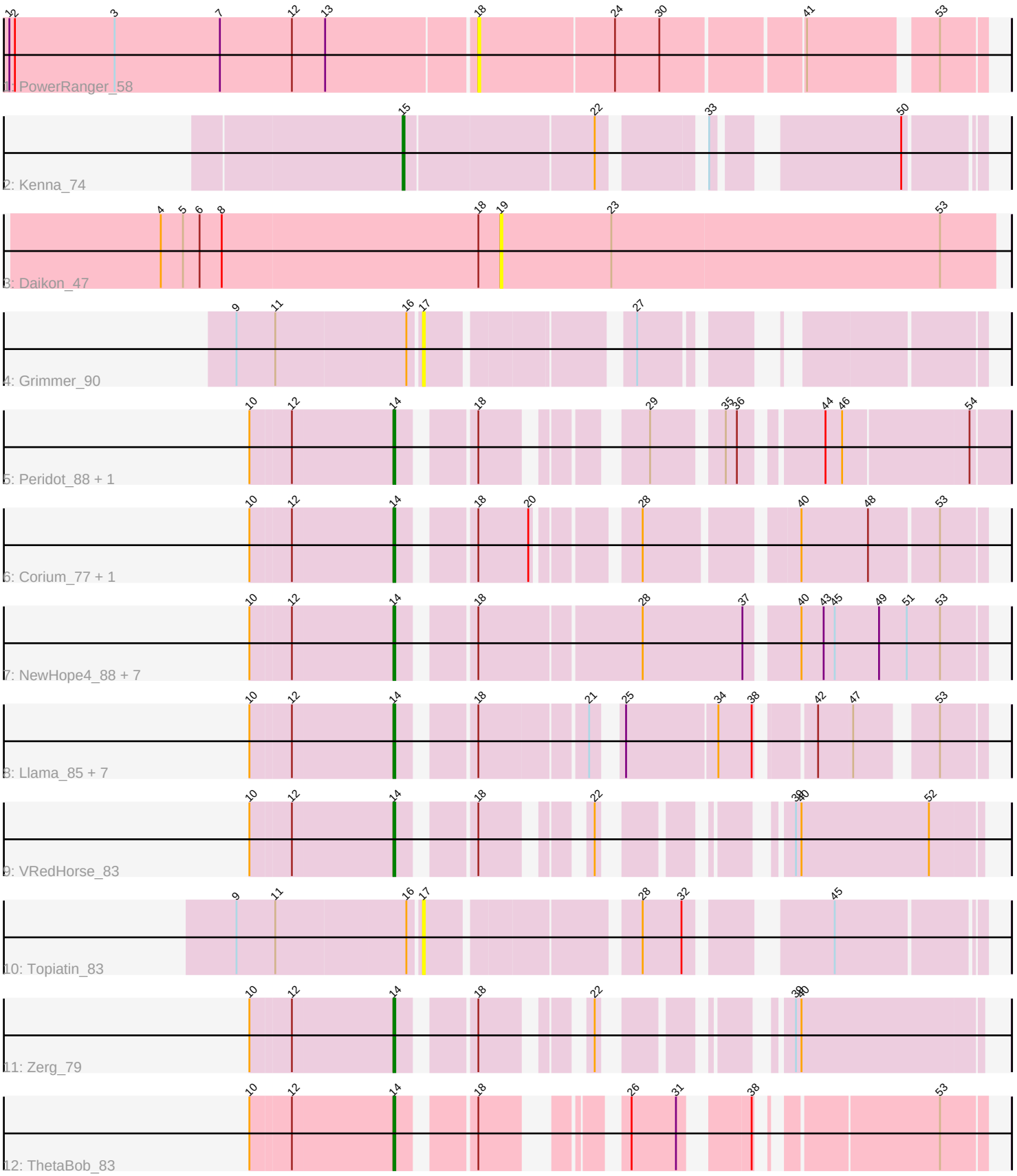
Pham 291431


1: PowerRanger_58
2: Kenna_74
3: Daikon_47
4: Grimmer_90
5: Peridot_88 + 1
6: Corium_77 + 1
7: NewHope4_88 + 7
8: Llama_85 + 7
9: VRedHorse_83
10: Topiatin_83
11: Zerg_79
12: ThetaBob_83

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 291431 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291431 has 28 members, 11 are drafts.

Phages represented in each track:
• Track 1 : PowerRanger_58
• Track 2 : Kenna_74
• Track 3 : Daikon_47
• Track 4 : Grimmer_90
• Track 5 : Peridot_88, Starcevich_84
• Track 6 : Corium_77, KingJulian_83
• Track 7 : NewHope4_88, MulchSalad_90, LunaBlu_88, Dante_82, SeaLumen_91, Enzomatic_95, Latretium_86, Polo2Bam_94
• Track 8 : Llama_85, OfUltron_86, Ochi17_84, MadMen_82, Seabastian_86, Jinglebell_85, Nichirin_79, Modragons_83
• Track 9 : VRedHorse_83
• Track 10 : Topiatin_83
• Track 11 : Zerg_79
• Track 12 : ThetaBob_83

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

The start number called the most often in the published annotations is 14, it was called in 16 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Corium_77, Dante_82, Enzomatic_95, Jinglebell_85, KingJulian_83, Latretium_86, Llama_85, LunaBlu_88, MadMen_82, Modragons_83, MulchSalad_90, NewHope4_88, Nichirin_79, Ochi17_84, OfUltron_86, Peridot_88, Polo2Bam_94, SeaLumen_91, Seabastian_86, Starcevich_84, ThetaBob_83, VRedHorse_83, Zerg_79,

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

Genes that do not have the "Most Annotated" start:
• Daikon_47, Grimmer_90, Kenna_74, PowerRanger_58, Topiatin_83,

Summary by start number:

Start 14:
• Found in 23 of 28 (82.1%) of genes in pham
• Manual Annotations of this start: 16 of 17
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Corium_77 (F1), Dante_82 (F1), Enzomatic_95 (F1), Jinglebell_85 (F1), KingJulian_83 (F1), Latretium_86 (F1), Llama_85 (F1), LunaBlu_88 (F1), MadMen_82 (F1), Modragons_83 (F1), MulchSalad_90 (F7), NewHope4_88 (F1), Nichirin_79 (F1), Ochi17_84 (F1), OfUltron_86 (F1), Peridot_88 (F1), Polo2Bam_94 (F1), SeaLumen_91 (F1), Seabastian_86 (F1), Starcevich_84 (F1), ThetaBob_83 (F4), VRedHorse_83 (F1), Zerg_79 (F1),

Start 15:
• Found in 1 of 28 (3.6%) of genes in pham
• Manual Annotations of this start: 1 of 17
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kenna_74 (DN1),

Start 17:
• Found in 2 of 28 (7.1%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Grimmer_90 (F1), Topiatin_83 (F1),

Start 18:
• Found in 25 of 28 (89.3%) of genes in pham
• No Manual Annotations of this start.
• Called 4.0% of time when present
• Phage (with cluster) where this start called: PowerRanger_58 (A1),

Start 19:
• Found in 1 of 28 (3.6%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Daikon_47 (E),

Summary by clusters:

There are 6 clusters represented in this pham: F1, F4, F7, A1, DN1, E,

Info for manual annotations of cluster DN1:
•Start number 15 was manually annotated 1 time for cluster DN1.

Info for manual annotations of cluster F1:
•Start number 14 was manually annotated 15 times for cluster F1.

Info for manual annotations of cluster F4:
•Start number 14 was manually annotated 1 time for cluster F4.

Gene Information:

Gene: Corium_77 Start: 49716, Stop: 49988, Start Num: 14
Candidate Starts for Corium_77:
(10, 49641), (12, 49662), (Start: 14 @49716 has 16 MA's), (18, 49749), (20, 49776), (28, 49821), (40, 49893), (48, 49929), (53, 49965),

Gene: Daikon_47 Start: 36344, Stop: 36078, Start Num: 19
Candidate Starts for Daikon_47:
(4, 36527), (5, 36515), (6, 36506), (8, 36494), (18, 36356), (19, 36344), (23, 36284), (53, 36107),

Gene: Dante_82 Start: 51218, Stop: 51511, Start Num: 14
Candidate Starts for Dante_82:
(10, 51143), (12, 51164), (Start: 14 @51218 has 16 MA's), (18, 51251), (28, 51335), (37, 51389), (40, 51413), (43, 51425), (45, 51431), (49, 51455), (51, 51470), (53, 51488),

Gene: Enzomatic_95 Start: 48600, Stop: 48893, Start Num: 14
Candidate Starts for Enzomatic_95:
(10, 48525), (12, 48546), (Start: 14 @48600 has 16 MA's), (18, 48633), (28, 48717), (37, 48771), (40, 48795), (43, 48807), (45, 48813), (49, 48837), (51, 48852), (53, 48870),

Gene: Grimmer_90 Start: 48780, Stop: 49022, Start Num: 17
Candidate Starts for Grimmer_90:
(9, 48684), (11, 48705), (16, 48774), (17, 48780), (27, 48876),

Gene: Jinglebell_85 Start: 49222, Stop: 49485, Start Num: 14
Candidate Starts for Jinglebell_85:
(10, 49147), (12, 49168), (Start: 14 @49222 has 16 MA's), (18, 49255), (21, 49309), (25, 49318), (34, 49366), (38, 49384), (42, 49408), (47, 49426), (53, 49462),

Gene: Kenna_74 Start: 44226, Stop: 44492, Start Num: 15
Candidate Starts for Kenna_74:
(Start: 15 @44226 has 1 MA's), (22, 44325), (33, 44370), (50, 44454),

Gene: KingJulian_83 Start: 49716, Stop: 49988, Start Num: 14
Candidate Starts for KingJulian_83:
(10, 49641), (12, 49662), (Start: 14 @49716 has 16 MA's), (18, 49749), (20, 49776), (28, 49821), (40, 49893), (48, 49929), (53, 49965),

Gene: Latretium_86 Start: 49509, Stop: 49802, Start Num: 14
Candidate Starts for Latretium_86:
(10, 49434), (12, 49455), (Start: 14 @49509 has 16 MA's), (18, 49542), (28, 49626), (37, 49680), (40, 49704), (43, 49716), (45, 49722), (49, 49746), (51, 49761), (53, 49779),

Gene: Llama_85 Start: 49078, Stop: 49341, Start Num: 14
Candidate Starts for Llama_85:
(10, 49003), (12, 49024), (Start: 14 @49078 has 16 MA's), (18, 49111), (21, 49165), (25, 49174), (34, 49222), (38, 49240), (42, 49264), (47, 49282), (53, 49318),

Gene: LunaBlu_88 Start: 50651, Stop: 50944, Start Num: 14
Candidate Starts for LunaBlu_88:

(10, 50576), (12, 50597), (Start: 14 @50651 has 16 MA's), (18, 50684), (28, 50768), (37, 50822), (40, 50846), (43, 50858), (45, 50864), (49, 50888), (51, 50903), (53, 50921),

Gene: MadMen_82 Start: 48403, Stop: 48666, Start Num: 14
Candidate Starts for MadMen_82:
(10, 48328), (12, 48349), (Start: 14 @48403 has 16 MA's), (18, 48436), (21, 48490), (25, 48499), (34, 48547), (38, 48565), (42, 48589), (47, 48607), (53, 48643),

Gene: Modragons_83 Start: 49066, Stop: 49329, Start Num: 14
Candidate Starts for Modragons_83:
(10, 48991), (12, 49012), (Start: 14 @49066 has 16 MA's), (18, 49099), (21, 49153), (25, 49162), (34, 49210), (38, 49228), (42, 49252), (47, 49270), (53, 49306),

Gene: MulchSalad_90 Start: 51307, Stop: 51600, Start Num: 14
Candidate Starts for MulchSalad_90:
(10, 51232), (12, 51253), (Start: 14 @51307 has 16 MA's), (18, 51340), (28, 51424), (37, 51478), (40, 51502), (43, 51514), (45, 51520), (49, 51544), (51, 51559), (53, 51577),

Gene: NewHope4_88 Start: 48746, Stop: 49039, Start Num: 14
Candidate Starts for NewHope4_88:
(10, 48671), (12, 48692), (Start: 14 @48746 has 16 MA's), (18, 48779), (28, 48863), (37, 48917), (40, 48941), (43, 48953), (45, 48959), (49, 48983), (51, 48998), (53, 49016),

Gene: Nichirin_79 Start: 48440, Stop: 48703, Start Num: 14
Candidate Starts for Nichirin_79:
(10, 48365), (12, 48386), (Start: 14 @48440 has 16 MA's), (18, 48473), (21, 48527), (25, 48536), (34, 48584), (38, 48602), (42, 48626), (47, 48644), (53, 48680),

Gene: Ochi17_84 Start: 48673, Stop: 48936, Start Num: 14
Candidate Starts for Ochi17_84:
(10, 48598), (12, 48619), (Start: 14 @48673 has 16 MA's), (18, 48706), (21, 48760), (25, 48769), (34, 48817), (38, 48835), (42, 48859), (47, 48877), (53, 48913),

Gene: OfUltron_86 Start: 49222, Stop: 49485, Start Num: 14
Candidate Starts for OfUltron_86:
(10, 49147), (12, 49168), (Start: 14 @49222 has 16 MA's), (18, 49255), (21, 49309), (25, 49318), (34, 49366), (38, 49384), (42, 49408), (47, 49426), (53, 49462),

Gene: Peridot_88 Start: 50421, Stop: 50690, Start Num: 14
Candidate Starts for Peridot_88:
(10, 50346), (12, 50367), (Start: 14 @50421 has 16 MA's), (18, 50454), (29, 50520), (35, 50553), (36, 50559), (44, 50595), (46, 50604), (54, 50670),

Gene: Polo2Bam_94 Start: 48600, Stop: 48893, Start Num: 14
Candidate Starts for Polo2Bam_94:
(10, 48525), (12, 48546), (Start: 14 @48600 has 16 MA's), (18, 48633), (28, 48717), (37, 48771), (40, 48795), (43, 48807), (45, 48813), (49, 48837), (51, 48852), (53, 48870),

Gene: PowerRanger_58 Start: 41782, Stop: 41528, Start Num: 18
Candidate Starts for PowerRanger_58:
(1, 42031), (2, 42028), (3, 41974), (7, 41917), (12, 41878), (13, 41860), (18, 41782), (24, 41710), (30, 41686), (41, 41614), (53, 41551),

Gene: SeaLumen_91 Start: 48600, Stop: 48893, Start Num: 14
Candidate Starts for SeaLumen_91:
(10, 48525), (12, 48546), (Start: 14 @48600 has 16 MA's), (18, 48633), (28, 48717), (37, 48771), (40, 48795), (43, 48807), (45, 48813), (49, 48837), (51, 48852), (53, 48870),

Gene: Seabastian_86 Start: 49223, Stop: 49486, Start Num: 14
Candidate Starts for Seabastian_86:
(10, 49148), (12, 49169), (Start: 14 @49223 has 16 MA's), (18, 49256), (21, 49310), (25, 49319), (34, 49367), (38, 49385), (42, 49409), (47, 49427), (53, 49463),

Gene: Starcevich_84 Start: 50987, Stop: 51256, Start Num: 14
Candidate Starts for Starcevich_84:
(10, 50912), (12, 50933), (Start: 14 @50987 has 16 MA's), (18, 51020), (29, 51086), (35, 51119), (36, 51125), (44, 51161), (46, 51170), (54, 51236),

Gene: ThetaBob_83 Start: 48523, Stop: 48762, Start Num: 14
Candidate Starts for ThetaBob_83:
(10, 48448), (12, 48469), (Start: 14 @48523 has 16 MA's), (18, 48556), (26, 48607), (31, 48631), (38, 48658), (53, 48739),

Gene: Topiatin_83 Start: 49070, Stop: 49327, Start Num: 17
Candidate Starts for Topiatin_83:
(9, 48974), (11, 48995), (16, 49064), (17, 49070), (28, 49172), (32, 49193), (45, 49253),

Gene: VRedHorse_83 Start: 47290, Stop: 47529, Start Num: 14
Candidate Starts for VRedHorse_83:
(10, 47215), (12, 47236), (Start: 14 @47290 has 16 MA's), (18, 47323), (22, 47365), (39, 47431), (40, 47434), (52, 47503),

Gene: Zerg_79 Start: 48632, Stop: 48871, Start Num: 14
Candidate Starts for Zerg_79:
(10, 48557), (12, 48578), (Start: 14 @48632 has 16 MA's), (18, 48665), (22, 48707), (39, 48773), (40, 48776),