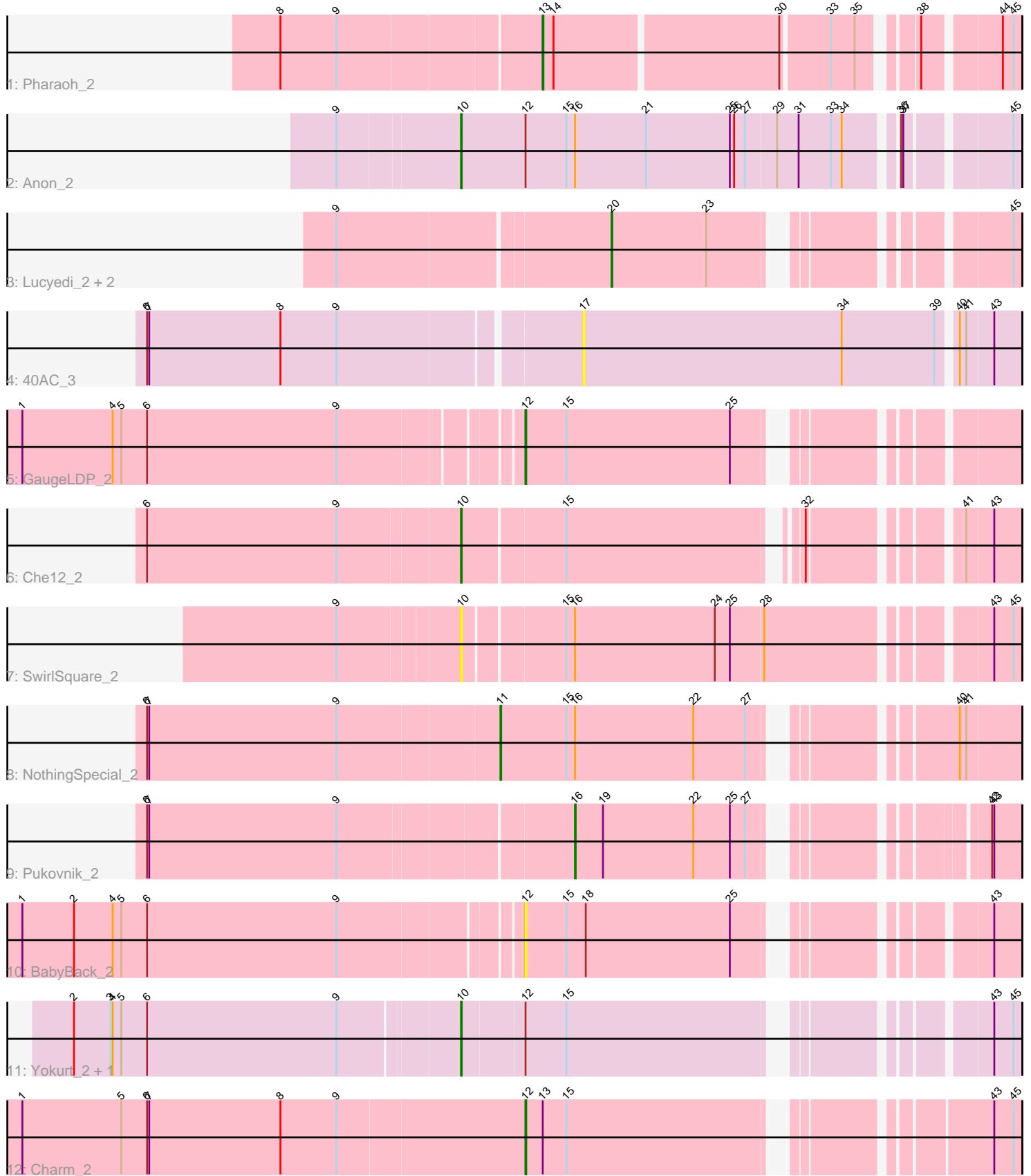


# Pham 140151



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 140151 Report

This analysis was run 04/28/24 on database version 559.

Pham number 140151 has 15 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Pharaoh\_2
- Track 2 : Anon\_2
- Track 3 : Lucyedi\_2, PainterBoy\_2, EagleEye\_2
- Track 4 : 40AC\_3
- Track 5 : GaugeLDP\_2
- Track 6 : Che12\_2
- Track 7 : SwirlSquare\_2
- Track 8 : NothingSpecial\_2
- Track 9 : Pukovnik\_2
- Track 10 : BabyBack\_2
- Track 11 : Yokurt\_2, Zulu\_2
- Track 12 : Charm\_2

### ***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 4 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Anon\_2, Che12\_2, SwirlSquare\_2, Yokurt\_2, Zulu\_2,

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

- 

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

- 40AC\_3, BabyBack\_2, Charm\_2, EagleEye\_2, GaugeLDP\_2, Lucyedi\_2, NothingSpecial\_2, PainterBoy\_2, Pharaoh\_2, Pukovnik\_2,

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

Start 10:

- Found in 5 of 15 ( 33.3% ) of genes in pham
- Manual Annotations of this start: 4 of 12
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Anon\_2 (A15), Che12\_2 (A2), SwirlSquare\_2 (A2), Yokurt\_2 (A6), Zulu\_2 (A6),

Start 11:

- Found in 1 of 15 ( 6.7% ) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: NothingSpecial\_2 (A2),

Start 12:

- Found in 6 of 15 ( 40.0% ) of genes in pham
- Manual Annotations of this start: 2 of 12
- Called 50.0% of time when present
- Phage (with cluster) where this start called: BabyBack\_2 (A2), Charm\_2 (A9), GaugeLDP\_2 (A2),

Start 13:

- Found in 2 of 15 ( 13.3% ) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Pharaoh\_2 (A12),

Start 16:

- Found in 4 of 15 ( 26.7% ) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Pukovnik\_2 (A2),

Start 17:

- Found in 1 of 15 ( 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: 40AC\_3 (A17),

Start 20:

- Found in 3 of 15 ( 20.0% ) of genes in pham
- Manual Annotations of this start: 3 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EagleEye\_2 (A16), Lucyedi\_2 (A16), PainterBoy\_2 (A16),

### **Summary by clusters:**

There are 7 clusters represented in this pham: A15, A17, A16, A12, A2, A6, A9,

Info for manual annotations of cluster A12:

- Start number 13 was manually annotated 1 time for cluster A12.

Info for manual annotations of cluster A15:

- Start number 10 was manually annotated 1 time for cluster A15.

Info for manual annotations of cluster A16:

- Start number 20 was manually annotated 3 times for cluster A16.

Info for manual annotations of cluster A2:

- Start number 10 was manually annotated 1 time for cluster A2.
- Start number 11 was manually annotated 1 time for cluster A2.
- Start number 12 was manually annotated 1 time for cluster A2.
- Start number 16 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster A6:

- Start number 10 was manually annotated 2 times for cluster A6.

Info for manual annotations of cluster A9:

- Start number 12 was manually annotated 1 time for cluster A9.

### ***Gene Information:***

Gene: 40AC\_3 Start: 1491, Stop: 2084, Start Num: 17

Candidate Starts for 40AC\_3:

(6, 909), (7, 912), (8, 1095), (9, 1173), (17, 1491), (34, 1851), (39, 1980), (40, 2001), (41, 2010), (43, 2046),

Gene: Anon\_2 Start: 1236, Stop: 1964, Start Num: 10

Candidate Starts for Anon\_2:

(9, 1071), (Start: 10 @1236 has 4 MA's), (Start: 12 @1326 has 2 MA's), (15, 1383), (Start: 16 @1395 has 1 MA's), (21, 1494), (25, 1611), (26, 1617), (27, 1632), (29, 1674), (31, 1704), (33, 1749), (34, 1764), (36, 1824), (37, 1827), (45, 1956),

Gene: BabyBack\_2 Start: 1285, Stop: 1881, Start Num: 12

Candidate Starts for BabyBack\_2:

(1, 610), (2, 682), (4, 736), (5, 748), (6, 784), (9, 1048), (Start: 12 @1285 has 2 MA's), (15, 1342), (18, 1369), (25, 1570), (43, 1843),

Gene: Charm\_2 Start: 1285, Stop: 1893, Start Num: 12

Candidate Starts for Charm\_2:

(1, 589), (5, 727), (6, 763), (7, 766), (8, 949), (9, 1027), (Start: 12 @1285 has 2 MA's), (Start: 13 @1309 has 1 MA's), (15, 1342), (43, 1855), (45, 1882),

Gene: Che12\_2 Start: 1226, Stop: 1900, Start Num: 10

Candidate Starts for Che12\_2:

(6, 797), (9, 1061), (Start: 10 @1226 has 4 MA's), (15, 1361), (32, 1652), (41, 1826), (43, 1862),

Gene: EagleEye\_2 Start: 1437, Stop: 1910, Start Num: 20

Candidate Starts for EagleEye\_2:

(9, 1071), (Start: 20 @1437 has 3 MA's), (23, 1569), (45, 1899),

Gene: GaugeLDP\_2 Start: 1281, Stop: 1877, Start Num: 12

Candidate Starts for GaugeLDP\_2:

(1, 612), (4, 738), (5, 750), (6, 786), (9, 1050), (Start: 12 @1281 has 2 MA's), (15, 1338), (25, 1566),

Gene: Lucyedi\_2 Start: 1437, Stop: 1910, Start Num: 20

Candidate Starts for Lucyedi\_2:

(9, 1071), (Start: 20 @1437 has 3 MA's), (23, 1569), (45, 1899),

Gene: NothingSpecial\_2 Start: 1288, Stop: 1932, Start Num: 11

Candidate Starts for NothingSpecial\_2:

(6, 805), (7, 808), (9, 1069), (Start: 11 @1288 has 1 MA's), (15, 1378), (Start: 16 @1390 has 1 MA's), (22, 1555), (27, 1627), (40, 1849), (41, 1858),

Gene: PainterBoy\_2 Start: 1437, Stop: 1910, Start Num: 20

Candidate Starts for PainterBoy\_2:

(9, 1071), (Start: 20 @1437 has 3 MA's), (23, 1569), (45, 1899),

Gene: Pharaoh\_2 Start: 1314, Stop: 1910, Start Num: 13

Candidate Starts for Pharaoh\_2:

(8, 963), (9, 1041), (Start: 13 @1314 has 1 MA's), (14, 1329), (30, 1632), (33, 1695), (35, 1728), (38, 1788), (44, 1884), (45, 1899),

Gene: Pukovnik\_2 Start: 1346, Stop: 1873, Start Num: 16

Candidate Starts for Pukovnik\_2:

(6, 773), (7, 776), (9, 1037), (Start: 16 @1346 has 1 MA's), (19, 1385), (22, 1511), (25, 1562), (27, 1583), (42, 1832), (43, 1835),

Gene: SwirlSquare\_2 Start: 1225, Stop: 1938, Start Num: 10

Candidate Starts for SwirlSquare\_2:

(9, 1063), (Start: 10 @1225 has 4 MA's), (15, 1354), (Start: 16 @1366 has 1 MA's), (24, 1561), (25, 1582), (28, 1627), (43, 1900), (45, 1927),

Gene: Yokurt\_2 Start: 1248, Stop: 1925, Start Num: 10

Candidate Starts for Yokurt\_2:

(2, 723), (3, 774), (4, 777), (5, 789), (6, 825), (9, 1089), (Start: 10 @1248 has 4 MA's), (Start: 12 @1332 has 2 MA's), (15, 1389), (43, 1890), (45, 1917),

Gene: Zulu\_2 Start: 1248, Stop: 1925, Start Num: 10

Candidate Starts for Zulu\_2:

(2, 723), (3, 774), (4, 777), (5, 789), (6, 825), (9, 1089), (Start: 10 @1248 has 4 MA's), (Start: 12 @1332 has 2 MA's), (15, 1389), (43, 1890), (45, 1917),