
- Track 17 : Penne\_1
- Track 18 : Thatch\_1
- Track 19 : Mantle\_1
- Track 20 : Transit\_1
- Track 21 : Ayka\_1
- Track 22 : Reje\_1
- Track 23 : Pize\_1

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

The start number called the most often in the published annotations is 10, it was called in 5 of the 20 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ayka\_1, Ellison17\_1, Grotle\_1, Mimi16\_1, Momos\_1, Pize\_1, Prophecy\_1, Razzleberry\_1,

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

- 

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

- Anjali\_5, Brave\_1, Curie\_1, Dunamis\_6, Evcara\_1, Fairywren\_1, Goodgraces\_5, Liberone\_3, Mantle\_1, Mendel\_6, Penne\_1, PineapplePizza\_3, Reje\_1, Seldom\_5, Smelly\_1, Spiderbri\_1, Squall\_1, Swim\_7, Thatch\_1, Tillums\_7, Transit\_1, Trapezoid\_1,

### Summary by start number:

Start 6:

- Found in 1 of 30 ( 3.3% ) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Curie\_1 (GI),

Start 7:

- Found in 1 of 30 ( 3.3% ) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PineapplePizza\_3 (GI),

Start 8:

- Found in 7 of 30 ( 23.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 28.6% of time when present
- Phage (with cluster) where this start called: Dunamis\_6 (FD), Goodgraces\_5 (FD),

Start 10:

- Found in 8 of 30 ( 26.7% ) of genes in pham
- Manual Annotations of this start: 5 of 20
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ayka\_1 (UNK), Ellison17\_1 (JB), Grotle\_1 (JB), Mimi16\_1 (JB), Momos\_1 (JB), Pize\_1 (UNK), Prophecy\_1 (JB), Razzleberry\_1 (JB),

Start 13:

- Found in 1 of 30 ( 3.3% ) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Trapezoid\_1 (JB),

Start 14:

- Found in 4 of 30 ( 13.3% ) of genes in pham
- Manual Annotations of this start: 3 of 20
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Mantle\_1 (JC), Thatch\_1 (JC), Transit\_1 (JC),

Start 16:

- Found in 6 of 30 ( 20.0% ) of genes in pham
- Manual Annotations of this start: 4 of 20
- Called 83.3% of time when present

- Phage (with cluster) where this start called: Brave\_1 (JB), Fairywren\_1 (JB), Penne\_1 (JB), Reje\_1 (UNK), Squall\_1 (JB),

Start 17:

- Found in 7 of 30 ( 23.3% ) of genes in pham
- Manual Annotations of this start: 4 of 20
- Called 71.4% of time when present
- Phage (with cluster) where this start called: Anjali\_5 (FD), Mendel\_6 (FD), Seldom\_5 (FD), Swim\_7 (FD), Tillums\_7 (FD),

Start 18:

- Found in 1 of 30 ( 3.3% ) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Evcara\_1 (GI),

Start 23:

- Found in 2 of 30 ( 6.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Smelly\_1 (GK), Spiderbri\_1 (GK),

Start 24:

- Found in 4 of 30 ( 13.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Liberone\_3 (GI),

### **Summary by clusters:**

There are 6 clusters represented in this pham: FD, JB, UNK, GK, GI, JC,

Info for manual annotations of cluster FD:

- Start number 17 was manually annotated 4 times for cluster FD.

Info for manual annotations of cluster GI:

- Start number 6 was manually annotated 1 time for cluster GI.
- Start number 7 was manually annotated 1 time for cluster GI.
- Start number 18 was manually annotated 1 time for cluster GI.

Info for manual annotations of cluster JB:

- Start number 10 was manually annotated 5 times for cluster JB.
- Start number 13 was manually annotated 1 time for cluster JB.
- Start number 16 was manually annotated 4 times for cluster JB.

Info for manual annotations of cluster JC:

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

### **Gene Information:**

Gene: Anjali\_5 Start: 1483, Stop: 1953, Start Num: 17

Candidate Starts for Anjali\_5:

(8, 1438), (Start: 17 @1483 has 4 MA's), (29, 1600), (32, 1642), (39, 1720), (50, 1810),

Gene: Ayka\_1 Start: 586, Stop: 1125, Start Num: 10

Candidate Starts for Ayka\_1:

(2, 493), (3, 520), (Start: 10 @586 has 5 MA's), (39, 853), (41, 877), (48, 898), (56, 976), (58, 1012), (60, 1021), (68, 1087),

Gene: Brave\_1 Start: 695, Stop: 1147, Start Num: 16

Candidate Starts for Brave\_1:

(Start: 16 @695 has 4 MA's), (27, 800), (39, 923), (54, 1028), (55, 1037), (60, 1091),

Gene: Curie\_1 Start: 421, Stop: 978, Start Num: 6

Candidate Starts for Curie\_1:

(5, 409), (Start: 6 @421 has 1 MA's), (9, 454), (24, 547), (33, 658), (44, 757), (57, 859), (59, 898),

Gene: Dunamis\_6 Start: 1455, Stop: 1967, Start Num: 8

Candidate Starts for Dunamis\_6:

(8, 1455), (Start: 17 @1500 has 4 MA's), (32, 1659), (40, 1740), (50, 1827), (60, 1905),

Gene: Ellison17\_1 Start: 497, Stop: 1048, Start Num: 10

Candidate Starts for Ellison17\_1:

(Start: 10 @497 has 5 MA's), (39, 764), (43, 803), (46, 815), (56, 905), (60, 950),

Gene: Evcara\_1 Start: 485, Stop: 967, Start Num: 18

Candidate Starts for Evcara\_1:

(15, 479), (Start: 18 @485 has 1 MA's), (24, 539), (30, 617), (33, 650), (36, 707), (38, 719), (40, 728), (52, 824), (53, 830), (64, 938), (65, 944), (66, 947),

Gene: Fairywren\_1 Start: 664, Stop: 1116, Start Num: 16

Candidate Starts for Fairywren\_1:

(1, 478), (Start: 16 @664 has 4 MA's), (27, 769), (36, 874), (39, 892), (54, 997), (55, 1006), (60, 1060), (62, 1099),

Gene: Goodgraces\_5 Start: 1678, Stop: 2190, Start Num: 8

Candidate Starts for Goodgraces\_5:

(8, 1678), (Start: 17 @1723 has 4 MA's), (32, 1882), (40, 1963), (50, 2050), (60, 2128),

Gene: Grotle\_1 Start: 456, Stop: 1007, Start Num: 10

Candidate Starts for Grotle\_1:

(Start: 10 @456 has 5 MA's), (39, 723), (43, 762), (46, 774), (56, 864), (60, 909),

Gene: Liberone\_3 Start: 1378, Stop: 1809, Start Num: 24

Candidate Starts for Liberone\_3:

(24, 1378), (33, 1489), (34, 1522), (39, 1564), (45, 1594), (51, 1657),

Gene: Mantle\_1 Start: 837, Stop: 1343, Start Num: 14

Candidate Starts for Mantle\_1:

(Start: 14 @837 has 3 MA's), (20, 867), (22, 894), (25, 951), (32, 1008), (37, 1077), (63, 1311),

Gene: Mendel\_6 Start: 1407, Stop: 1874, Start Num: 17

Candidate Starts for Mendel\_6:

(8, 1362), (Start: 17 @1407 has 4 MA's), (32, 1566), (40, 1647), (50, 1734), (60, 1812),

Gene: Mimi16\_1 Start: 507, Stop: 1058, Start Num: 10

Candidate Starts for Mimi16\_1:

(Start: 10 @507 has 5 MA's), (39, 774), (43, 813), (46, 825), (56, 915), (60, 960),

Gene: Momos\_1 Start: 497, Stop: 1048, Start Num: 10

Candidate Starts for Momos\_1:

(Start: 10 @497 has 5 MA's), (39, 764), (43, 803), (46, 815), (56, 905), (60, 950),

Gene: Penne\_1 Start: 698, Stop: 1150, Start Num: 16

Candidate Starts for Penne\_1:

(Start: 16 @698 has 4 MA's), (27, 803), (36, 908), (39, 926), (54, 1031), (55, 1040), (60, 1094), (62, 1133),

Gene: PineapplePizza\_3 Start: 1180, Stop: 1725, Start Num: 7

Candidate Starts for PineapplePizza\_3:

(4, 1147), (Start: 7 @1180 has 1 MA's), (11, 1213), (24, 1294), (33, 1405), (34, 1438), (39, 1480), (45, 1510), (51, 1573),

Gene: Pize\_1 Start: 471, Stop: 1010, Start Num: 10

Candidate Starts for Pize\_1:

(Start: 10 @471 has 5 MA's), (12, 480), (20, 522), (28, 609), (39, 735), (41, 759), (46, 768), (48, 780), (62, 942), (67, 960),

Gene: Prophecy\_1 Start: 507, Stop: 1058, Start Num: 10

Candidate Starts for Prophecy\_1:

(Start: 10 @507 has 5 MA's), (39, 774), (43, 813), (46, 825), (56, 915), (60, 960),

Gene: Razzleberry\_1 Start: 500, Stop: 1033, Start Num: 10

Candidate Starts for Razzleberry\_1:

(Start: 10 @500 has 5 MA's), (31, 674), (39, 767), (41, 791), (48, 812), (56, 890), (58, 926), (60, 935), (68, 1001),

Gene: Reje\_1 Start: 554, Stop: 1015, Start Num: 16

Candidate Starts for Reje\_1:

(Start: 16 @554 has 4 MA's), (27, 668), (39, 791), (48, 836), (49, 842), (54, 896), (62, 998),

Gene: Seldom\_5 Start: 1986, Stop: 2456, Start Num: 17

Candidate Starts for Seldom\_5:

(8, 1941), (Start: 17 @1986 has 4 MA's), (32, 2142), (50, 2310), (54, 2325), (60, 2388),

Gene: Smelly\_1 Start: 419, Stop: 832, Start Num: 23

Candidate Starts for Smelly\_1:

(19, 374), (21, 395), (23, 419), (35, 587), (38, 602), (50, 701), (61, 779), (64, 812),

Gene: Spiderbri\_1 Start: 367, Stop: 780, Start Num: 23

Candidate Starts for Spiderbri\_1:

(Start: 14 @307 has 3 MA's), (19, 322), (21, 343), (23, 367), (38, 550), (50, 649), (64, 760),

Gene: Squall\_1 Start: 665, Stop: 1117, Start Num: 16

Candidate Starts for Squall\_1:

(1, 479), (Start: 16 @665 has 4 MA's), (27, 770), (36, 875), (39, 893), (54, 998), (55, 1007), (60, 1061), (62, 1100),

Gene: Swim\_7 Start: 1879, Stop: 2349, Start Num: 17

Candidate Starts for Swim\_7:

(8, 1834), (Start: 17 @1879 has 4 MA's), (32, 2038), (40, 2119), (50, 2206),

Gene: Thatch\_1 Start: 729, Stop: 1232, Start Num: 14

Candidate Starts for Thatch\_1:

(Start: 14 @729 has 3 MA's), (26, 843), (32, 897), (37, 966), (42, 1005), (47, 1029), (63, 1200),

Gene: Tillums\_7 Start: 1944, Stop: 2411, Start Num: 17

Candidate Starts for Tillums\_7:

(8, 1899), (Start: 17 @1944 has 4 MA's), (32, 2103), (40, 2184), (50, 2271), (60, 2349),

Gene: Transit\_1 Start: 735, Stop: 1238, Start Num: 14

Candidate Starts for Transit\_1:

(Start: 14 @735 has 3 MA's), (25, 846), (32, 903), (37, 972), (42, 1011), (63, 1206),

Gene: Trapezoid\_1 Start: 572, Stop: 1048, Start Num: 13

Candidate Starts for Trapezoid\_1:

(Start: 13 @572 has 1 MA's), (Start: 16 @587 has 4 MA's), (27, 701), (39, 824), (48, 869), (49, 875), (54, 929), (62, 1031),