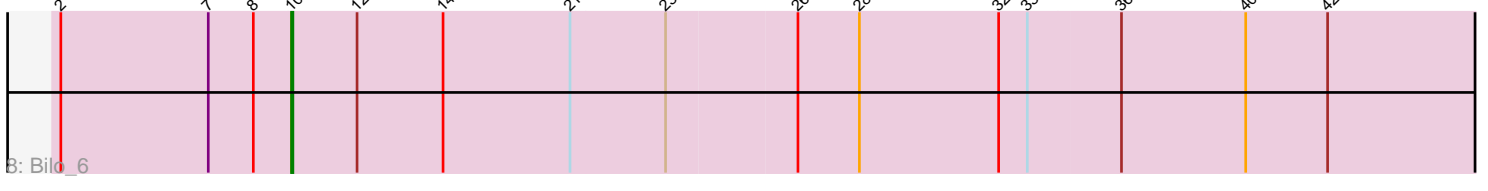
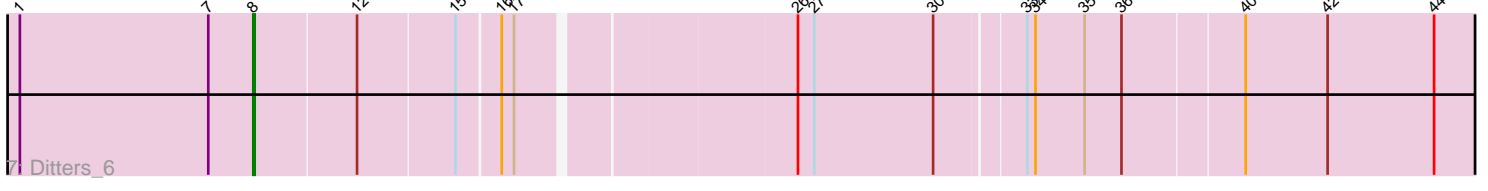
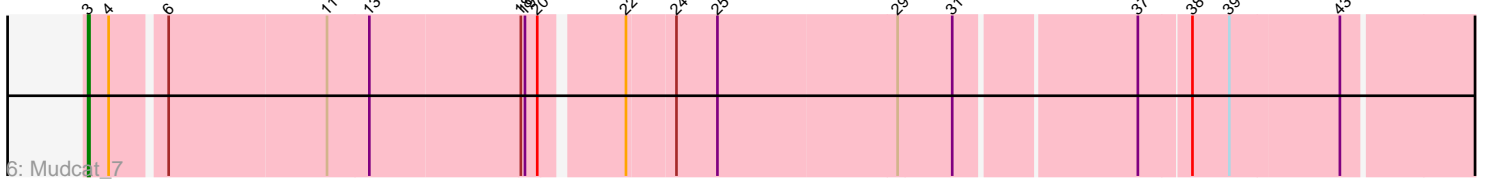
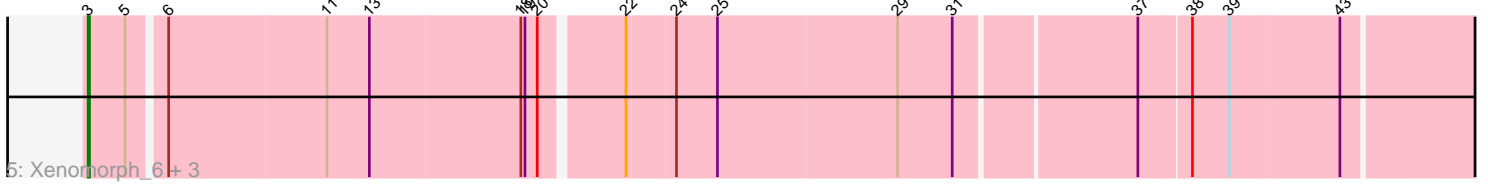
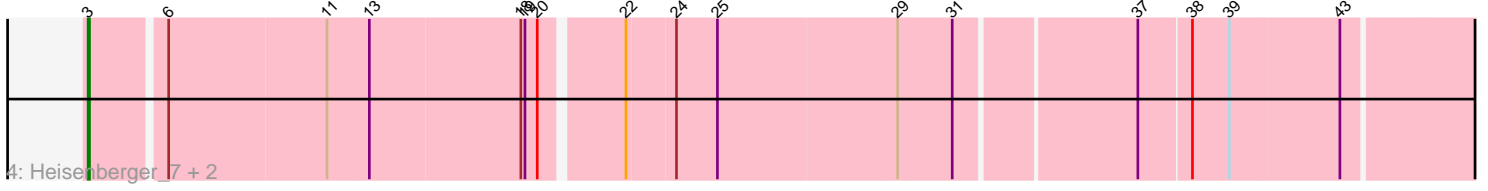
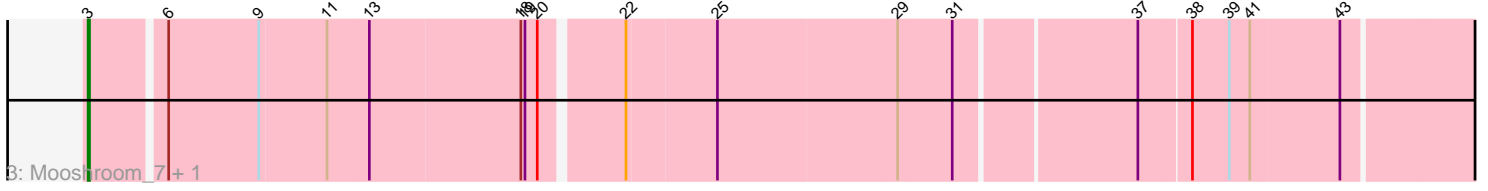
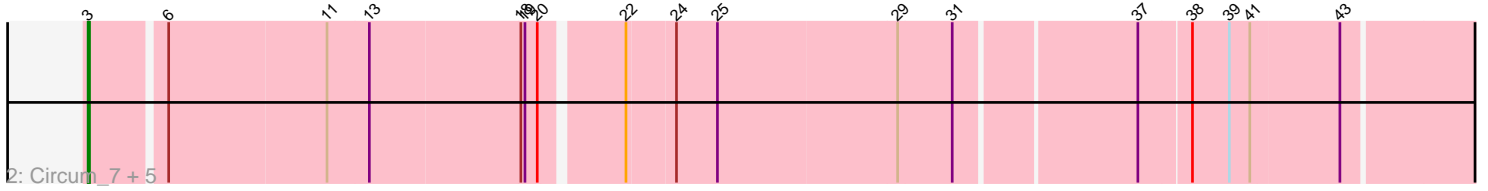
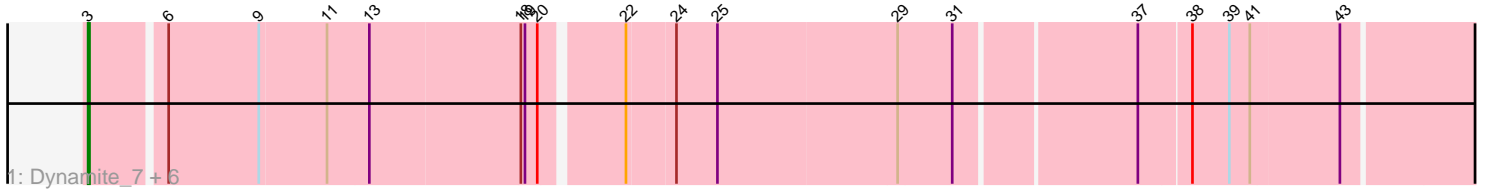


Pham 309132



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 309132 Report

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

Pham number 309132 has 25 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Dynamite\_7, Tribby\_7, Arcadia\_7, Bowling\_7, NapoleonB\_7, Nason\_7, Elsa\_7
- Track 2 : Circum\_7, KeaneyLin\_6, Benllo\_6, Hankly\_6, BenitoAntonio\_7, GoCrazy\_6
- Track 3 : Mooshroom\_7, Kardesai\_6
- Track 4 : Heisenberger\_7, YoshiYama\_6, JEGGS\_7
- Track 5 : Xenomorph\_6, Correa\_7, Cheesy\_7, Stardom\_6
- Track 6 : Mudcat\_7
- Track 7 : Ditters\_6
- Track 8 : Bilo\_6

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

The start number called the most often in the published annotations is 3, it was called in 21 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arcadia\_7, BenitoAntonio\_7, Benllo\_6, Bowling\_7, Cheesy\_7, Circum\_7, Correa\_7, Dynamite\_7, Elsa\_7, GoCrazy\_6, Hankly\_6, Heisenberger\_7, JEGGS\_7, Kardesai\_6, KeaneyLin\_6, Mooshroom\_7, Mudcat\_7, NapoleonB\_7, Nason\_7, Stardom\_6, Tribby\_7, Xenomorph\_6, YoshiYama\_6,

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

- 

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

- Bilo\_6, Ditters\_6,

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

Start 3:

- Found in 23 of 25 ( 92.0% ) of genes in pham
- Manual Annotations of this start: 21 of 23
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Arcadia\_7 (AM), BenitoAntonio\_7 (AM), Benllo\_6 (AM), Bowling\_7 (AM), Cheesy\_7 (AM), Circum\_7 (AM), Correa\_7 (AM), Dynamite\_7 (AM), Elsa\_7 (AM), GoCrazy\_6 (AM), Hankly\_6 (AM), Heisenberger\_7 (AM), JEGGS\_7 (AM), Kardesai\_6 (AM), KeaneyLin\_6 (AM), Mooshroom\_7 (AM), Mudcat\_7 (AM), NapoleonB\_7 (AM), Nason\_7 (AM), Stardom\_6 (AM), Tribby\_7 (AM), Xenomorph\_6 (AM), YoshiYama\_6 (AM),

Start 8:

- Found in 2 of 25 ( 8.0% ) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Ditters\_6 (BI2),

Start 10:

- Found in 1 of 25 ( 4.0% ) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bilo\_6 (BI2),

### **Summary by clusters:**

There are 2 clusters represented in this pham: BI2, AM,

Info for manual annotations of cluster AM:

- Start number 3 was manually annotated 21 times for cluster AM.

Info for manual annotations of cluster BI2:

- Start number 8 was manually annotated 1 time for cluster BI2.
- Start number 10 was manually annotated 1 time for cluster BI2.

### **Gene Information:**

Gene: Arcadia\_7 Start: 3209, Stop: 4216, Start Num: 3

Candidate Starts for Arcadia\_7:

(Start: 3 @3209 has 21 MA's), (6, 3260), (9, 3326), (11, 3374), (13, 3404), (18, 3512), (19, 3515), (20, 3524), (22, 3578), (24, 3611), (25, 3641), (29, 3770), (31, 3809), (37, 3932), (38, 3968), (39, 3995), (41, 4010), (43, 4073),

Gene: BenitoAntonio\_7 Start: 2817, Stop: 3824, Start Num: 3

Candidate Starts for BenitoAntonio\_7:

(Start: 3 @2817 has 21 MA's), (6, 2868), (11, 2982), (13, 3012), (18, 3120), (19, 3123), (20, 3132), (22, 3186), (24, 3219), (25, 3249), (29, 3378), (31, 3417), (37, 3540), (38, 3576), (39, 3603), (41, 3618), (43, 3681),

Gene: Benllo\_6 Start: 2819, Stop: 3826, Start Num: 3

Candidate Starts for Benllo\_6:

(Start: 3 @2819 has 21 MA's), (6, 2870), (11, 2984), (13, 3014), (18, 3122), (19, 3125), (20, 3134), (22, 3188), (24, 3221), (25, 3251), (29, 3380), (31, 3419), (37, 3542), (38, 3578), (39, 3605), (41, 3620), (43, 3683),

Gene: Bilo\_6 Start: 2269, Stop: 3171, Start Num: 10

Candidate Starts for Bilo\_6:

(2, 2101), (7, 2209), (Start: 8 @2242 has 1 MA's), (Start: 10 @2269 has 1 MA's), (12, 2317), (14, 2380), (21, 2473), (23, 2542), (26, 2635), (28, 2680), (32, 2782), (33, 2803), (36, 2869), (40, 2959), (42, 3019),

Gene: Bowling\_7 Start: 2819, Stop: 3826, Start Num: 3

Candidate Starts for Bowling\_7:

(Start: 3 @2819 has 21 MA's), (6, 2870), (9, 2936), (11, 2984), (13, 3014), (18, 3122), (19, 3125), (20, 3134), (22, 3188), (24, 3221), (25, 3251), (29, 3380), (31, 3419), (37, 3542), (38, 3578), (39, 3605), (41, 3620), (43, 3683),

Gene: Cheesy\_7 Start: 2819, Stop: 3826, Start Num: 3

Candidate Starts for Cheesy\_7:

(Start: 3 @2819 has 21 MA's), (5, 2846), (6, 2870), (11, 2984), (13, 3014), (18, 3122), (19, 3125), (20, 3134), (22, 3188), (24, 3221), (25, 3251), (29, 3380), (31, 3419), (37, 3542), (38, 3578), (39, 3605), (43, 3683),

Gene: Circum\_7 Start: 2819, Stop: 3826, Start Num: 3

Candidate Starts for Circum\_7:

(Start: 3 @2819 has 21 MA's), (6, 2870), (11, 2984), (13, 3014), (18, 3122), (19, 3125), (20, 3134), (22, 3188), (24, 3221), (25, 3251), (29, 3380), (31, 3419), (37, 3542), (38, 3578), (39, 3605), (41, 3620), (43, 3683),

Gene: Correa\_7 Start: 2819, Stop: 3826, Start Num: 3

Candidate Starts for Correa\_7:

(Start: 3 @2819 has 21 MA's), (5, 2846), (6, 2870), (11, 2984), (13, 3014), (18, 3122), (19, 3125), (20, 3134), (22, 3188), (24, 3221), (25, 3251), (29, 3380), (31, 3419), (37, 3542), (38, 3578), (39, 3605), (43, 3683),

Gene: Ditters\_6 Start: 2286, Stop: 3176, Start Num: 8

Candidate Starts for Ditters\_6:

(1, 2115), (7, 2253), (Start: 8 @2286 has 1 MA's), (12, 2358), (15, 2427), (16, 2457), (17, 2466), (26, 2652), (27, 2664), (30, 2751), (33, 2811), (34, 2817), (35, 2853), (36, 2880), (40, 2964), (42, 3024), (44, 3102),

Gene: Dynamite\_7 Start: 2819, Stop: 3826, Start Num: 3

Candidate Starts for Dynamite\_7:

(Start: 3 @2819 has 21 MA's), (6, 2870), (9, 2936), (11, 2984), (13, 3014), (18, 3122), (19, 3125), (20, 3134), (22, 3188), (24, 3221), (25, 3251), (29, 3380), (31, 3419), (37, 3542), (38, 3578), (39, 3605), (41, 3620), (43, 3683),

Gene: Elsa\_7 Start: 3209, Stop: 4216, Start Num: 3

Candidate Starts for Elsa\_7:

(Start: 3 @3209 has 21 MA's), (6, 3260), (9, 3326), (11, 3374), (13, 3404), (18, 3512), (19, 3515), (20, 3524), (22, 3578), (24, 3611), (25, 3641), (29, 3770), (31, 3809), (37, 3932), (38, 3968), (39, 3995), (41, 4010), (43, 4073),

Gene: GoCrazy\_6 Start: 2819, Stop: 3826, Start Num: 3

Candidate Starts for GoCrazy\_6:

(Start: 3 @2819 has 21 MA's), (6, 2870), (11, 2984), (13, 3014), (18, 3122), (19, 3125), (20, 3134), (22, 3188), (24, 3221), (25, 3251), (29, 3380), (31, 3419), (37, 3542), (38, 3578), (39, 3605), (41, 3620), (43, 3683),

Gene: Hankly\_6 Start: 2843, Stop: 3850, Start Num: 3

Candidate Starts for Hankly\_6:

(Start: 3 @2843 has 21 MA's), (6, 2894), (11, 3008), (13, 3038), (18, 3146), (19, 3149), (20, 3158), (22, 3212), (24, 3245), (25, 3275), (29, 3404), (31, 3443), (37, 3566), (38, 3602), (39, 3629), (41, 3644), (43, 3707),

Gene: Heisenberger\_7 Start: 2819, Stop: 3826, Start Num: 3

Candidate Starts for Heisenberger\_7:

(Start: 3 @2819 has 21 MA's), (6, 2870), (11, 2984), (13, 3014), (18, 3122), (19, 3125), (20, 3134), (22, 3188), (24, 3221), (25, 3251), (29, 3380), (31, 3419), (37, 3542), (38, 3578), (39, 3605), (43, 3683),

Gene: JEGGS\_7 Start: 2821, Stop: 3828, Start Num: 3

Candidate Starts for JEGGS\_7:

(Start: 3 @2821 has 21 MA's), (6, 2872), (11, 2986), (13, 3016), (18, 3124), (19, 3127), (20, 3136), (22, 3190), (24, 3223), (25, 3253), (29, 3382), (31, 3421), (37, 3544), (38, 3580), (39, 3607), (43, 3685),

Gene: Kardesai\_6 Start: 2819, Stop: 3826, Start Num: 3

Candidate Starts for Kardesai\_6:

(Start: 3 @2819 has 21 MA's), (6, 2870), (9, 2936), (11, 2984), (13, 3014), (18, 3122), (19, 3125), (20, 3134), (22, 3188), (25, 3251), (29, 3380), (31, 3419), (37, 3542), (38, 3578), (39, 3605), (41, 3620), (43, 3683),

Gene: KeaneyLin\_6 Start: 2819, Stop: 3826, Start Num: 3

Candidate Starts for KeaneyLin\_6:

(Start: 3 @2819 has 21 MA's), (6, 2870), (11, 2984), (13, 3014), (18, 3122), (19, 3125), (20, 3134), (22, 3188), (24, 3221), (25, 3251), (29, 3380), (31, 3419), (37, 3542), (38, 3578), (39, 3605), (41, 3620), (43, 3683),

Gene: Mooshroom\_7 Start: 2819, Stop: 3826, Start Num: 3

Candidate Starts for Mooshroom\_7:

(Start: 3 @2819 has 21 MA's), (6, 2870), (9, 2936), (11, 2984), (13, 3014), (18, 3122), (19, 3125), (20, 3134), (22, 3188), (25, 3251), (29, 3380), (31, 3419), (37, 3542), (38, 3578), (39, 3605), (41, 3620), (43, 3683),

Gene: Mudcat\_7 Start: 2820, Stop: 3827, Start Num: 3

Candidate Starts for Mudcat\_7:

(Start: 3 @2820 has 21 MA's), (4, 2835), (6, 2871), (11, 2985), (13, 3015), (18, 3123), (19, 3126), (20, 3135), (22, 3189), (24, 3222), (25, 3252), (29, 3381), (31, 3420), (37, 3543), (38, 3579), (39, 3606), (43, 3684),

Gene: NapoleonB\_7 Start: 2819, Stop: 3826, Start Num: 3

Candidate Starts for NapoleonB\_7:

(Start: 3 @2819 has 21 MA's), (6, 2870), (9, 2936), (11, 2984), (13, 3014), (18, 3122), (19, 3125), (20, 3134), (22, 3188), (24, 3221), (25, 3251), (29, 3380), (31, 3419), (37, 3542), (38, 3578), (39, 3605), (41, 3620), (43, 3683),

Gene: Nason\_7 Start: 3209, Stop: 4216, Start Num: 3

Candidate Starts for Nason\_7:

(Start: 3 @3209 has 21 MA's), (6, 3260), (9, 3326), (11, 3374), (13, 3404), (18, 3512), (19, 3515), (20, 3524), (22, 3578), (24, 3611), (25, 3641), (29, 3770), (31, 3809), (37, 3932), (38, 3968), (39, 3995), (41, 4010), (43, 4073),

Gene: Stardom\_6 Start: 2819, Stop: 3826, Start Num: 3

Candidate Starts for Stardom\_6:

(Start: 3 @2819 has 21 MA's), (5, 2846), (6, 2870), (11, 2984), (13, 3014), (18, 3122), (19, 3125), (20, 3134), (22, 3188), (24, 3221), (25, 3251), (29, 3380), (31, 3419), (37, 3542), (38, 3578), (39, 3605), (43, 3683),

Gene: Tribby\_7 Start: 2819, Stop: 3826, Start Num: 3

Candidate Starts for Tribby\_7:

(Start: 3 @2819 has 21 MA's), (6, 2870), (9, 2936), (11, 2984), (13, 3014), (18, 3122), (19, 3125), (20, 3134), (22, 3188), (24, 3221), (25, 3251), (29, 3380), (31, 3419), (37, 3542), (38, 3578), (39, 3605), (41, 3620), (43, 3683),

Gene: Xenomorph\_6 Start: 2819, Stop: 3826, Start Num: 3

Candidate Starts for Xenomorph\_6:

(Start: 3 @2819 has 21 MA's), (5, 2846), (6, 2870), (11, 2984), (13, 3014), (18, 3122), (19, 3125), (20, 3134), (22, 3188), (24, 3221), (25, 3251), (29, 3380), (31, 3419), (37, 3542), (38, 3578), (39, 3605), (43, 3683),

Gene: YoshiYama\_6 Start: 2819, Stop: 3826, Start Num: 3

Candidate Starts for YoshiYama\_6:

(Start: 3 @2819 has 21 MA's), (6, 2870), (11, 2984), (13, 3014), (18, 3122), (19, 3125), (20, 3134), (22, 3188), (24, 3221), (25, 3251), (29, 3380), (31, 3419), (37, 3542), (38, 3578), (39, 3605), (43, 3683),