

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 87453 Report

This analysis was run 04/05/24 on database version 557.

Pham number 87453 has 12 members, 3 are drafts.

Phages represented in each track:

Track 1 : Phelemich\_3, Mysterious\_3, Reprobate\_3

Track 2 : LittleMunchkin\_3

Track 3 : CaiB 3

Track 4 : MakoManhole\_3, MossRose\_3, CloverMinnie\_3

Track 5 : AnarQue\_3, Wooper\_3

Track 6 : Kozie\_2Track 7 : Tonitrus 6

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

The start number called the most often in the published annotations is 9, it was called in 6 of the 9 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• AnarQue\_3, CaiB\_3, CloverMinnie\_3, LittleMunchkin\_3, MakoManhole\_3, MossRose\_3, Tonitrus\_6, Wooper\_3,

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

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

Kozie\_2, Mysterious\_3, Phelemich\_3, Reprobate\_3,

### Summary by start number:

#### Start 7:

- Found in 1 of 12 (8.3%) of genes in pham
- Manual Annotations of this start: 1 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kozie\_2 (EI),

#### Start 8:

- Found in 3 of 12 (25.0%) of genes in pham
- Manual Annotations of this start: 2 of 9

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mysterious\_3 (B5), Phelemich\_3 (B5), Reprobate\_3 (B5),

#### Start 9:

- Found in 8 of 12 (66.7%) of genes in pham
- Manual Annotations of this start: 6 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AnarQue\_3 (DR), CaiB\_3 (DR), CloverMinnie\_3 (DR), LittleMunchkin\_3 (DR), MakoManhole\_3 (DR), MossRose\_3 (DR), Tonitrus\_6 (singleton), Wooper\_3 (DR),

### **Summary by clusters:**

There are 4 clusters represented in this pham: B5, singleton, DR, EI,

Info for manual annotations of cluster B5:

Start number 8 was manually annotated 2 times for cluster B5.

Info for manual annotations of cluster DR:

•Start number 9 was manually annotated 6 times for cluster DR.

Info for manual annotations of cluster EI:

•Start number 7 was manually annotated 1 time for cluster El.

### Gene Information:

Gene: AnarQue\_3 Start: 1658, Stop: 2515, Start Num: 9

Candidate Starts for AnarQue 3:

(Start: 9 @ 1658 has 6 MA's), (12, 1733), (13, 1757), (15, 1796), (18, 1865), (20, 1946), (24, 2021), (27, 2039), (34, 2108), (38, 2210), (43, 2369), (47, 2459), (51, 2504),

Gene: CaiB 3 Start: 1658, Stop: 2515, Start Num: 9

Candidate Starts for CaiB\_3:

(Start: 9 @ 1658 has 6 MA's), (12, 1733), (13, 1757), (15, 1796), (18, 1865), (19, 1913), (20, 1946), (24, 2021), (27, 2039), (34, 2108), (38, 2210), (43, 2369), (47, 2459), (51, 2504),

Gene: CloverMinnie 3 Start: 1658, Stop: 2515, Start Num: 9

Candidate Starts for CloverMinnie 3:

(Start: 9 @ 1658 has 6 MA's), (12, 1733), (13, 1757), (15, 1796), (16, 1823), (18, 1865), (20, 1946), (24, 2021), (27, 2039), (34, 2108), (38, 2210), (43, 2369), (47, 2459), (51, 2504),

Gene: Kozie\_2 Start: 879, Stop: 1829, Start Num: 7

Candidate Starts for Kozie\_2:

(Start: 7 @879 has 1 MA's), (10, 933), (11, 975), (12, 984), (14, 1041), (20, 1236), (28, 1338), (29, 1371), (30, 1380), (31, 1383), (32, 1392), (40, 1602), (41, 1641), (46, 1743), (48, 1770), (50, 1803), (53, 1815),

Gene: LittleMunchkin 3 Start: 1649, Stop: 2506, Start Num: 9

Candidate Starts for LittleMunchkin 3:

(1, 1094), (2, 1241), (3, 1265), (4, 1334), (5, 1394), (6, 1412), (Start: 9 @1649 has 6 MA's), (12, 1724), (14, 1775), (15, 1787), (20, 1937), (21, 1946), (27, 2030), (32, 2090), (35, 2168), (36, 2174), (37, 2198), (47, 2450), (52, 2498),

Gene: MakoManhole\_3 Start: 1658, Stop: 2515, Start Num: 9

Candidate Starts for MakoManhole 3:

(Start: 9 @ 1658 has 6 MA's), (12, 1733), (13, 1757), (15, 1796), (16, 1823), (18, 1865), (20, 1946), (24, 2021), (27, 2039), (34, 2108), (38, 2210), (43, 2369), (47, 2459), (51, 2504),

Gene: MossRose\_3 Start: 1658, Stop: 2515, Start Num: 9

Candidate Starts for MossRose 3:

(Start: 9 @ 1658 has 6 MA's), (12, 1733), (13, 1757), (15, 1796), (16, 1823), (18, 1865), (20, 1946), (24, 2021), (27, 2039), (34, 2108), (38, 2210), (43, 2369), (47, 2459), (51, 2504),

Gene: Mysterious\_3 Start: 1670, Stop: 2548, Start Num: 8

Candidate Starts for Mysterious\_3:

(Start: 8 @ 1670 has 2 MA's), (12, 1763), (14, 1817), (17, 1865), (19, 1946), (22, 2009), (23, 2039), (25, 2057), (32, 2132), (33, 2135), (43, 2402), (44, 2423), (49, 2513), (51, 2537),

Gene: Phelemich\_3 Start: 1670, Stop: 2548, Start Num: 8

Candidate Starts for Phelemich 3:

(Start: 8 @ 1670 has 2 MA's), (12, 1763), (14, 1817), (17, 1865), (19, 1946), (22, 2009), (23, 2039), (25, 2057), (32, 2132), (33, 2135), (43, 2402), (44, 2423), (49, 2513), (51, 2537),

Gene: Reprobate\_3 Start: 1667, Stop: 2545, Start Num: 8

Candidate Starts for Reprobate\_3:

(Start: 8 @ 1667 has 2 MA's), (12, 1760), (14, 1814), (17, 1862), (19, 1943), (22, 2006), (23, 2036), (25, 2054), (32, 2129), (33, 2132), (43, 2399), (44, 2420), (49, 2510), (51, 2534),

Gene: Tonitrus\_6 Start: 2368, Stop: 3237, Start Num: 9

Candidate Starts for Tonitrus\_6:

(Start: 9 @2368 has 6 MA's), (12, 2443), (26, 2749), (32, 2812), (39, 2989), (42, 3076), (43, 3082), (45, 3109), (47, 3172),

Gene: Wooper\_3 Start: 1658, Stop: 2515, Start Num: 9

Candidate Starts for Wooper 3:

(Start: 9 @ 1658 has 6 MA's), (12, 1733), (13, 1757), (15, 1796), (18, 1865), (20, 1946), (24, 2021), (27, 2039), (34, 2108), (38, 2210), (43, 2369), (47, 2459), (51, 2504),