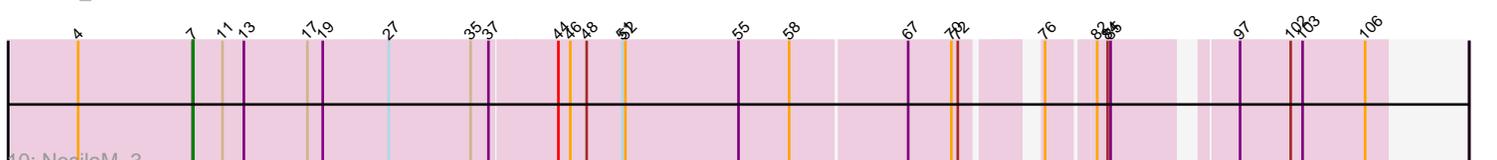
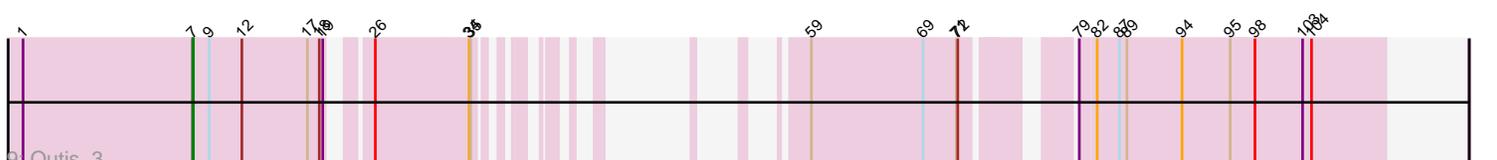
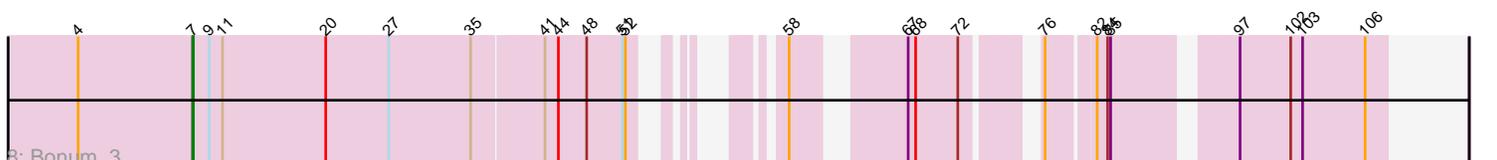
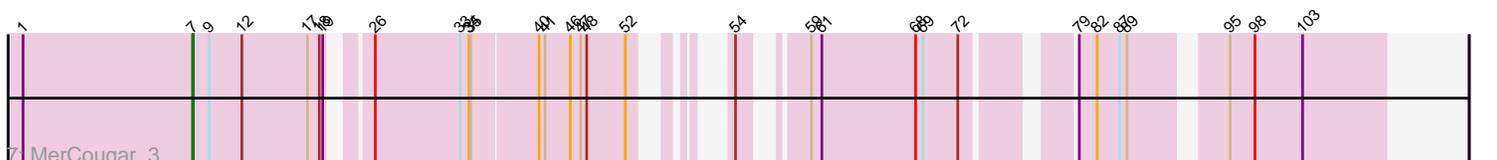
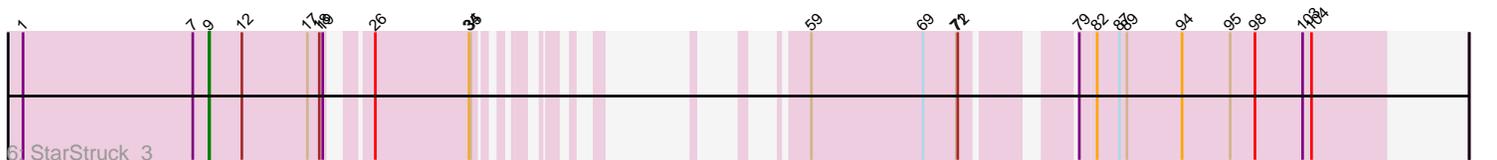
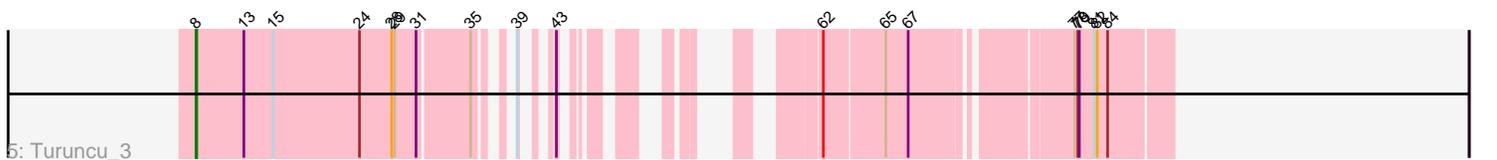
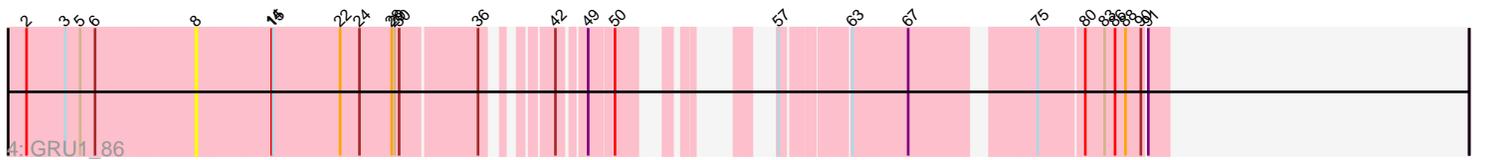
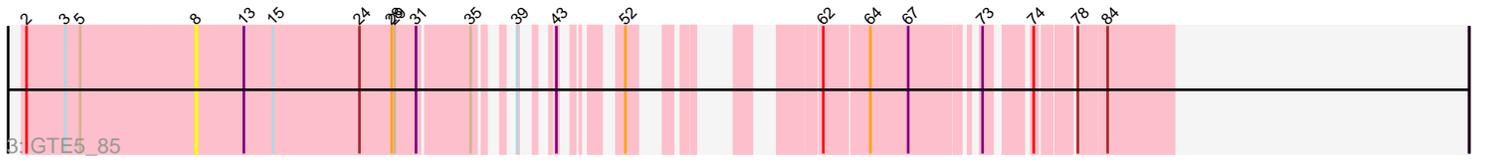
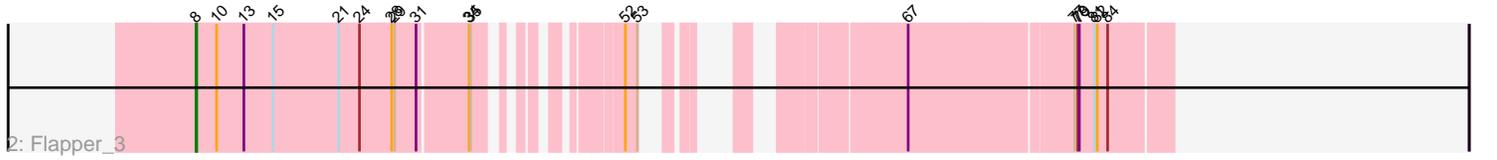
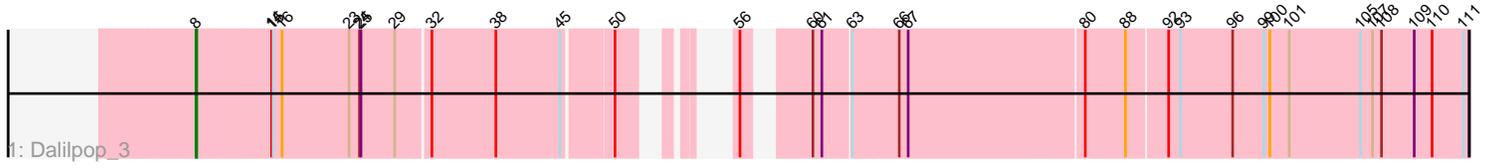


Pham 282642



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 282642 Report

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

Pham number 282642 has 10 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Dalilpop\_3
- Track 2 : Flapper\_3
- Track 3 : GTE5\_85
- Track 4 : GRU1\_86
- Track 5 : Turuncu\_3
- Track 6 : StarStruck\_3
- Track 7 : MerCougar\_3
- Track 8 : Bonum\_3
- Track 9 : Outis\_3
- Track 10 : NosilaM\_3

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

The start number called the most often in the published annotations is 7, it was called in 4 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bonum\_3, MerCougar\_3, NosilaM\_3, Outis\_3,

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

- StarStruck\_3,

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

- Dalilpop\_3, Flapper\_3, GRU1\_86, GTE5\_85, Turuncu\_3,

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

Start 7:

- Found in 5 of 10 ( 50.0% ) of genes in pham
- Manual Annotations of this start: 4 of 8
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Bonum\_3 (CR2), MerCougar\_3 (CR2), NosilaM\_3 (CR2), Outis\_3 (CR2),

Start 8:

- Found in 5 of 10 ( 50.0% ) of genes in pham
- Manual Annotations of this start: 3 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dalilpop\_3 (CR1), Flapper\_3 (CR1), GRU1\_86 (CR1), GTE5\_85 (CR1), Turuncu\_3 (CR1),

Start 9:

- Found in 4 of 10 ( 40.0% ) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 25.0% of time when present
- Phage (with cluster) where this start called: StarStruck\_3 (CR2),

**Summary by clusters:**

There are 2 clusters represented in this pham: CR2, CR1,

Info for manual annotations of cluster CR1:

- Start number 8 was manually annotated 3 times for cluster CR1.

Info for manual annotations of cluster CR2:

- Start number 7 was manually annotated 4 times for cluster CR2.
- Start number 9 was manually annotated 1 time for cluster CR2.

**Gene Information:**

Gene: Bonum\_3 Start: 1829, Stop: 3790, Start Num: 7

Candidate Starts for Bonum\_3:

(4, 1598), (Start: 7 @1829 has 4 MA's), (Start: 9 @1862 has 1 MA's), (11, 1889), (20, 2096), (27, 2219), (35, 2381), (41, 2522), (44, 2549), (48, 2606), (51, 2669), (52, 2675), (58, 2813), (67, 2990), (68, 3005), (72, 3089), (76, 3194), (82, 3275), (84, 3296), (85, 3302), (97, 3500), (102, 3599), (103, 3623), (106, 3746),

Gene: Dalilpop\_3 Start: 1745, Stop: 4006, Start Num: 8

Candidate Starts for Dalilpop\_3:

(Start: 8 @1745 has 3 MA's), (14, 1883), (15, 1886), (16, 1904), (23, 2039), (24, 2060), (25, 2063), (29, 2129), (32, 2192), (38, 2321), (45, 2450), (50, 2537), (56, 2636), (60, 2729), (61, 2747), (63, 2801), (66, 2891), (67, 2909), (80, 3248), (88, 3326), (92, 3401), (93, 3425), (96, 3530), (99, 3593), (100, 3605), (101, 3644), (105, 3788), (107, 3812), (108, 3830), (109, 3896), (110, 3932), (111, 3995),

Gene: Flapper\_3 Start: 1748, Stop: 3301, Start Num: 8

Candidate Starts for Flapper\_3:

(Start: 8 @1748 has 3 MA's), (10, 1781), (13, 1835), (15, 1889), (21, 2021), (24, 2063), (28, 2126), (29, 2132), (31, 2174), (34, 2270), (35, 2273), (52, 2453), (53, 2477), (67, 2798), (77, 3116), (78, 3122), (79, 3125), (81, 3155), (82, 3161), (84, 3182),

Gene: GRU1\_86 Start: 60814, Stop: 62319, Start Num: 8

Candidate Starts for GRU1\_86:

(2, 60487), (3, 60565), (5, 60595), (6, 60625), (Start: 8 @60814 has 3 MA's), (14, 60952), (15, 60955), (22, 61090), (24, 61129), (28, 61192), (29, 61198), (30, 61207), (36, 61354), (42, 61432), (49, 61477), (50, 61519), (57, 61645), (63, 61762), (67, 61870), (75, 62086), (80, 62167), (83, 62203), (86, 62224),

(88, 62245), (90, 62272), (91, 62278),

Gene: GTE5\_85 Start: 61835, Stop: 63214, Start Num: 8

Candidate Starts for GTE5\_85:

(2, 61508), (3, 61586), (5, 61616), (Start: 8 @61835 has 3 MA's), (13, 61925), (15, 61979), (24, 62153), (28, 62216), (29, 62222), (31, 62264), (35, 62363), (39, 62393), (43, 62411), (52, 62471), (62, 62657), (64, 62741), (67, 62816), (73, 62921), (74, 62984), (78, 63041), (84, 63086),

Gene: MerCougar\_3 Start: 1858, Stop: 3819, Start Num: 7

Candidate Starts for MerCougar\_3:

(1, 1516), (Start: 7 @1858 has 4 MA's), (Start: 9 @1891 has 1 MA's), (12, 1957), (17, 2086), (18, 2110), (19, 2116), (26, 2164), (33, 2332), (34, 2350), (35, 2353), (40, 2482), (41, 2494), (46, 2545), (47, 2566), (48, 2578), (52, 2647), (54, 2722), (59, 2806), (61, 2827), (68, 3016), (69, 3031), (72, 3100), (79, 3262), (82, 3289), (87, 3334), (89, 3349), (95, 3508), (98, 3556), (103, 3652),

Gene: NosilaM\_3 Start: 1871, Stop: 4069, Start Num: 7

Candidate Starts for NosilaM\_3:

(4, 1640), (Start: 7 @1871 has 4 MA's), (11, 1931), (13, 1973), (17, 2096), (19, 2126), (27, 2255), (35, 2417), (37, 2453), (44, 2585), (46, 2609), (48, 2642), (51, 2714), (52, 2720), (55, 2948), (58, 3050), (67, 3275), (70, 3362), (72, 3374), (76, 3479), (82, 3560), (84, 3581), (85, 3587), (97, 3776), (102, 3875), (103, 3899), (106, 4025),

Gene: Outis\_3 Start: 1858, Stop: 3594, Start Num: 7

Candidate Starts for Outis\_3:

(1, 1516), (Start: 7 @1858 has 4 MA's), (Start: 9 @1891 has 1 MA's), (12, 1957), (17, 2086), (18, 2110), (19, 2116), (26, 2164), (34, 2350), (35, 2353), (59, 2533), (69, 2758), (71, 2824), (72, 2827), (79, 2989), (82, 3016), (87, 3061), (89, 3076), (94, 3187), (95, 3283), (98, 3331), (103, 3427), (104, 3445),

Gene: StarStruck\_3 Start: 1891, Stop: 3594, Start Num: 9

Candidate Starts for StarStruck\_3:

(1, 1516), (Start: 7 @1858 has 4 MA's), (Start: 9 @1891 has 1 MA's), (12, 1957), (17, 2086), (18, 2110), (19, 2116), (26, 2164), (34, 2350), (35, 2353), (59, 2533), (69, 2758), (71, 2824), (72, 2827), (79, 2989), (82, 3016), (87, 3061), (89, 3076), (94, 3187), (95, 3283), (98, 3331), (103, 3427), (104, 3445),

Gene: Turuncu\_3 Start: 1749, Stop: 3197, Start Num: 8

Candidate Starts for Turuncu\_3:

(Start: 8 @1749 has 3 MA's), (13, 1839), (15, 1893), (24, 2067), (28, 2130), (29, 2136), (31, 2178), (35, 2277), (39, 2307), (43, 2325), (62, 2571), (65, 2685), (67, 2730), (77, 3012), (78, 3018), (79, 3021), (81, 3051), (82, 3057), (84, 3078),