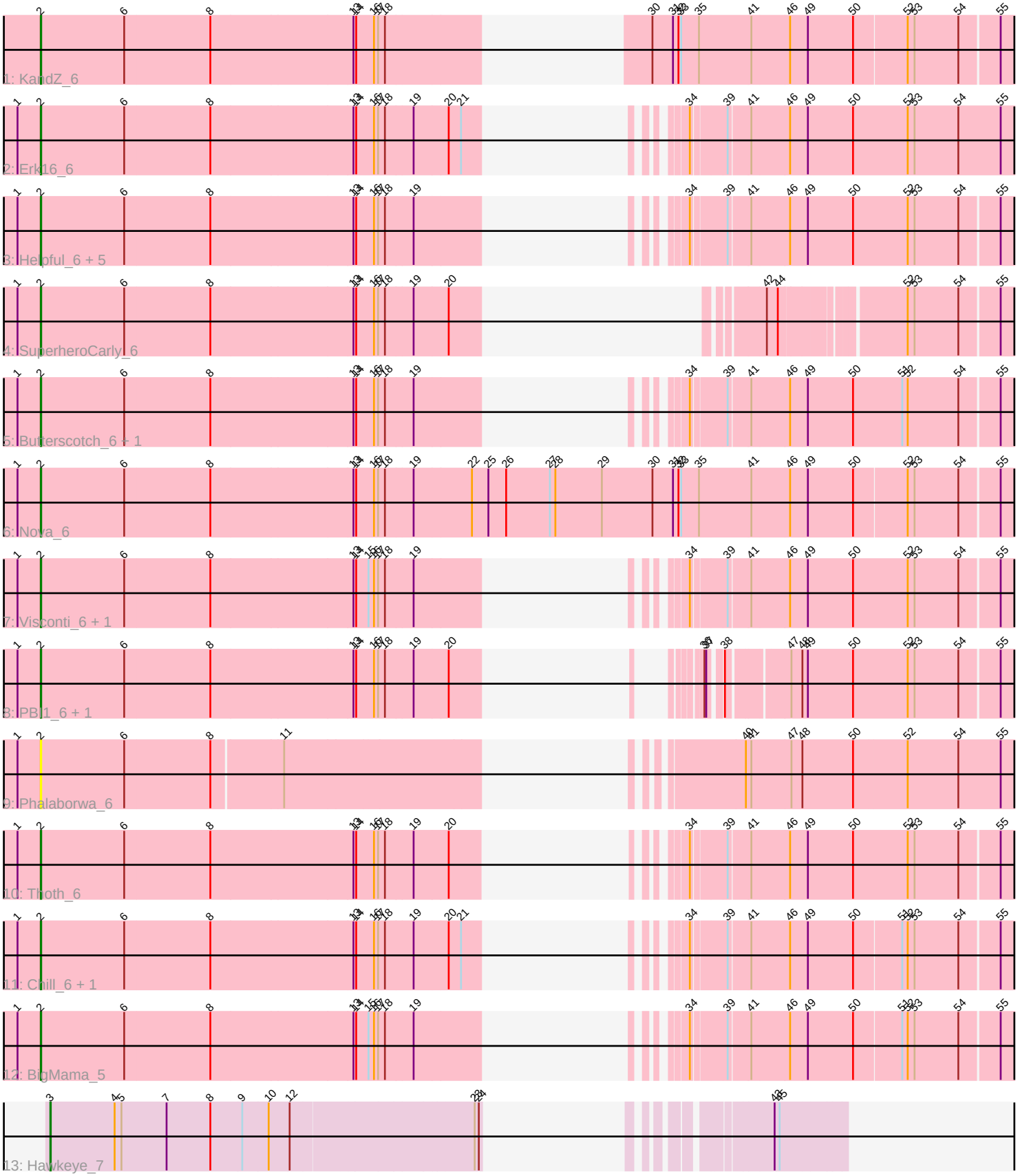
Pham 348023


1: KandZ_6
2: Erk16_6
3: Helpful_6 + 5
4: SuperheroCarly_6
5: Butterscotch_6 + 1
6: Nova_6
7: Visconti_6 + 1
8: PB11_6 + 1
9: Phalaborwa_6
10: Thoth_6
11: Chill_6 + 1
12: BigMama_5
13: Hawkeye_7

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 348023 Report

This analysis was run 11/14/26 on database version 672.

Pham number 348023 has 22 members, 1 are drafts.

Phages represented in each track:
• Track 1 : KandZ_6
• Track 2 : Erk16_6
• Track 3 : Helpful_6, Penelope2018_6, Delton_6, Troll4_6, Prager_6, Mopey_6
• Track 4 : SuperheroCarly_6
• Track 5 : Butterscotch_6, PLot_6
• Track 6 : Nova_6
• Track 7 : Visconti_6, Giuseppe_6
• Track 8 : PBI1_6, Adjutor_6
• Track 9 : Phalaborwa_6
• Track 10 : Thoth_6
• Track 11 : Chill_6, WaldoWhy_6
• Track 12 : BigMama_5
• Track 13 : Hawkeye_7

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

The start number called the most often in the published annotations is 2, it was called in 20 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Adjutor_6, BigMama_5, Butterscotch_6, Chill_6, Delton_6, Erk16_6, Giuseppe_6, Helpful_6, KandZ_6, Mopey_6, Nova_6, PBI1_6, PLot_6, Penelope2018_6, Phalaborwa_6, Prager_6, SuperheroCarly_6, Thoth_6, Troll4_6, Visconti_6, WaldoWhy_6,

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

Genes that do not have the "Most Annotated" start:
• Hawkeye_7,

Summary by start number:

Start 2:

• Found in 21 of 22 (95.5%) of genes in pham
• Manual Annotations of this start: 20 of 21
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Adjutor_6 (D1), BigMama_5 (D1), Butterscotch_6 (D1), Chill_6 (D1), Delton_6 (D1), Erk16_6 (D1), Giuseppe_6 (D1), Helpful_6 (D1), KandZ_6 (D1), Mopey_6 (D1), Nova_6 (D1), PBI1_6 (D1), PLot_6 (D1), Penelope2018_6 (D1), Phalaborwa_6 (D1), Prager_6 (D1), SuperheroCarly_6 (D1), Thoth_6 (D1), Troll4_6 (D1), Visconti_6 (D1), WaldoWhy_6 (D1),

Start 3:
• Found in 1 of 22 (4.5%) of genes in pham
• Manual Annotations of this start: 1 of 21
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Hawkeye_7 (D2),

Summary by clusters:

There are 2 clusters represented in this pham: D2, D1,

Info for manual annotations of cluster D1:
•Start number 2 was manually annotated 20 times for cluster D1.

Info for manual annotations of cluster D2:
•Start number 3 was manually annotated 1 time for cluster D2.

Gene Information:

Gene: Adjutor_6 Start: 2136, Stop: 3776, Start Num: 2
Candidate Starts for Adjutor_6:
(1, 2085), (Start: 2 @2136 has 20 MA's), (6, 2319), (8, 2505), (13, 2814), (14, 2820), (16, 2859), (17, 2868), (18, 2883), (19, 2943), (20, 3018), (36, 3144), (37, 3147), (38, 3168), (47, 3285), (48, 3309), (49, 3321), (50, 3420), (52, 3540), (53, 3555), (54, 3651), (55, 3735),

Gene: BigMama_5 Start: 2155, Stop: 3852, Start Num: 2
Candidate Starts for BigMama_5:
(1, 2104), (Start: 2 @2155 has 20 MA's), (6, 2338), (8, 2524), (13, 2833), (14, 2839), (15, 2866), (16, 2878), (17, 2887), (18, 2902), (19, 2962), (34, 3175), (39, 3241), (41, 3286), (46, 3367), (49, 3403), (50, 3502), (51, 3604), (52, 3616), (53, 3631), (54, 3727), (55, 3811),

Gene: Butterscotch_6 Start: 2136, Stop: 3839, Start Num: 2
Candidate Starts for Butterscotch_6:
(1, 2085), (Start: 2 @2136 has 20 MA's), (6, 2319), (8, 2505), (13, 2814), (14, 2820), (16, 2859), (17, 2868), (18, 2883), (19, 2943), (34, 3156), (39, 3222), (41, 3267), (46, 3348), (49, 3384), (50, 3483), (51, 3591), (52, 3603), (54, 3714), (55, 3798),

Gene: Chill_6 Start: 2145, Stop: 3842, Start Num: 2
Candidate Starts for Chill_6:
(1, 2094), (Start: 2 @2145 has 20 MA's), (6, 2328), (8, 2514), (13, 2823), (14, 2829), (16, 2868), (17, 2877), (18, 2892), (19, 2952), (20, 3027), (21, 3054), (34, 3165), (39, 3231), (41, 3276), (46, 3357), (49, 3393), (50, 3492), (51, 3594), (52, 3606), (53, 3621), (54, 3717), (55, 3801),

Gene: Delton_6 Start: 2145, Stop: 3848, Start Num: 2
Candidate Starts for Delton_6:
(1, 2094), (Start: 2 @2145 has 20 MA's), (6, 2328), (8, 2514), (13, 2823), (14, 2829), (16, 2868), (17, 2877), (18, 2892), (19, 2952), (34, 3165), (39, 3231), (41, 3276), (46, 3357), (49, 3393), (50, 3492), (52, 3612), (53, 3627), (54, 3723), (55, 3807),

Gene: Erk16_6 Start: 2136, Stop: 3848, Start Num: 2
Candidate Starts for Erk16_6:
(1, 2085), (Start: 2 @2136 has 20 MA's), (6, 2319), (8, 2505), (13, 2814), (14, 2820), (16, 2859), (17, 2868), (18, 2883), (19, 2943), (20, 3018), (21, 3045), (34, 3156), (39, 3222), (41, 3267), (46, 3348), (49, 3384), (50, 3483), (52, 3603), (53, 3618), (54, 3714), (55, 3807),

Gene: Giuseppe_6 Start: 2128, Stop: 3831, Start Num: 2
Candidate Starts for Giuseppe_6:
(1, 2077), (Start: 2 @2128 has 20 MA's), (6, 2311), (8, 2497), (13, 2806), (14, 2812), (15, 2839), (16, 2851), (17, 2860), (18, 2875), (19, 2935), (34, 3148), (39, 3214), (41, 3259), (46, 3340), (49, 3376), (50, 3475), (52, 3595), (53, 3610), (54, 3706), (55, 3790),

Gene: Hawkeye_7 Start: 2765, Stop: 4054, Start Num: 3
Candidate Starts for Hawkeye_7:
(Start: 3 @2765 has 1 MA's), (4, 2906), (5, 2921), (7, 3020), (8, 3116), (9, 3185), (10, 3242), (12, 3287), (23, 3665), (24, 3674), (43, 3908), (45, 3917),

Gene: Helpful_6 Start: 2136, Stop: 3839, Start Num: 2
Candidate Starts for Helpful_6:
(1, 2085), (Start: 2 @2136 has 20 MA's), (6, 2319), (8, 2505), (13, 2814), (14, 2820), (16, 2859), (17, 2868), (18, 2883), (19, 2943), (34, 3156), (39, 3222), (41, 3267), (46, 3348), (49, 3384), (50, 3483), (52, 3603), (53, 3618), (54, 3714), (55, 3798),

Gene: KandZ_6 Start: 2136, Stop: 3926, Start Num: 2
Candidate Starts for KandZ_6:
(Start: 2 @2136 has 20 MA's), (6, 2319), (8, 2505), (13, 2814), (14, 2820), (16, 2859), (17, 2868), (18, 2883), (30, 3150), (31, 3195), (32, 3207), (33, 3213), (35, 3252), (41, 3363), (46, 3444), (49, 3480), (50, 3579), (52, 3690), (53, 3705), (54, 3801), (55, 3885),

Gene: Mopey_6 Start: 2136, Stop: 3839, Start Num: 2
Candidate Starts for Mopey_6:
(1, 2085), (Start: 2 @2136 has 20 MA's), (6, 2319), (8, 2505), (13, 2814), (14, 2820), (16, 2859), (17, 2868), (18, 2883), (19, 2943), (34, 3156), (39, 3222), (41, 3267), (46, 3348), (49, 3384), (50, 3483), (52, 3603), (53, 3618), (54, 3714), (55, 3798),

Gene: Nova_6 Start: 2145, Stop: 4253, Start Num: 2
Candidate Starts for Nova_6:
(1, 2094), (Start: 2 @2145 has 20 MA's), (6, 2328), (8, 2514), (13, 2823), (14, 2829), (16, 2868), (17, 2877), (18, 2892), (19, 2952), (22, 3078), (25, 3114), (26, 3153), (27, 3249), (28, 3261), (29, 3363), (30, 3474), (31, 3519), (32, 3531), (33, 3537), (35, 3576), (41, 3687), (46, 3768), (49, 3804), (50, 3903), (52, 4017), (53, 4032), (54, 4128), (55, 4212),

Gene: PBI1_6 Start: 2136, Stop: 3776, Start Num: 2
Candidate Starts for PBI1_6:
(1, 2085), (Start: 2 @2136 has 20 MA's), (6, 2319), (8, 2505), (13, 2814), (14, 2820), (16, 2859), (17, 2868), (18, 2883), (19, 2943), (20, 3018), (36, 3144), (37, 3147), (38, 3168), (47, 3285), (48, 3309), (49, 3321), (50, 3420), (52, 3540), (53, 3555), (54, 3651), (55, 3735),

Gene: PLot_6 Start: 2136, Stop: 3848, Start Num: 2
Candidate Starts for PLot_6:
(1, 2085), (Start: 2 @2136 has 20 MA's), (6, 2319), (8, 2505), (13, 2814), (14, 2820), (16, 2859), (17, 2868), (18, 2883), (19, 2943), (34, 3156), (39, 3222), (41, 3267), (46, 3348), (49, 3384), (50, 3483), (51, 3591), (52, 3603), (54, 3714), (55, 3807),

Gene: Penelope2018_6 Start: 2136, Stop: 3839, Start Num: 2
Candidate Starts for Penelope2018_6:
(1, 2085), (Start: 2 @2136 has 20 MA's), (6, 2319), (8, 2505), (13, 2814), (14, 2820), (16, 2859), (17, 2868), (18, 2883), (19, 2943), (34, 3156), (39, 3222), (41, 3267), (46, 3348), (49, 3384), (50, 3483), (52, 3603), (53, 3618), (54, 3714), (55, 3798),

Gene: Phalaborwa_6 Start: 2141, Stop: 3871, Start Num: 2
Candidate Starts for Phalaborwa_6:
(1, 2090), (Start: 2 @2141 has 20 MA's), (6, 2324), (8, 2510), (11, 2660), (40, 3278), (41, 3290), (47, 3377), (48, 3401), (50, 3512), (52, 3626), (54, 3737), (55, 3830),

Gene: Prager_6 Start: 2145, Stop: 3848, Start Num: 2
Candidate Starts for Prager_6:
(1, 2094), (Start: 2 @2145 has 20 MA's), (6, 2328), (8, 2514), (13, 2823), (14, 2829), (16, 2868), (17, 2877), (18, 2892), (19, 2952), (34, 3165), (39, 3231), (41, 3276), (46, 3357), (49, 3393), (50, 3492), (52, 3612), (53, 3627), (54, 3723), (55, 3807),

Gene: SuperheroCarly_6 Start: 2145, Stop: 3701, Start Num: 2
Candidate Starts for SuperheroCarly_6:
(1, 2094), (Start: 2 @2145 has 20 MA's), (6, 2328), (8, 2514), (13, 2823), (14, 2829), (16, 2868), (17, 2877), (18, 2892), (19, 2952), (20, 3027), (42, 3204), (44, 3228), (52, 3465), (53, 3480), (54, 3576), (55, 3660),

Gene: Thoth_6 Start: 2136, Stop: 3836, Start Num: 2
Candidate Starts for Thoth_6:
(1, 2085), (Start: 2 @2136 has 20 MA's), (6, 2319), (8, 2505), (13, 2814), (14, 2820), (16, 2859), (17, 2868), (18, 2883), (19, 2943), (20, 3018), (34, 3153), (39, 3219), (41, 3264), (46, 3345), (49, 3381), (50, 3480), (52, 3600), (53, 3615), (54, 3711), (55, 3795),

Gene: Troll4_6 Start: 2137, Stop: 3840, Start Num: 2
Candidate Starts for Troll4_6:
(1, 2086), (Start: 2 @2137 has 20 MA's), (6, 2320), (8, 2506), (13, 2815), (14, 2821), (16, 2860), (17, 2869), (18, 2884), (19, 2944), (34, 3157), (39, 3223), (41, 3268), (46, 3349), (49, 3385), (50, 3484), (52, 3604), (53, 3619), (54, 3715), (55, 3799),

Gene: Visconti_6 Start: 2146, Stop: 3849, Start Num: 2
Candidate Starts for Visconti_6:
(1, 2095), (Start: 2 @2146 has 20 MA's), (6, 2329), (8, 2515), (13, 2824), (14, 2830), (15, 2857), (16, 2869), (17, 2878), (18, 2893), (19, 2953), (34, 3166), (39, 3232), (41, 3277), (46, 3358), (49, 3394), (50, 3493), (52, 3613), (53, 3628), (54, 3724), (55, 3808),

Gene: WaldoWhy_6 Start: 2145, Stop: 3842, Start Num: 2
Candidate Starts for WaldoWhy_6:
(1, 2094), (Start: 2 @2145 has 20 MA's), (6, 2328), (8, 2514), (13, 2823), (14, 2829), (16, 2868), (17, 2877), (18, 2892), (19, 2952), (20, 3027), (21, 3054), (34, 3165), (39, 3231), (41, 3276), (46, 3357), (49, 3393), (50, 3492), (51, 3594), (52, 3606), (53, 3621), (54, 3717), (55, 3801),