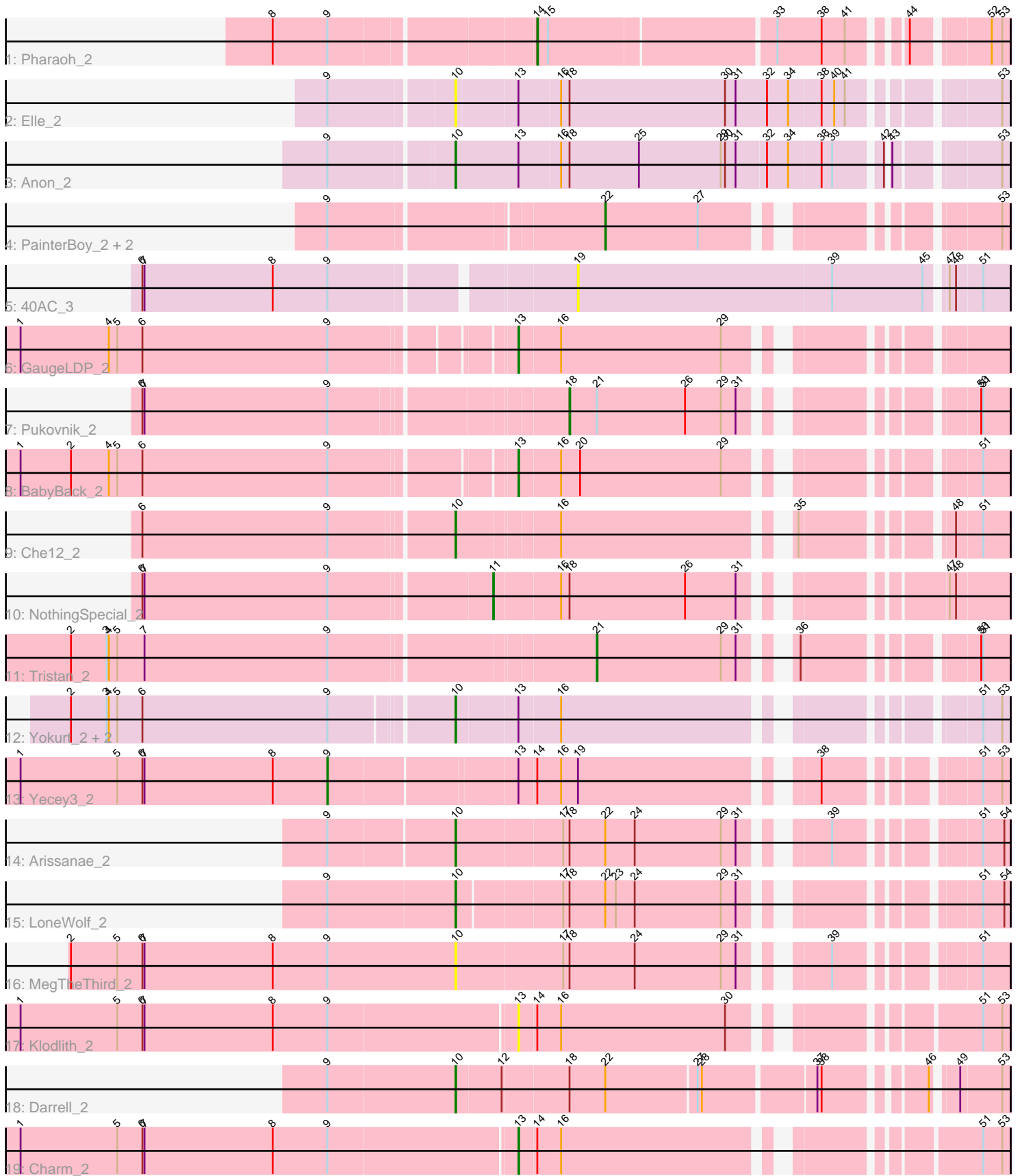


Pham 311994



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 311994 Report

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

Pham number 311994 has 23 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Pharaoh\_2
- Track 2 : Elle\_2
- Track 3 : Anon\_2
- Track 4 : PainterBoy\_2, Lucyedi\_2, EagleEye\_2
- Track 5 : 40AC\_3
- Track 6 : GaugeLDP\_2
- Track 7 : Pukovnik\_2
- Track 8 : BabyBack\_2
- Track 9 : Che12\_2
- Track 10 : NothingSpecial\_2
- Track 11 : Tristan\_2
- Track 12 : Yokurt\_2, Zulu\_2, Polyphemus\_2
- Track 13 : Yecey3\_2
- Track 14 : Arissanae\_2
- Track 15 : LoneWolf\_2
- Track 16 : MegTheThird\_2
- Track 17 : Klodlith\_2
- Track 18 : Darrell\_2
- Track 19 : 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 8 of the 19 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Anon\_2, Arissanae\_2, Che12\_2, Darrell\_2, Elle\_2, LoneWolf\_2, MegTheThird\_2, Polyphemus\_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, Klodlith\_2, Lucyedi\_2, NothingSpecial\_2, PainterBoy\_2, Pharaoh\_2, Pukovnik\_2, Tristan\_2, Yecey3\_2,

### Summary by start number:

#### Start 9:

- Found in 23 of 23 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 1 of 19
- Called 4.3% of time when present
- Phage (with cluster) where this start called: Yecey3\_2 (A9),

#### Start 10:

- Found in 10 of 23 ( 43.5% ) of genes in pham
- Manual Annotations of this start: 8 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anon\_2 (A15), Arissanae\_2 (A9), Che12\_2 (A2), Darrell\_2 (A9), Elle\_2 (A15), LoneWolf\_2 (A9), MegTheThird\_2 (A9), Polyphemos\_2 (A6), Yokurt\_2 (A6), Zulu\_2 (A6),

#### Start 11:

- Found in 1 of 23 ( 4.3% ) of genes in pham
- Manual Annotations of this start: 1 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: NothingSpecial\_2 (A2),

#### Start 13:

- Found in 10 of 23 ( 43.5% ) of genes in pham
- Manual Annotations of this start: 3 of 19
- Called 40.0% of time when present
- Phage (with cluster) where this start called: BabyBack\_2 (A2), Charm\_2 (A9), GaugeLDP\_2 (A2), Klodlith\_2 (A9),

#### Start 14:

- Found in 4 of 23 ( 17.4% ) of genes in pham
- Manual Annotations of this start: 1 of 19
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Pharaoh\_2 (A12),

#### Start 18:

- Found in 8 of 23 ( 34.8% ) of genes in pham
- Manual Annotations of this start: 1 of 19
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Pukovnik\_2 (A2),

#### Start 19:

- Found in 2 of 23 ( 8.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: 40AC\_3 (A17),

#### Start 21:

- Found in 2 of 23 ( 8.7% ) of genes in pham
- Manual Annotations of this start: 1 of 19

- Called 50.0% of time when present
- Phage (with cluster) where this start called: Tristan\_2 (A2),

Start 22:

- Found in 6 of 23 ( 26.1% ) of genes in pham
- Manual Annotations of this start: 3 of 19
- Called 50.0% 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 14 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 22 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 13 was manually annotated 2 times for cluster A2.
- Start number 18 was manually annotated 1 time for cluster A2.
- Start number 21 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster A6:

- Start number 10 was manually annotated 3 times for cluster A6.

Info for manual annotations of cluster A9:

- Start number 9 was manually annotated 1 time for cluster A9.
- Start number 10 was manually annotated 3 times for cluster A9.
- Start number 13 was manually annotated 1 time for cluster A9.

### **Gene Information:**

Gene: 40AC\_3 Start: 1491, Stop: 2084, Start Num: 19

Candidate Starts for 40AC\_3:

(6, 909), (7, 912), (8, 1095), (Start: 9 @1173 has 1 MA's), (19, 1491), (39, 1851), (45, 1980), (47, 2001), (48, 2010), (51, 2046),

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

Candidate Starts for Anon\_2:

(Start: 9 @1071 has 1 MA's), (Start: 10 @1236 has 8 MA's), (Start: 13 @1326 has 3 MA's), (16, 1383), (Start: 18 @1395 has 1 MA's), (25, 1494), (29, 1611), (30, 1617), (31, 1632), (32, 1674), (34, 1704), (38, 1749), (39, 1764), (42, 1824), (43, 1827), (53, 1956),

Gene: Arissanae\_2 Start: 1223, Stop: 1906, Start Num: 10

Candidate Starts for Arissanae\_2:

(Start: 9 @1049 has 1 MA's), (Start: 10 @1223 has 8 MA's), (17, 1370), (Start: 18 @1379 has 1 MA's), (Start: 22 @1430 has 3 MA's), (24, 1472), (29, 1595), (31, 1616), (39, 1703), (51, 1868), (54, 1898),

Gene: BabyBack\_2 Start: 1285, Stop: 1881, Start Num: 13

Candidate Starts for BabyBack\_2:

(1, 610), (2, 682), (4, 736), (5, 748), (6, 784), (Start: 9 @1048 has 1 MA's), (Start: 13 @1285 has 3 MA's), (16, 1342), (20, 1369), (29, 1570), (51, 1843),

Gene: Charm\_2 Start: 1285, Stop: 1893, Start Num: 13

Candidate Starts for Charm\_2:

(1, 589), (5, 727), (6, 763), (7, 766), (8, 949), (Start: 9 @1027 has 1 MA's), (Start: 13 @1285 has 3 MA's), (Start: 14 @1309 has 1 MA's), (16, 1342), (51, 1855), (53, 1882),

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

Candidate Starts for Che12\_2:

(6, 797), (Start: 9 @1061 has 1 MA's), (Start: 10 @1226 has 8 MA's), (16, 1361), (35, 1652), (48, 1826), (51, 1862),

Gene: Darrell\_2 Start: 1208, Stop: 1912, Start Num: 10

Candidate Starts for Darrell\_2:

(Start: 9 @1028 has 1 MA's), (Start: 10 @1208 has 8 MA's), (12, 1268), (Start: 18 @1358 has 1 MA's), (Start: 22 @1409 has 3 MA's), (27, 1535), (28, 1541), (37, 1691), (38, 1697), (46, 1817), (49, 1844), (53, 1901),

Gene: EagleEye\_2 Start: 1437, Stop: 1910, Start Num: 22

Candidate Starts for EagleEye\_2:

(Start: 9 @1071 has 1 MA's), (Start: 22 @1437 has 3 MA's), (27, 1569), (53, 1899),

Gene: Elle\_2 Start: 1198, Stop: 1923, Start Num: 10

Candidate Starts for Elle\_2:

(Start: 9 @1030 has 1 MA's), (Start: 10 @1198 has 8 MA's), (Start: 13 @1282 has 3 MA's), (16, 1339), (Start: 18 @1351 has 1 MA's), (30, 1573), (31, 1588), (32, 1633), (34, 1663), (38, 1708), (40, 1726), (41, 1741), (53, 1915),

Gene: GaugeLDP\_2 Start: 1281, Stop: 1877, Start Num: 13

Candidate Starts for GaugeLDP\_2:

(1, 612), (4, 738), (5, 750), (6, 786), (Start: 9 @1050 has 1 MA's), (Start: 13 @1281 has 3 MA's), (16, 1338), (29, 1566),

Gene: Klodlith\_2 Start: 1285, Stop: 1893, Start Num: 13

Candidate Starts for Klodlith\_2:

(1, 589), (5, 727), (6, 763), (7, 766), (8, 949), (Start: 9 @1027 has 1 MA's), (Start: 13 @1285 has 3 MA's), (Start: 14 @1309 has 1 MA's), (16, 1342), (30, 1576), (51, 1855), (53, 1882),

Gene: LoneWolf\_2 Start: 1207, Stop: 1884, Start Num: 10

Candidate Starts for LoneWolf\_2:

(Start: 9 @1027 has 1 MA's), (Start: 10 @1207 has 8 MA's), (17, 1348), (Start: 18 @1357 has 1 MA's), (Start: 22 @1408 has 3 MA's), (23, 1423), (24, 1450), (29, 1573), (31, 1594), (51, 1846), (54, 1876),

Gene: Lucyedi\_2 Start: 1437, Stop: 1910, Start Num: 22

Candidate Starts for Lucyedi\_2:

(Start: 9 @1071 has 1 MA's), (Start: 22 @1437 has 3 MA's), (27, 1569), (53, 1899),

Gene: MegTheThird\_2 Start: 1207, Stop: 1890, Start Num: 10

Candidate Starts for MegTheThird\_2:

(2, 658), (5, 724), (6, 760), (7, 763), (8, 946), (Start: 9 @1024 has 1 MA's), (Start: 10 @1207 has 8 MA's), (17, 1354), (Start: 18 @1363 has 1 MA's), (24, 1456), (29, 1579), (31, 1600), (39, 1687), (51, 1852),

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

Candidate Starts for NothingSpecial\_2:

(6, 805), (7, 808), (Start: 9 @1069 has 1 MA's), (Start: 11 @1288 has 1 MA's), (16, 1378), (Start: 18 @1390 has 1 MA's), (26, 1555), (31, 1627), (47, 1849), (48, 1858),

Gene: PainterBoy\_2 Start: 1437, Stop: 1910, Start Num: 22

Candidate Starts for PainterBoy\_2:

(Start: 9 @1071 has 1 MA's), (Start: 22 @1437 has 3 MA's), (27, 1569), (53, 1899),

Gene: Pharaoh\_2 Start: 1314, Stop: 1910, Start Num: 14

Candidate Starts for Pharaoh\_2:

(8, 963), (Start: 9 @1041 has 1 MA's), (Start: 14 @1314 has 1 MA's), (15, 1329), (33, 1632), (38, 1695), (41, 1728), (44, 1788), (52, 1884), (53, 1899),

Gene: Polyphemus\_2 Start: 1250, Stop: 1927, Start Num: 10

Candidate Starts for Polyphemus\_2:

(2, 725), (3, 776), (4, 779), (5, 791), (6, 827), (Start: 9 @1091 has 1 MA's), (Start: 10 @1250 has 8 MA's), (Start: 13 @1334 has 3 MA's), (16, 1391), (51, 1892), (53, 1919),

Gene: Pukovnik\_2 Start: 1346, Stop: 1873, Start Num: 18

Candidate Starts for Pukovnik\_2:

(6, 773), (7, 776), (Start: 9 @1037 has 1 MA's), (Start: 18 @1346 has 1 MA's), (Start: 21 @1385 has 1 MA's), (26, 1511), (29, 1562), (31, 1583), (50, 1832), (51, 1835),

Gene: Tristan\_2 Start: 1413, Stop: 1901, Start Num: 21

Candidate Starts for Tristan\_2:

(2, 693), (3, 744), (4, 747), (5, 759), (7, 798), (Start: 9 @1059 has 1 MA's), (Start: 21 @1413 has 1 MA's), (29, 1590), (31, 1611), (36, 1656), (50, 1860), (51, 1863),

Gene: Yecey3\_2 Start: 1038, Stop: 1883, Start Num: 9

Candidate Starts for Yecey3\_2:

(1, 600), (5, 738), (6, 774), (7, 777), (8, 960), (Start: 9 @1038 has 1 MA's), (Start: 13 @1290 has 3 MA's), (Start: 14 @1314 has 1 MA's), (16, 1347), (19, 1371), (38, 1668), (51, 1848), (53, 1875),

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), (Start: 9 @1089 has 1 MA's), (Start: 10 @1248 has 8 MA's), (Start: 13 @1332 has 3 MA's), (16, 1389), (51, 1890), (53, 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), (Start: 9 @1089 has 1 MA's), (Start: 10 @1248 has 8 MA's), (Start: 13 @1332 has 3 MA's), (16, 1389), (51, 1890), (53, 1917),