Pham 344440


1: Gibson_8
2: ShakeNBake_8
3: Greenbelt_9
4: SassyC_10
5: Wilkos_7
6: Virizion_9
7: Rooney_8
8: Dryad_9
9: Yara_7
10: Wentworth_8
11: KimJongPhill_8
12: Creature_7
13: Zuko_7
14: OscarSo_6
15: Isperia_6
16: Wyvern_8
17: Doedicurus_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 344440 Report

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

Pham number 344440 has 19 members, 4 are drafts.

Phages represented in each track:
• Track 1 : Gibson_8
• Track 2 : ShakeNBake_8, Lizz_8, PHTowN_8
• Track 3 : Greenbelt_9
• Track 4 : SassyC_10
• Track 5 : Wilkos_7
• Track 6 : Virizion_9
• Track 7 : Rooney_8
• Track 8 : Dryad_9
• Track 9 : Yara_7
• Track 10 : Wentworth_8
• Track 11 : KimJongPhill_8
• Track 12 : Creature_7
• Track 13 : Zuko_7
• Track 14 : OscarSo_6
• Track 15 : Isperia_6
• Track 16 : Wyvern_8
• Track 17 : Doedicurus_7

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

The start number called the most often in the published annotations is 10, it was called in 7 of the 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Dryad_9, Gibson_8, Lizz_8, PHTowN_8, Rooney_8, ShakeNBake_8, Wentworth_8, Wilkos_7,

Genes that have the "Most Annotated" start but do not call it:
• Virizion_9,

Genes that do not have the "Most Annotated" start:
• Creature_7, Doedicurus_7, Greenbelt_9, Isperia_6, KimJongPhill_8, OscarSo_6, SassyC_10, Wyvern_8, Yara_7, Zuko_7,

Summary by start number:

Start 5:
• Found in 1 of 19 (5.3%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Creature_7 (BR),

Start 7:
• Found in 2 of 19 (10.5%) of genes in pham
• Manual Annotations of this start: 2 of 15
• Called 100.0% of time when present
• Phage (with cluster) where this start called: KimJongPhill_8 (BR), Zuko_7 (BR),

Start 10:
• Found in 9 of 19 (47.4%) of genes in pham
• Manual Annotations of this start: 7 of 15
• Called 88.9% of time when present
• Phage (with cluster) where this start called: Dryad_9 (BN), Gibson_8 (BN), Lizz_8 (BN), PHTowN_8 (BN), Rooney_8 (BN), ShakeNBake_8 (BN), Wentworth_8 (BN), Wilkos_7 (BN),

Start 12:
• Found in 2 of 19 (10.5%) of genes in pham
• Manual Annotations of this start: 1 of 15
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Greenbelt_9 (BN), SassyC_10 (BN),

Start 13:
• Found in 1 of 19 (5.3%) of genes in pham
• Manual Annotations of this start: 1 of 15
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Yara_7 (BN),

Start 15:
• Found in 2 of 19 (10.5%) of genes in pham
• Manual Annotations of this start: 1 of 15
• Called 50.0% of time when present
• Phage (with cluster) where this start called: OscarSo_6 (GJ),

Start 16:
• Found in 9 of 19 (47.4%) of genes in pham
• No Manual Annotations of this start.
• Called 11.1% of time when present
• Phage (with cluster) where this start called: Virizion_9 (BN),

Start 17:
• Found in 3 of 19 (15.8%) of genes in pham
• Manual Annotations of this start: 3 of 15
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Doedicurus_7 (GJ), Isperia_6 (GJ), Wyvern_8 (GJ),

Summary by clusters:

There are 3 clusters represented in this pham: BN, GJ, BR,

Info for manual annotations of cluster BN:
•Start number 10 was manually annotated 7 times for cluster BN.
•Start number 12 was manually annotated 1 time for cluster BN.
•Start number 13 was manually annotated 1 time for cluster BN.

Info for manual annotations of cluster BR:
•Start number 7 was manually annotated 2 times for cluster BR.

Info for manual annotations of cluster GJ:
•Start number 15 was manually annotated 1 time for cluster GJ.
•Start number 17 was manually annotated 3 times for cluster GJ.

Gene Information:

Gene: Creature_7 Start: 3887, Stop: 5557, Start Num: 5
Candidate Starts for Creature_7:
(5, 3887), (8, 3926), (Start: 15 @3989 has 1 MA's), (18, 4007), (31, 4109), (34, 4127), (36, 4142), (39, 4181), (44, 4232), (60, 4493), (62, 4511), (70, 4658), (72, 4700), (73, 4718), (76, 4736), (77, 4742), (79, 4766), (82, 4829), (83, 4832), (91, 4970), (103, 5093), (105, 5129), (106, 5132), (107, 5168), (113, 5210), (122, 5270), (125, 5300), (128, 5318), (130, 5330), (142, 5444), (145, 5465), (146, 5477), (149, 5501),

Gene: Doedicurus_7 Start: 2150, Stop: 3703, Start Num: 17
Candidate Starts for Doedicurus_7:
(Start: 17 @2150 has 3 MA's), (34, 2279), (41, 2351), (44, 2387), (47, 2441), (49, 2477), (51, 2501), (64, 2708), (69, 2762), (77, 2894), (80, 2921), (86, 3035), (88, 3065), (102, 3221), (108, 3305), (110, 3314), (116, 3347), (119, 3389), (120, 3395), (123, 3425), (128, 3452), (129, 3458), (130, 3464), (136, 3518), (142, 3581), (149, 3638),

Gene: Dryad_9 Start: 2881, Stop: 4485, Start Num: 10
Candidate Starts for Dryad_9:
(Start: 10 @2881 has 7 MA's), (16, 2914), (18, 2926), (22, 2956), (23, 2959), (30, 3019), (32, 3028), (35, 3046), (36, 3058), (40, 3106), (46, 3187), (49, 3253), (57, 3394), (59, 3418), (60, 3424), (63, 3466), (65, 3496), (66, 3505), (67, 3511), (68, 3535), (70, 3586), (77, 3670), (87, 3844), (91, 3913), (94, 3958), (96, 3970), (97, 3976), (101, 3997), (109, 4099), (117, 4156), (121, 4180), (126, 4219), (128, 4231), (129, 4237), (138, 4312), (142, 4363), (144, 4381), (147, 4399),

Gene: Gibson_8 Start: 2809, Stop: 4416, Start Num: 10
Candidate Starts for Gibson_8:
(Start: 10 @2809 has 7 MA's), (16, 2842), (18, 2854), (19, 2869), (24, 2890), (32, 2956), (35, 2974), (40, 3034), (46, 3115), (49, 3181), (60, 3352), (63, 3394), (66, 3433), (70, 3514), (71, 3550), (77, 3598), (79, 3622), (87, 3775), (89, 3793), (94, 3889), (97, 3907), (99, 3916), (101, 3928), (109, 4030), (117, 4087), (118, 4105), (121, 4111), (127, 4153), (128, 4162), (130, 4174), (131, 4177), (147, 4330), (149, 4351), (153, 4393),

Gene: Greenbelt_9 Start: 3162, Stop: 4745, Start Num: 12
Candidate Starts for Greenbelt_9:

(Start: 12 @3162 has 1 MA's), (23, 3237), (33, 3321), (35, 3324), (40, 3381), (53, 3624), (54, 3630), (58, 3675), (60, 3699), (63, 3741), (66, 3780), (67, 3786), (74, 3924), (76, 3939), (77, 3945), (87, 4107), (89, 4125), (94, 4221), (95, 4230), (99, 4248), (116, 4401), (117, 4419), (126, 4482), (128, 4494), (129, 4500), (134, 4539), (138, 4575), (139, 4590), (155, 4734),

Gene: Isperia_6 Start: 1639, Stop: 3192, Start Num: 17
Candidate Starts for Isperia_6:
(Start: 17 @1639 has 3 MA's), (34, 1768), (41, 1840), (44, 1876), (47, 1930), (49, 1966), (51, 1990), (64, 2197), (69, 2251), (77, 2383), (80, 2410), (86, 2524), (88, 2554), (102, 2710), (108, 2794), (110, 2803), (116, 2836), (119, 2878), (120, 2884), (123, 2914), (128, 2941), (129, 2947), (130, 2953), (136, 3007), (142, 3070), (149, 3127),

Gene: KimJongPhill_8 Start: 4350, Stop: 5975, Start Num: 7
Candidate Starts for KimJongPhill_8:
(Start: 7 @4350 has 2 MA's), (9, 4392), (14, 4419), (25, 4497), (28, 4530), (29, 4551), (31, 4557), (34, 4575), (42, 4656), (48, 4752), (51, 4794), (53, 4866), (62, 4959), (70, 5106), (72, 5148), (73, 5166), (75, 5172), (77, 5190), (79, 5214), (82, 5277), (87, 5349), (91, 5418), (92, 5436), (93, 5451), (103, 5538), (111, 5604), (114, 5619), (115, 5625), (128, 5724), (133, 5757), (141, 5829), (142, 5850), (144, 5868), (146, 5883), (154, 5952),

Gene: Lizz_8 Start: 2765, Stop: 4372, Start Num: 10
Candidate Starts for Lizz_8:
(3, 2672), (Start: 10 @2765 has 7 MA's), (16, 2798), (18, 2810), (22, 2840), (27, 2879), (32, 2912), (35, 2930), (36, 2942), (38, 2975), (40, 2990), (46, 3071), (49, 3137), (51, 3161), (57, 3278), (59, 3302), (60, 3308), (63, 3350), (66, 3389), (70, 3470), (77, 3554), (79, 3578), (82, 3659), (87, 3731), (89, 3749), (109, 3986), (117, 4043), (118, 4061), (122, 4070), (127, 4109), (128, 4118), (131, 4133), (135, 4178), (137, 4187), (142, 4250), (148, 4295), (151, 4319),

Gene: OscarSo_6 Start: 1928, Stop: 3490, Start Num: 15
Candidate Starts for OscarSo_6:
(Start: 15 @1928 has 1 MA's), (34, 2063), (36, 2078), (45, 2192), (47, 2228), (51, 2288), (61, 2447), (64, 2495), (69, 2549), (77, 2681), (84, 2780), (86, 2822), (100, 2987), (110, 3101), (116, 3134), (129, 3242), (130, 3248), (136, 3302), (142, 3365), (149, 3422), (152, 3455),

Gene: PHTowN_8 Start: 2765, Stop: 4372, Start Num: 10
Candidate Starts for PHTowN_8:
(3, 2672), (Start: 10 @2765 has 7 MA's), (16, 2798), (18, 2810), (22, 2840), (27, 2879), (32, 2912), (35, 2930), (36, 2942), (38, 2975), (40, 2990), (46, 3071), (49, 3137), (51, 3161), (57, 3278), (59, 3302), (60, 3308), (63, 3350), (66, 3389), (70, 3470), (77, 3554), (79, 3578), (82, 3659), (87, 3731), (89, 3749), (109, 3986), (117, 4043), (118, 4061), (122, 4070), (127, 4109), (128, 4118), (131, 4133), (135, 4178), (137, 4187), (142, 4250), (148, 4295), (151, 4319),

Gene: Rooney_8 Start: 2809, Stop: 4416, Start Num: 10
Candidate Starts for Rooney_8:
(Start: 10 @2809 has 7 MA's), (16, 2842), (18, 2854), (19, 2869), (24, 2890), (32, 2956), (35, 2974), (40, 3034), (46, 3115), (49, 3181), (60, 3352), (63, 3394), (66, 3433), (70, 3514), (77, 3598), (79, 3622), (87, 3775), (89, 3793), (97, 3907), (99, 3916), (101, 3928), (109, 4030), (117, 4087), (118, 4105), (121, 4111), (127, 4153), (128, 4162), (130, 4174), (131, 4177), (147, 4330), (149, 4351), (153, 4393),

Gene: SassyC_10 Start: 2712, Stop: 4328, Start Num: 12
Candidate Starts for SassyC_10:
(2, 2610), (3, 2613), (6, 2643), (Start: 12 @2712 has 1 MA's), (18, 2763), (20, 2787), (30, 2856), (32, 2865), (35, 2883), (40, 2943), (46, 3024), (49, 3090), (60, 3261), (63, 3303), (66, 3342), (70, 3423), (77,

3507), (79, 3531), (85, 3636), (87, 3684), (89, 3702), (97, 3816), (101, 3837), (109, 3939), (117, 3996), (118, 4014), (121, 4020), (127, 4062), (128, 4071), (134, 4116), (142, 4203), (143, 4206), (147, 4239), (148, 4248), (149, 4260),

Gene: ShakeNBake_8 Start: 2765, Stop: 4372, Start Num: 10
Candidate Starts for ShakeNBake_8:
(3, 2672), (Start: 10 @2765 has 7 MA's), (16, 2798), (18, 2810), (22, 2840), (27, 2879), (32, 2912), (35, 2930), (36, 2942), (38, 2975), (40, 2990), (46, 3071), (49, 3137), (51, 3161), (57, 3278), (59, 3302), (60, 3308), (63, 3350), (66, 3389), (70, 3470), (77, 3554), (79, 3578), (82, 3659), (87, 3731), (89, 3749), (109, 3986), (117, 4043), (118, 4061), (122, 4070), (127, 4109), (128, 4118), (131, 4133), (135, 4178), (137, 4187), (142, 4250), (148, 4295), (151, 4319),

Gene: Virizion_9 Start: 2842, Stop: 4416, Start Num: 16
Candidate Starts for Virizion_9:
(Start: 10 @2809 has 7 MA's), (16, 2842), (18, 2854), (19, 2869), (24, 2890), (32, 2956), (35, 2974), (40, 3034), (46, 3115), (49, 3181), (60, 3352), (63, 3394), (66, 3433), (68, 3463), (70, 3514), (77, 3598), (79, 3622), (87, 3775), (89, 3793), (94, 3889), (97, 3907), (99, 3916), (101, 3928), (117, 4087), (118, 4105), (121, 4111), (127, 4153), (128, 4162), (130, 4174), (131, 4177), (147, 4330), (149, 4351), (153, 4393),

Gene: Wentworth_8 Start: 2554, Stop: 4161, Start Num: 10
Candidate Starts for Wentworth_8:
(Start: 10 @2554 has 7 MA's), (16, 2587), (18, 2599), (22, 2629), (27, 2668), (32, 2701), (35, 2719), (36, 2731), (37, 2740), (40, 2779), (46, 2860), (49, 2926), (52, 2959), (56, 3046), (63, 3139), (66, 3178), (70, 3259), (77, 3343), (79, 3367), (85, 3472), (87, 3520), (89, 3538), (101, 3673), (109, 3775), (117, 3832), (118, 3850), (122, 3859), (127, 3898), (128, 3907), (131, 3922), (135, 3967), (137, 3976), (139, 4003), (142, 4039), (143, 4042), (147, 4075), (149, 4096),

Gene: Wilkos_7 Start: 2666, Stop: 4273, Start Num: 10
Candidate Starts for Wilkos_7:
(Start: 10 @2666 has 7 MA's), (16, 2699), (18, 2711), (22, 2741), (23, 2744), (32, 2813), (35, 2831), (36, 2843), (37, 2852), (40, 2891), (46, 2972), (49, 3038), (50, 3044), (55, 3149), (59, 3203), (60, 3209), (63, 3251), (66, 3290), (70, 3371), (77, 3455), (79, 3479), (85, 3584), (87, 3632), (89, 3650), (109, 3887), (117, 3944), (118, 3962), (127, 4010), (128, 4019), (131, 4034), (132, 4037), (139, 4115), (142, 4151), (143, 4154), (148, 4196), (150, 4217),

Gene: Wyvern_8 Start: 2354, Stop: 3952, Start Num: 17
Candidate Starts for Wyvern_8:
(Start: 17 @2354 has 3 MA's), (34, 2483), (41, 2555), (43, 2573), (44, 2591), (47, 2645), (49, 2681), (51, 2705), (64, 2912), (69, 2966), (77, 3098), (78, 3113), (88, 3284), (94, 3389), (98, 3407), (110, 3533), (116, 3566), (123, 3644), (124, 3650), (129, 3677), (130, 3683), (140, 3770), (142, 3830), (149, 3887),

Gene: Yara_7 Start: 2325, Stop: 3908, Start Num: 13
Candidate Starts for Yara_7:
(1, 2151), (4, 2241), (11, 2319), (Start: 13 @2325 has 1 MA's), (21, 2391), (23, 2397), (30, 2457), (32, 2466), (35, 2484), (40, 2541), (58, 2835), (60, 2859), (62, 2877), (63, 2901), (66, 2940), (67, 2946), (77, 3105), (80, 3132), (82, 3195), (86, 3246), (87, 3267), (89, 3285), (90, 3330), (91, 3336), (97, 3399), (109, 3522), (112, 3537), (117, 3579), (128, 3654), (142, 3786), (147, 3822), (148, 3831), (155, 3894),

Gene: Zuko_7 Start: 3998, Stop: 5650, Start Num: 7
Candidate Starts for Zuko_7:

(Start: 7 @3998 has 2 MA's), (26, 4151), (28, 4175), (31, 4202), (34, 4220), (51, 4439), (53, 4511), (60, 4586), (62, 4604), (70, 4751), (72, 4793), (73, 4811), (76, 4829), (77, 4835), (79, 4859), (81, 4871), (82, 4922), (91, 5063), (103, 5186), (104, 5219), (105, 5222), (114, 5306), (122, 5363), (126, 5399), (128, 5411), (130, 5423), (142, 5537), (146, 5570), (147, 5573), (149, 5594),