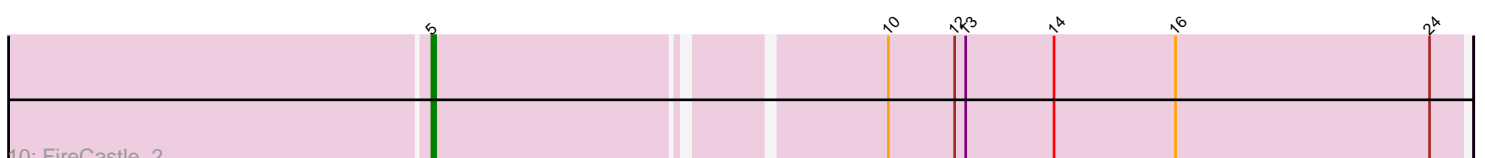
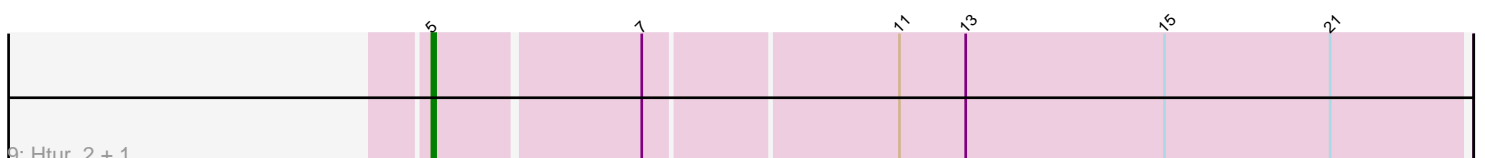
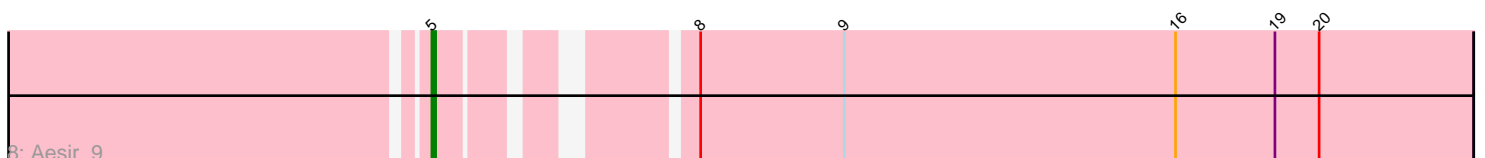
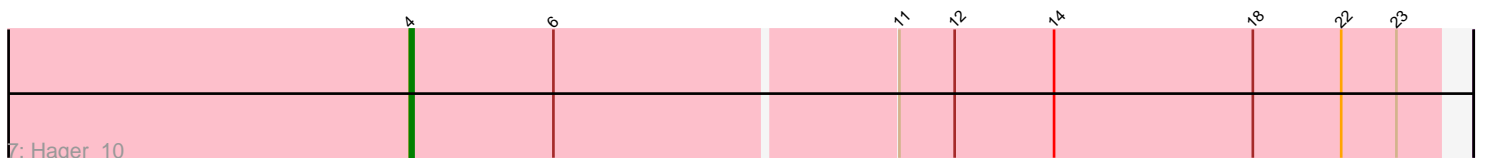
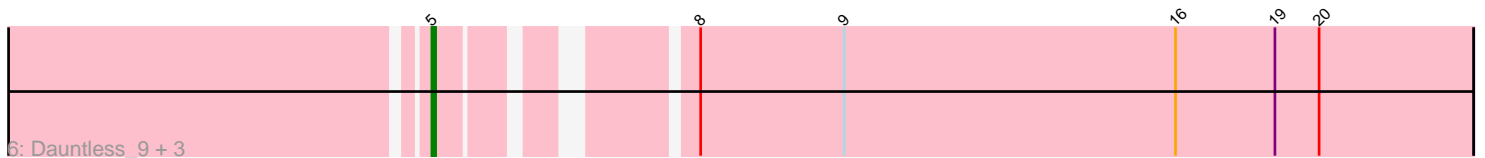
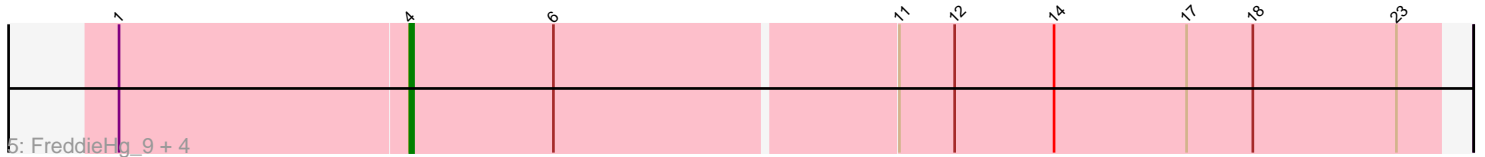
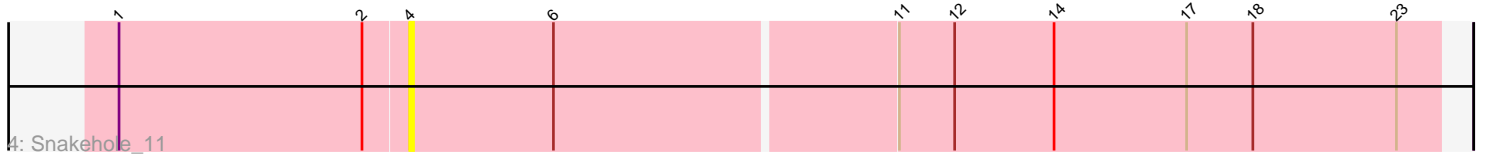
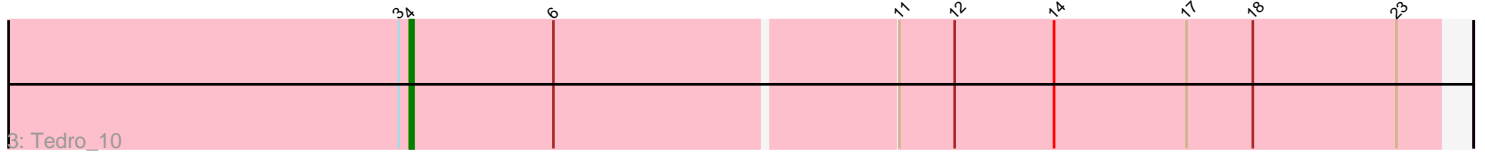
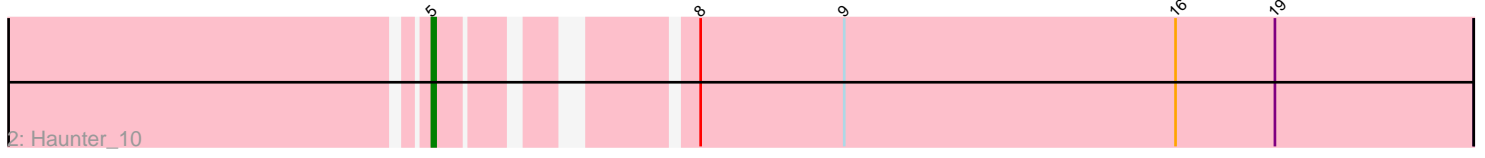


Pham 158091



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 158091 Report

This analysis was run 04/22/24 on database version 561.

Pham number 158091 has 29 members, 7 are drafts.

Phages represented in each track:

- Track 1 : NarutoRun\_10, Cybele\_10, PhunaPhoke\_10, Gilda\_10, Poultruss\_9, AnnaSerena\_10, Neptune\_10, Anakin\_10, OverHedge\_10, Potty\_10, Rachella\_10, Kate\_10
- Track 2 : Haunter\_10
- Track 3 : Tedro\_10
- Track 4 : Snakehole\_11
- Track 5 : FreddieHg\_9, CoolCookie\_12, Chivey\_9, Hiddenleaf\_9, JingleBells\_9
- Track 6 : Dauntless\_9, JDawG\_10, Erudite\_9, MortySmith\_9
- Track 7 : Hager\_10
- Track 8 : Aesir\_9
- Track 9 : Htur\_2, Rasovi\_2
- Track 10 : FireCastle\_2

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

The start number called the most often in the published annotations is 4, it was called in 15 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Anakin\_10, AnnaSerena\_10, Chivey\_9, CoolCookie\_12, Cybele\_10, FreddieHg\_9, Gilda\_10, Hager\_10, Hiddenleaf\_9, JingleBells\_9, Kate\_10, NarutoRun\_10, Neptune\_10, OverHedge\_10, PhunaPhoke\_10, Potty\_10, Poultruss\_9, Rachella\_10, Snakehole\_11, Tedro\_10,

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

- 

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

- Aesir\_9, Dauntless\_9, Erudite\_9, FireCastle\_2, Haunter\_10, Htur\_2, JDawG\_10, MortySmith\_9, Rasovi\_2,

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

Start 4:

- Found in 20 of 29 ( 69.0% ) of genes in pham
- Manual Annotations of this start: 15 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anakin\_10 (EF), AnnaSerena\_10 (EF), Chivey\_9 (EF), CoolCookie\_12 (EF), Cybele\_10 (EF), FreddieHg\_9 (EF), Gilda\_10 (EF), Hager\_10 (EF), Hiddenleaf\_9 (EF), JingleBells\_9 (EF), Kate\_10 (EF), NarutoRun\_10 (EF), Neptune\_10 (EF), OverHedge\_10 (EF), PhunaPhoke\_10 (EF), Potty\_10 (EF), Poultruss\_9 (EF), Rachella\_10 (EF), Snakehole\_11 (EF), Tedro\_10 (EF),

Start 5:

- Found in 9 of 29 ( 31.0% ) of genes in pham
- Manual Annotations of this start: 7 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aesir\_9 (EF), Dauntless\_9 (EF), Erudite\_9 (EF), FireCastle\_2 (EJ), Haunter\_10 (EF), Htur\_2 (EJ), JDawG\_10 (EF), MortySmith\_9 (EF), Rasovi\_2 (EJ),

### Summary by clusters:

There are 2 clusters represented in this pham: EF, EJ,

Info for manual annotations of cluster EF:

- Start number 4 was manually annotated 15 times for cluster EF.
- Start number 5 was manually annotated 5 times for cluster EF.

Info for manual annotations of cluster EJ:

- Start number 5 was manually annotated 2 times for cluster EJ.

### Gene Information:

Gene: Aesir\_9 Start: 2665, Stop: 2928, Start Num: 5

Candidate Starts for Aesir\_9:

(Start: 5 @2665 has 7 MA's), (8, 2719), (9, 2758), (16, 2848), (19, 2875), (20, 2887),

Gene: Anakin\_10 Start: 2867, Stop: 3142, Start Num: 4

Candidate Starts for Anakin\_10:

(Start: 4 @2867 has 15 MA's), (6, 2906), (11, 2996), (12, 3011), (14, 3038), (17, 3074), (18, 3092), (23, 3131),

Gene: AnnaSerena\_10 Start: 2864, Stop: 3139, Start Num: 4

Candidate Starts for AnnaSerena\_10:

(Start: 4 @2864 has 15 MA's), (6, 2903), (11, 2993), (12, 3008), (14, 3035), (17, 3071), (18, 3089), (23, 3128),

Gene: Chivey\_9 Start: 2590, Stop: 2865, Start Num: 4

Candidate Starts for Chivey\_9:

(1, 2512), (Start: 4 @2590 has 15 MA's), (6, 2629), (11, 2719), (12, 2734), (14, 2761), (17, 2797), (18, 2815), (23, 2854),

Gene: CoolCookie\_12 Start: 2859, Stop: 3134, Start Num: 4

Candidate Starts for CoolCookie\_12:

(1, 2781), (Start: 4 @2859 has 15 MA's), (6, 2898), (11, 2988), (12, 3003), (14, 3030), (17, 3066), (18, 3084), (23, 3123),

Gene: Cybele\_10 Start: 2832, Stop: 3107, Start Num: 4

Candidate Starts for Cybele\_10:

(Start: 4 @2832 has 15 MA's), (6, 2871), (11, 2961), (12, 2976), (14, 3003), (17, 3039), (18, 3057), (23, 3096),

Gene: Dauntless\_9 Start: 2594, Stop: 2857, Start Num: 5

Candidate Starts for Dauntless\_9:

(Start: 5 @2594 has 7 MA's), (8, 2648), (9, 2687), (16, 2777), (19, 2804), (20, 2816),

Gene: Erudite\_9 Start: 2594, Stop: 2857, Start Num: 5

Candidate Starts for Erudite\_9:

(Start: 5 @2594 has 7 MA's), (8, 2648), (9, 2687), (16, 2777), (19, 2804), (20, 2816),

Gene: FireCastle\_2 Start: 591, Stop: 860, Start Num: 5

Candidate Starts for FireCastle\_2:

(Start: 5 @591 has 7 MA's), (10, 705), (12, 723), (13, 726), (14, 750), (16, 783), (24, 852),

Gene: FreddieHg\_9 Start: 2603, Stop: 2878, Start Num: 4

Candidate Starts for FreddieHg\_9:

(1, 2525), (Start: 4 @2603 has 15 MA's), (6, 2642), (11, 2732), (12, 2747), (14, 2774), (17, 2810), (18, 2828), (23, 2867),

Gene: Gilda\_10 Start: 2856, Stop: 3131, Start Num: 4

Candidate Starts for Gilda\_10:

(Start: 4 @2856 has 15 MA's), (6, 2895), (11, 2985), (12, 3000), (14, 3027), (17, 3063), (18, 3081), (23, 3120),

Gene: Hager\_10 Start: 2857, Stop: 3132, Start Num: 4

Candidate Starts for Hager\_10:

(Start: 4 @2857 has 15 MA's), (6, 2896), (11, 2986), (12, 3001), (14, 3028), (18, 3082), (22, 3106), (23, 3121),

Gene: Haunter\_10 Start: 2818, Stop: 3081, Start Num: 5

Candidate Starts for Haunter\_10:

(Start: 5 @2818 has 7 MA's), (8, 2872), (9, 2911), (16, 3001), (19, 3028),

Gene: Hiddenleaf\_9 Start: 2590, Stop: 2865, Start Num: 4

Candidate Starts for Hiddenleaf\_9:

(1, 2512), (Start: 4 @2590 has 15 MA's), (6, 2629), (11, 2719), (12, 2734), (14, 2761), (17, 2797), (18, 2815), (23, 2854),

Gene: Htur\_2 Start: 600, Stop: 872, Start Num: 5

Candidate Starts for Htur\_2:

(Start: 5 @600 has 7 MA's), (7, 654), (11, 720), (13, 738), (15, 792), (21, 837),

Gene: JDawG\_10 Start: 2659, Stop: 2922, Start Num: 5

Candidate Starts for JDawG\_10:

(Start: 5 @2659 has 7 MA's), (8, 2713), (9, 2752), (16, 2842), (19, 2869), (20, 2881),

Gene: JingleBells\_9 Start: 2659, Stop: 2934, Start Num: 4

Candidate Starts for JingleBells\_9:

(1, 2581), (Start: 4 @2659 has 15 MA's), (6, 2698), (11, 2788), (12, 2803), (14, 2830), (17, 2866), (18, 2884), (23, 2923),

Gene: Kate\_10 Start: 2864, Stop: 3139, Start Num: 4

Candidate Starts for Kate\_10:

(Start: 4 @2864 has 15 MA's), (6, 2903), (11, 2993), (12, 3008), (14, 3035), (17, 3071), (18, 3089), (23, 3128),

Gene: MortySmith\_9 Start: 2576, Stop: 2839, Start Num: 5

Candidate Starts for MortySmith\_9:

(Start: 5 @2576 has 7 MA's), (8, 2630), (9, 2669), (16, 2759), (19, 2786), (20, 2798),

Gene: NarutoRun\_10 Start: 2867, Stop: 3142, Start Num: 4

Candidate Starts for NarutoRun\_10:

(Start: 4 @2867 has 15 MA's), (6, 2906), (11, 2996), (12, 3011), (14, 3038), (17, 3074), (18, 3092), (23, 3131),

Gene: Neptune\_10 Start: 2832, Stop: 3107, Start Num: 4

Candidate Starts for Neptune\_10:

(Start: 4 @2832 has 15 MA's), (6, 2871), (11, 2961), (12, 2976), (14, 3003), (17, 3039), (18, 3057), (23, 3096),

Gene: OverHedge\_10 Start: 2829, Stop: 3104, Start Num: 4

Candidate Starts for OverHedge\_10:

(Start: 4 @2829 has 15 MA's), (6, 2868), (11, 2958), (12, 2973), (14, 3000), (17, 3036), (18, 3054), (23, 3093),

Gene: PhunaPhoke\_10 Start: 2850, Stop: 3125, Start Num: 4

Candidate Starts for PhunaPhoke\_10:

(Start: 4 @2850 has 15 MA's), (6, 2889), (11, 2979), (12, 2994), (14, 3021), (17, 3057), (18, 3075), (23, 3114),

Gene: Potty\_10 Start: 2855, Stop: 3130, Start Num: 4

Candidate Starts for Potty\_10:

(Start: 4 @2855 has 15 MA's), (6, 2894), (11, 2984), (12, 2999), (14, 3026), (17, 3062), (18, 3080), (23, 3119),

Gene: Poultruss\_9 Start: 2629, Stop: 2904, Start Num: 4

Candidate Starts for Poultruss\_9:

(Start: 4 @2629 has 15 MA's), (6, 2668), (11, 2758), (12, 2773), (14, 2800), (17, 2836), (18, 2854), (23, 2893),

Gene: Rachella\_10 Start: 2861, Stop: 3136, Start Num: 4

Candidate Starts for Rachella\_10:

(Start: 4 @2861 has 15 MA's), (6, 2900), (11, 2990), (12, 3005), (14, 3032), (17, 3068), (18, 3086), (23, 3125),

Gene: Rasovi\_2 Start: 600, Stop: 872, Start Num: 5

Candidate Starts for Rasovi\_2:

(Start: 5 @600 has 7 MA's), (7, 654), (11, 720), (13, 738), (15, 792), (21, 837),

Gene: Snakehole\_11 Start: 2685, Stop: 2960, Start Num: 4

Candidate Starts for Snakehole\_11:

(1, 2607), (2, 2673), (Start: 4 @2685 has 15 MA's), (6, 2724), (11, 2814), (12, 2829), (14, 2856), (17, 2892), (18, 2910), (23, 2949),

Gene: Tedro\_10 Start: 2862, Stop: 3137, Start Num: 4

Candidate Starts for Tedro\_10:

(3, 2859), (Start: 4 @2862 has 15 MA's), (6, 2901), (11, 2991), (12, 3006), (14, 3033), (17, 3069), (18, 3087), (23, 3126),