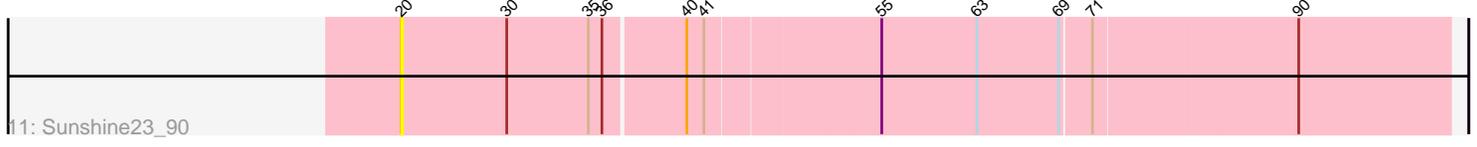
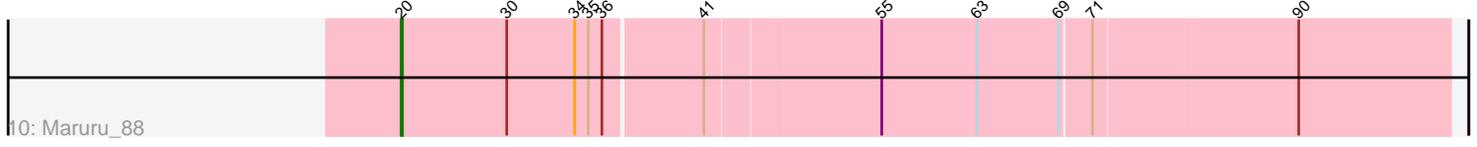
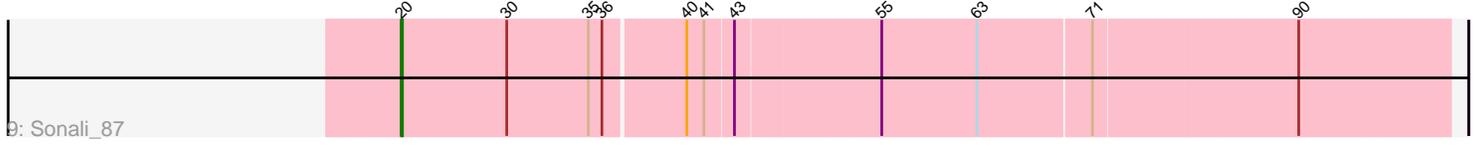
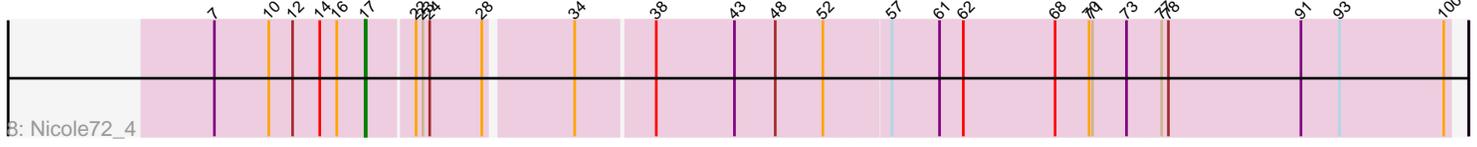
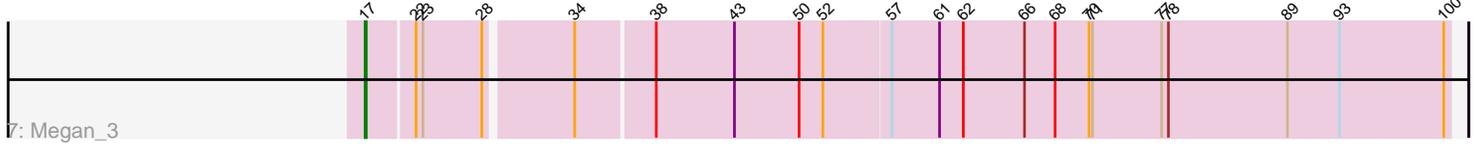
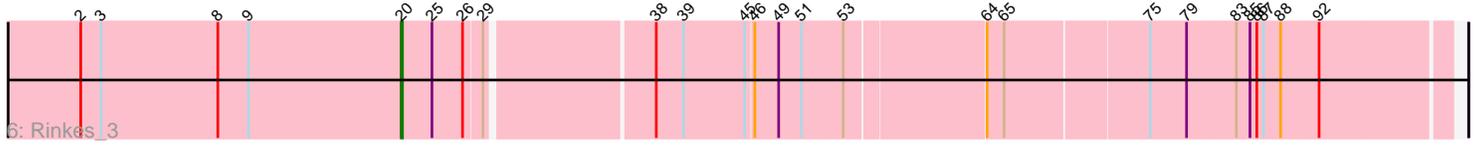
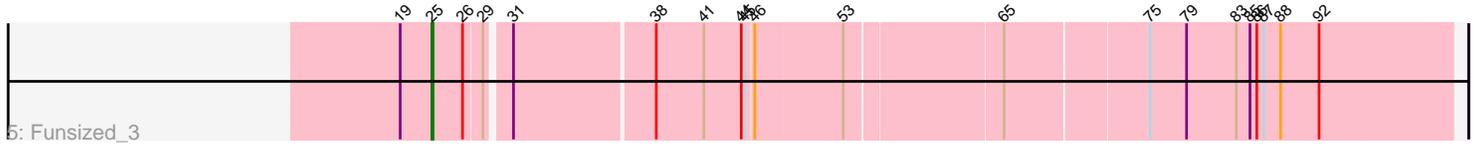
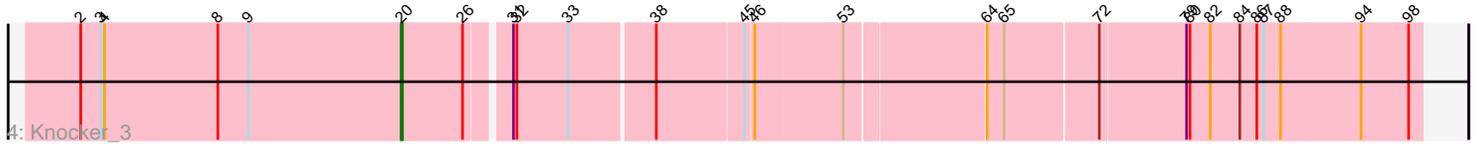
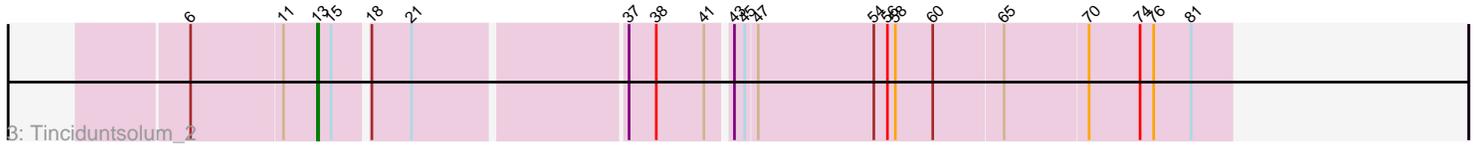
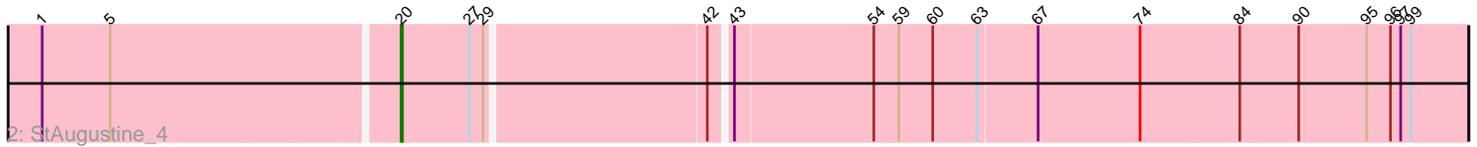
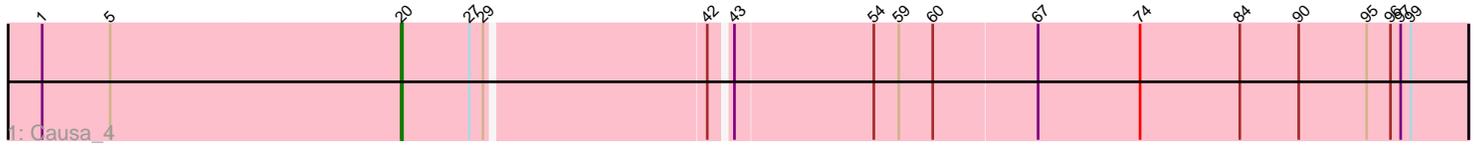


# Pham 284378



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 284378 Report

This analysis was run 02/23/26 on database version 636.

Pham number 284378 has 11 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Causa\_4
- Track 2 : StAugustine\_4
- Track 3 : Tinciduntolum\_2
- Track 4 : Knocker\_3
- Track 5 : Funsized\_3
- Track 6 : Rinkes\_3
- Track 7 : Megan\_3
- Track 8 : Nicole72\_4
- Track 9 : Sonali\_87
- Track 10 : Maruru\_88
- Track 11 : Sunshine23\_90

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

The start number called the most often in the published annotations is 20, it was called in 6 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Causa\_4, Knocker\_3, Maruru\_88, Rinkes\_3, Sonali\_87, StAugustine\_4, Sunshine23\_90,

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

- 

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

- Funsized\_3, Megan\_3, Nicole72\_4, Tinciduntolum\_2,

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

Start 13:

- Found in 1 of 11 ( 9.1% ) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Tinciduntolum\_2 (B2),

Start 17:

- Found in 2 of 11 ( 18.2% ) of genes in pham
- Manual Annotations of this start: 2 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Megan\_3 (EC), Nicole72\_4 (EC),

Start 20:

- Found in 7 of 11 ( 63.6% ) of genes in pham
- Manual Annotations of this start: 6 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Causa\_4 (AI), Knocker\_3 (B9), Maruru\_88 (FG), Rinkes\_3 (B9), Sonali\_87 (FG), StAugustine\_4 (AI), Sunshine23\_90 (FG),

Start 25:

- Found in 2 of 11 ( 18.2% ) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Funsized\_3 (B9),

**Summary by clusters:**

There are 5 clusters represented in this pham: EC, AI, B9, B2, FG,

Info for manual annotations of cluster AI:

- Start number 20 was manually annotated 2 times for cluster AI.

Info for manual annotations of cluster B2:

- Start number 13 was manually annotated 1 time for cluster B2.

Info for manual annotations of cluster B9:

- Start number 20 was manually annotated 2 times for cluster B9.
- Start number 25 was manually annotated 1 time for cluster B9.

Info for manual annotations of cluster EC:

- Start number 17 was manually annotated 2 times for cluster EC.

Info for manual annotations of cluster FG:

- Start number 20 was manually annotated 2 times for cluster FG.

**Gene Information:**

Gene: Causa\_4 Start: 1633, Stop: 2544, Start Num: 20

Candidate Starts for Causa\_4:

(1, 1321), (5, 1381), (Start: 20 @1633 has 6 MA's), (27, 1693), (29, 1705), (42, 1891), (43, 1906), (54, 2026), (59, 2047), (60, 2077), (67, 2167), (74, 2257), (84, 2344), (90, 2395), (95, 2455), (96, 2476), (97, 2485), (99, 2494),

Gene: Funsized\_3 Start: 1714, Stop: 2565, Start Num: 25

Candidate Starts for Funsized\_3:

(19, 1687), (Start: 25 @1714 has 1 MA's), (26, 1741), (29, 1756), (31, 1774), (38, 1894), (41, 1936), (44, 1969), (45, 1972), (46, 1978), (53, 2053), (65, 2185), (75, 2305), (79, 2335), (83, 2377), (85, 2389), (86, 2395), (87, 2401), (88, 2416), (92, 2449),

Gene: Knocker\_3 Start: 1699, Stop: 2547, Start Num: 20

Candidate Starts for Knocker\_3:

(2, 1417), (3, 1435), (4, 1438), (8, 1537), (9, 1564), (Start: 20 @1699 has 6 MA's), (26, 1753), (31, 1786), (32, 1789), (33, 1834), (38, 1906), (45, 1981), (46, 1987), (53, 2062), (64, 2179), (65, 2194), (72, 2272), (79, 2344), (80, 2347), (82, 2365), (84, 2389), (86, 2404), (87, 2410), (88, 2425), (94, 2494), (98, 2536),

Gene: Maruru\_88 Start: 53421, Stop: 54311, Start Num: 20

Candidate Starts for Maruru\_88:

(Start: 20 @53421 has 6 MA's), (30, 53514), (34, 53574), (35, 53586), (36, 53598), (41, 53682), (55, 53829), (63, 53913), (69, 53985), (71, 54009), (90, 54183),

Gene: Megan\_3 Start: 1626, Stop: 2543, Start Num: 17

Candidate Starts for Megan\_3:

(Start: 17 @1626 has 2 MA's), (22, 1662), (23, 1668), (28, 1719), (34, 1791), (38, 1857), (43, 1926), (50, 1983), (52, 2004), (57, 2058), (61, 2100), (62, 2121), (66, 2175), (68, 2202), (70, 2229), (71, 2232), (77, 2292), (78, 2298), (89, 2403), (93, 2448), (100, 2538),

Gene: Nicole72\_4 Start: 1834, Stop: 2751, Start Num: 17

Candidate Starts for Nicole72\_4:

(7, 1702), (10, 1750), (12, 1771), (14, 1795), (16, 1810), (Start: 17 @1834 has 2 MA's), (22, 1870), (23, 1876), (24, 1882), (28, 1927), (34, 1999), (38, 2065), (43, 2134), (48, 2170), (52, 2212), (57, 2266), (61, 2308), (62, 2329), (68, 2410), (70, 2437), (71, 2440), (73, 2470), (77, 2500), (78, 2506), (91, 2623), (93, 2656), (100, 2746),

Gene: Rinkes\_3 Start: 1688, Stop: 2560, Start Num: 20

Candidate Starts for Rinkes\_3:

(2, 1406), (3, 1424), (8, 1526), (9, 1553), (Start: 20 @1688 has 6 MA's), (Start: 25 @1715 has 1 MA's), (26, 1742), (29, 1757), (38, 1895), (39, 1919), (45, 1973), (46, 1979), (49, 2000), (51, 2018), (53, 2054), (64, 2171), (65, 2186), (75, 2306), (79, 2336), (83, 2378), (85, 2390), (86, 2396), (87, 2402), (88, 2417), (92, 2450),

Gene: Sonali\_87 Start: 54040, Stop: 54930, Start Num: 20

Candidate Starts for Sonali\_87:

(Start: 20 @54040 has 6 MA's), (30, 54133), (35, 54205), (36, 54217), (40, 54286), (41, 54301), (43, 54325), (55, 54448), (63, 54532), (71, 54628), (90, 54802),

Gene: StAugustine\_4 Start: 1624, Stop: 2535, Start Num: 20

Candidate Starts for StAugustine\_4:

(1, 1321), (5, 1381), (Start: 20 @1624 has 6 MA's), (27, 1684), (29, 1696), (42, 1882), (43, 1897), (54, 2017), (59, 2038), (60, 2068), (63, 2107), (67, 2158), (74, 2248), (84, 2335), (90, 2386), (95, 2446), (96, 2467), (97, 2476), (99, 2485),

Gene: Sunshine23\_90 Start: 53776, Stop: 54666, Start Num: 20

Candidate Starts for Sunshine23\_90:

(Start: 20 @53776 has 6 MA's), (30, 53869), (35, 53941), (36, 53953), (40, 54022), (41, 54037), (55, 54184), (63, 54268), (69, 54340), (71, 54364), (90, 54538),

Gene: Tinciduntolum\_2 Start: 819, Stop: 1574, Start Num: 13

Candidate Starts for Tincidunt\_solum\_2:

(6, 714), (11, 789), (Start: 13 @819 has 1 MA's), (15, 831), (18, 855), (21, 888), (37, 1065), (38, 1089),  
(41, 1131), (43, 1149), (45, 1158), (47, 1167), (54, 1269), (56, 1281), (58, 1287), (60, 1320), (65, 1380),  
(70, 1452), (74, 1497), (76, 1509), (81, 1542),