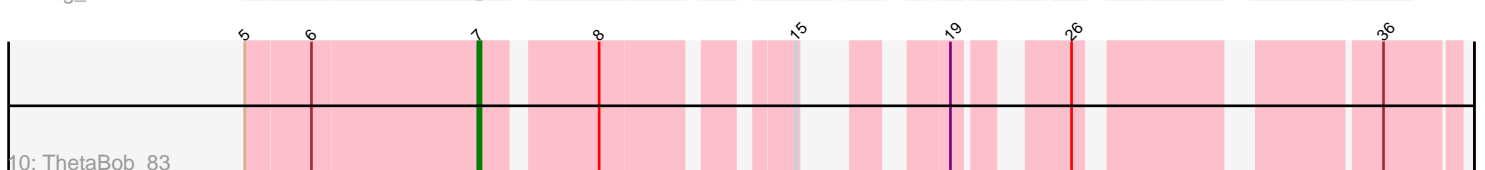
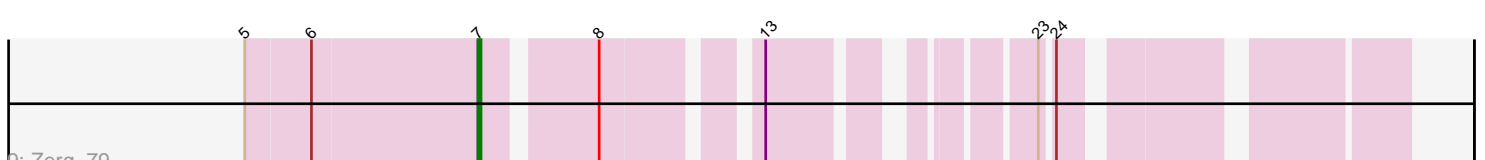
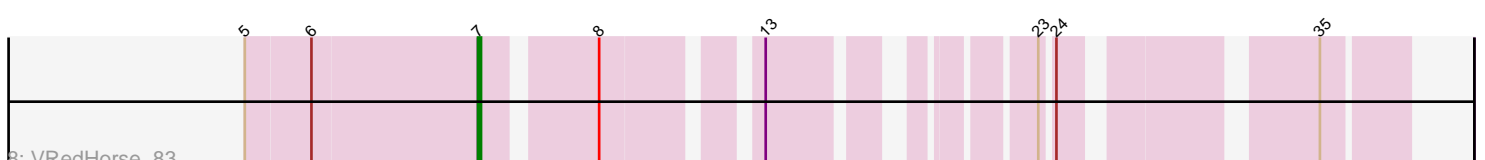
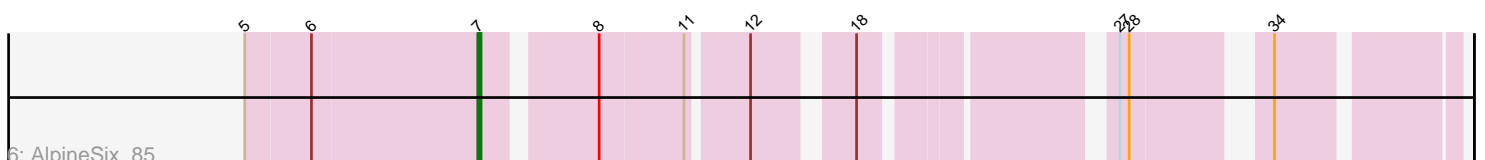
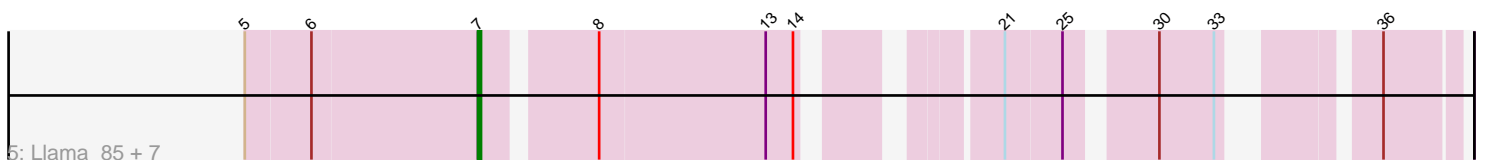
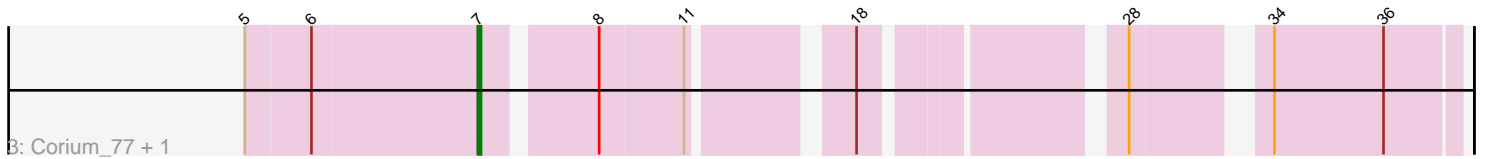
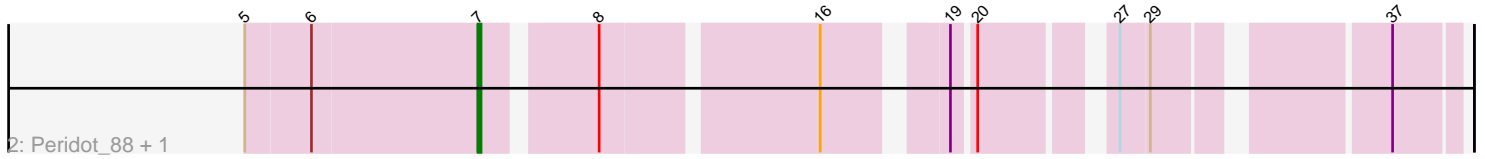
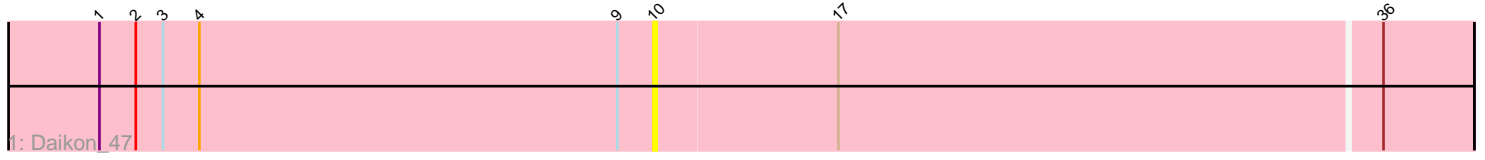


Pham 296860



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 296860 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296860 has 26 members, 9 are drafts.

Phages represented in each track:

- Track 1 : Daikon\_47
- Track 2 : Peridot\_88, Starcevich\_84
- Track 3 : Corium\_77, KingJulian\_83
- Track 4 : NewHope4\_88, MulchSalad\_90, LunaBlu\_88, Dante\_82, SeaLumen\_91, Enzomatic\_95, Latretium\_86, Polo2Bam\_94
- Track 5 : Llama\_85, OfUltron\_86, Ochi17\_84, MadMen\_82, Sebastian\_86, Jinglebell\_85, Nichirin\_79, Modragons\_83
- Track 6 : AlpineSix\_85
- Track 7 : PatoPoderoso\_77
- Track 8 : VRedHorse\_83
- Track 9 : Zerg\_79
- Track 10 : 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 7, it was called in 17 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AlpineSix\_85, 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, Sebastian\_86, Starcevich\_84, ThetaBob\_83, VRedHorse\_83, Zerg\_79,

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

- PatoPoderoso\_77,

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

- Daikon\_47,

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

Start 7:

- Found in 25 of 26 ( 96.2% ) of genes in pham
- Manual Annotations of this start: 17 of 17
- Called 96.0% of time when present
- Phage (with cluster) where this start called: AlpineSix\_85 (F1), 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), Starceвич\_84 (F1), ThetaBob\_83 (F4), VRedHorse\_83 (F1), Zerg\_79 (F1),

Start 10:

- Found in 1 of 26 ( 3.8% ) 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),

Start 11:

- Found in 4 of 26 ( 15.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: PatoPoderoso\_77 (F1),

### **Summary by clusters:**

There are 4 clusters represented in this pham: F1, F4, E, F7,

Info for manual annotations of cluster F1:

- Start number 7 was manually annotated 16 times for cluster F1.

Info for manual annotations of cluster F4:

- Start number 7 was manually annotated 1 time for cluster F4.

### **Gene Information:**

Gene: AlpineSix\_85 Start: 49223, Stop: 49489, Start Num: 7

Candidate Starts for AlpineSix\_85:

(5, 49148), (6, 49169), (Start: 7 @49223 has 17 MA's), (8, 49256), (11, 49283), (12, 49301), (18, 49328), (27, 49397), (28, 49400), (34, 49436),

Gene: Corium\_77 Start: 49716, Stop: 49988, Start Num: 7

Candidate Starts for Corium\_77:

(5, 49641), (6, 49662), (Start: 7 @49716 has 17 MA's), (8, 49749), (11, 49776), (18, 49821), (28, 49893), (34, 49929), (36, 49965),

Gene: Daikon\_47 Start: 36344, Stop: 36078, Start Num: 10

Candidate Starts for Daikon\_47:

(1, 36527), (2, 36515), (3, 36506), (4, 36494), (9, 36356), (10, 36344), (17, 36284), (36, 36107),

Gene: Dante\_82 Start: 51218, Stop: 51511, Start Num: 7

Candidate Starts for Dante\_82:

(5, 51143), (6, 51164), (Start: 7 @51218 has 17 MA's), (8, 51251), (18, 51335), (22, 51389), (28, 51413), (31, 51425), (32, 51431), (34, 51455), (35, 51470), (36, 51488),

Gene: Enzomatic\_95 Start: 48600, Stop: 48893, Start Num: 7

Candidate Starts for Enzomatic\_95:

(5, 48525), (6, 48546), (Start: 7 @48600 has 17 MA's), (8, 48633), (18, 48717), (22, 48771), (28, 48795), (31, 48807), (32, 48813), (34, 48837), (35, 48852), (36, 48870),

Gene: Jinglebell\_85 Start: 49222, Stop: 49485, Start Num: 7

Candidate Starts for Jinglebell\_85:

(5, 49147), (6, 49168), (Start: 7 @49222 has 17 MA's), (8, 49255), (13, 49309), (14, 49318), (21, 49366), (25, 49384), (30, 49408), (33, 49426), (36, 49462),

Gene: KingJulian\_83 Start: 49716, Stop: 49988, Start Num: 7

Candidate Starts for KingJulian\_83:

(5, 49641), (6, 49662), (Start: 7 @49716 has 17 MA's), (8, 49749), (11, 49776), (18, 49821), (28, 49893), (34, 49929), (36, 49965),

Gene: Latretium\_86 Start: 49509, Stop: 49802, Start Num: 7

Candidate Starts for Latretium\_86:

(5, 49434), (6, 49455), (Start: 7 @49509 has 17 MA's), (8, 49542), (18, 49626), (22, 49680), (28, 49704), (31, 49716), (32, 49722), (34, 49746), (35, 49761), (36, 49779),

Gene: Llama\_85 Start: 49078, Stop: 49341, Start Num: 7

Candidate Starts for Llama\_85:

(5, 49003), (6, 49024), (Start: 7 @49078 has 17 MA's), (8, 49111), (13, 49165), (14, 49174), (21, 49222), (25, 49240), (30, 49264), (33, 49282), (36, 49318),

Gene: LunaBlu\_88 Start: 50651, Stop: 50944, Start Num: 7

Candidate Starts for LunaBlu\_88:

(5, 50576), (6, 50597), (Start: 7 @50651 has 17 MA's), (8, 50684), (18, 50768), (22, 50822), (28, 50846), (31, 50858), (32, 50864), (34, 50888), (35, 50903), (36, 50921),

Gene: MadMen\_82 Start: 48403, Stop: 48666, Start Num: 7

Candidate Starts for MadMen\_82:

(5, 48328), (6, 48349), (Start: 7 @48403 has 17 MA's), (8, 48436), (13, 48490), (14, 48499), (21, 48547), (25, 48565), (30, 48589), (33, 48607), (36, 48643),

Gene: Modragons\_83 Start: 49066, Stop: 49329, Start Num: 7

Candidate Starts for Modragons\_83:

(5, 48991), (6, 49012), (Start: 7 @49066 has 17 MA's), (8, 49099), (13, 49153), (14, 49162), (21, 49210), (25, 49228), (30, 49252), (33, 49270), (36, 49306),

Gene: MulchSalad\_90 Start: 51307, Stop: 51600, Start Num: 7

Candidate Starts for MulchSalad\_90:

(5, 51232), (6, 51253), (Start: 7 @51307 has 17 MA's), (8, 51340), (18, 51424), (22, 51478), (28, 51502), (31, 51514), (32, 51520), (34, 51544), (35, 51559), (36, 51577),

Gene: NewHope4\_88 Start: 48746, Stop: 49039, Start Num: 7

Candidate Starts for NewHope4\_88:

(5, 48671), (6, 48692), (Start: 7 @48746 has 17 MA's), (8, 48779), (18, 48863), (22, 48917), (28, 48941), (31, 48953), (32, 48959), (34, 48983), (35, 48998), (36, 49016),

Gene: Nichirin\_79 Start: 48440, Stop: 48703, Start Num: 7

Candidate Starts for Nichirin\_79:

(5, 48365), (6, 48386), (Start: 7 @48440 has 17 MA's), (8, 48473), (13, 48527), (14, 48536), (21, 48584), (25, 48602), (30, 48626), (33, 48644), (36, 48680),

Gene: Ochi17\_84 Start: 48673, Stop: 48936, Start Num: 7

Candidate Starts for Ochi17\_84:

(5, 48598), (6, 48619), (Start: 7 @48673 has 17 MA's), (8, 48706), (13, 48760), (14, 48769), (21, 48817), (25, 48835), (30, 48859), (33, 48877), (36, 48913),

Gene: OfUltron\_86 Start: 49222, Stop: 49485, Start Num: 7

Candidate Starts for OfUltron\_86:

(5, 49147), (6, 49168), (Start: 7 @49222 has 17 MA's), (8, 49255), (13, 49309), (14, 49318), (21, 49366), (25, 49384), (30, 49408), (33, 49426), (36, 49462),

Gene: PatoPoderoso\_77 Start: 49776, Stop: 49988, Start Num: 11

Candidate Starts for PatoPoderoso\_77:

(5, 49641), (6, 49662), (Start: 7 @49716 has 17 MA's), (8, 49749), (11, 49776), (18, 49821), (28, 49893), (34, 49929), (36, 49965),

Gene: Peridot\_88 Start: 50421, Stop: 50690, Start Num: 7

Candidate Starts for Peridot\_88:

(5, 50346), (6, 50367), (Start: 7 @50421 has 17 MA's), (8, 50454), (16, 50520), (19, 50553), (20, 50559), (27, 50595), (29, 50604), (37, 50670),

Gene: Polo2Bam\_94 Start: 48600, Stop: 48893, Start Num: 7

Candidate Starts for Polo2Bam\_94:

(5, 48525), (6, 48546), (Start: 7 @48600 has 17 MA's), (8, 48633), (18, 48717), (22, 48771), (28, 48795), (31, 48807), (32, 48813), (34, 48837), (35, 48852), (36, 48870),

Gene: SeaLumen\_91 Start: 48600, Stop: 48893, Start Num: 7

Candidate Starts for SeaLumen\_91:

(5, 48525), (6, 48546), (Start: 7 @48600 has 17 MA's), (8, 48633), (18, 48717), (22, 48771), (28, 48795), (31, 48807), (32, 48813), (34, 48837), (35, 48852), (36, 48870),

Gene: Seabastian\_86 Start: 49223, Stop: 49486, Start Num: 7

Candidate Starts for Seabastian\_86:

(5, 49148), (6, 49169), (Start: 7 @49223 has 17 MA's), (8, 49256), (13, 49310), (14, 49319), (21, 49367), (25, 49385), (30, 49409), (33, 49427), (36, 49463),

Gene: Starcevich\_84 Start: 50987, Stop: 51256, Start Num: 7

Candidate Starts for Starcevich\_84:

(5, 50912), (6, 50933), (Start: 7 @50987 has 17 MA's), (8, 51020), (16, 51086), (19, 51119), (20, 51125), (27, 51161), (29, 51170), (37, 51236),

Gene: ThetaBob\_83 Start: 48523, Stop: 48762, Start Num: 7

Candidate Starts for ThetaBob\_83:

(5, 48448), (6, 48469), (Start: 7 @48523 has 17 MA's), (8, 48556), (15, 48607), (19, 48631), (26, 48658), (36, 48739),

Gene: VRedHorse\_83 Start: 47290, Stop: 47529, Start Num: 7

Candidate Starts for VRedHorse\_83:

(5, 47215), (6, 47236), (Start: 7 @47290 has 17 MA's), (8, 47323), (13, 47365), (23, 47431), (24, 47434), (35, 47503),

Gene: Zerg\_79 Start: 48632, Stop: 48871, Start Num: 7

Candidate Starts for Zerg\_79:

(5, 48557), (6, 48578), (Start: 7 @48632 has 17 MA's), (8, 48665), (13, 48707), (23, 48773), (24, 48776),