Zoomed Pham 291509

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 291509 Report

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

Pham number 291509 has 23 members, 12 are drafts.

Phages represented in each track:
• Track 1 : Ellewin_72, Emmetator_73, KSunshine22_75, Artu_73, BooTeria_77, WaddleDee_68, DunneganBoMo_70
• Track 2 : LeoJr_80
• Track 3 : Bloom_84, FrostedClock_83, Racecar_81, Talia1610_80, Mimi_80
• Track 4 : Atuin_75, ReginaGlobina_80
• Track 5 : SJReid_83
• Track 6 : Phrampa_72
• Track 7 : FloraSnap32_80, Patbob_79
• Track 8 : GoldenEssence_66
• Track 9 : Panchaali_73
• Track 10 : Stewart25555_71
• Track 11 : Laure_82

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 8 of the 11 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Atuin_75, Bloom_84, FloraSnap32_80, FrostedClock_83, GoldenEssence_66, Laure_82, LeoJr_80, Mimi_80, Patbob_79, Phrampa_72, Racecar_81, ReginaGlobina_80, SJReid_83, Talia1610_80,

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

Genes that do not have the "Most Annotated" start:
• Artu_73, BooTeria_77, DunneganBoMo_70, Ellewin_72, Emmetator_73, KSunshine22_75, Panchaali_73, Stewart25555_71, WaddleDee_68,

Summary by start number:

Start 6:
• Found in 9 of 23 (39.1%) of genes in pham

• Manual Annotations of this start: 3 of 11
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Artu_73 (FC), BooTeria_77 (FC), DunneganBoMo_70 (FC), Ellewin_72 (FC), Emmetator_73 (FC), KSunshine22_75 (FC), Panchaali_73 (FC), Stewart25555_71 (FC), WaddleDee_68 (FC),

Start 7:
• Found in 14 of 23 (60.9%) of genes in pham
• Manual Annotations of this start: 8 of 11
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Atuin_75 (FC), Bloom_84 (FC), FloraSnap32_80 (FC), FrostedClock_83 (FC), GoldenEssence_66 (FC), Laure_82 (UNK), LeoJr_80 (FC), Mimi_80 (FC), Patbob_79 (FC), Phrampa_72 (FC), Racecar_81 (FC), ReginaGlobina_80 (FC), SJReid_83 (FC), Talia1610_80 (FC),

Summary by clusters:

There are 2 clusters represented in this pham: UNK, FC,

Info for manual annotations of cluster FC:
•Start number 6 was manually annotated 3 times for cluster FC.
•Start number 7 was manually annotated 8 times for cluster FC.

Gene Information:

Gene: Artu_73 Start: 42522, Stop: 44036, Start Num: 6
Candidate Starts for Artu_73:
(3, 42429), (Start: 6 @42522 has 3 MA's), (9, 42555), (10, 42582), (15, 42690), (18, 42708), (19, 42747), (20, 42777), (21, 42789), (23, 42819), (26, 42918), (33, 43065), (34, 43071), (35, 43113), (38, 43233), (40, 43353), (52, 43890), (54, 43956),

Gene: Atuin_75 Start: 45156, Stop: 46664, Start Num: 7
Candidate Starts for Atuin_75:
(4, 45114), (5, 45117), (Start: 7 @45156 has 8 MA's), (8, 45165), (10, 45216), (20, 45411), (21, 45423), (22, 45450), (26, 45552), (33, 45693), (36, 45744), (40, 45981), (44, 46131), (45, 46161), (48, 46314), (52, 46518), (54, 46584), (55, 46587),

Gene: Bloom_84 Start: 46467, Stop: 48026, Start Num: 7
Candidate Starts for Bloom_84:
(Start: 7 @46467 has 8 MA's), (10, 46527), (11, 46542), (20, 46752), (26, 46893), (31, 47007), (33, 47058), (35, 47106), (39, 47340), (43, 47475), (46, 47538), (49, 47757), (52, 47883), (54, 47949),

Gene: BooTeria_77 Start: 42590, Stop: 44104, Start Num: 6
Candidate Starts for BooTeria_77:
(3, 42497), (Start: 6 @42590 has 3 MA's), (9, 42623), (10, 42650), (15, 42758), (18, 42776), (19, 42815), (20, 42845), (21, 42857), (23, 42887), (26, 42986), (33, 43133), (34, 43139), (35, 43181), (38, 43301), (40, 43421), (52, 43958), (54, 44024),

Gene: DunneganBoMo_70 Start: 42015, Stop: 43529, Start Num: 6
Candidate Starts for DunneganBoMo_70:

(3, 41922), (Start: 6 @42015 has 3 MA's), (9, 42048), (10, 42075), (15, 42183), (18, 42201), (19, 42240), (20, 42270), (21, 42282), (23, 42312), (26, 42411), (33, 42558), (34, 42564), (35, 42606), (38, 42726), (40, 42846), (52, 43383), (54, 43449),

Gene: Ellewin_72 Start: 41610, Stop: 43124, Start Num: 6
Candidate Starts for Ellewin_72:
(3, 41517), (Start: 6 @41610 has 3 MA's), (9, 41643), (10, 41670), (15, 41778), (18, 41796), (19, 41835), (20, 41865), (21, 41877), (23, 41907), (26, 42006), (33, 42153), (34, 42159), (35, 42201), (38, 42321), (40, 42441), (52, 42978), (54, 43044),

Gene: Emmetator_73 Start: 42762, Stop: 44276, Start Num: 6
Candidate Starts for Emmetator_73:
(3, 42669), (Start: 6 @42762 has 3 MA's), (9, 42795), (10, 42822), (15, 42930), (18, 42948), (19, 42987), (20, 43017), (21, 43029), (23, 43059), (26, 43158), (33, 43305), (34, 43311), (35, 43353), (38, 43473), (40, 43593), (52, 44130), (54, 44196),

Gene: FloraSnap32_80 Start: 45495, Stop: 47063, Start Num: 7
Candidate Starts for FloraSnap32_80:
(Start: 7 @45495 has 8 MA's), (10, 45555), (11, 45570), (12, 45573), (20, 45780), (26, 45921), (31, 46035), (33, 46086), (35, 46134), (39, 46377), (43, 46512), (46, 46575), (49, 46794), (52, 46920), (54, 46986),

Gene: FrostedClock_83 Start: 45955, Stop: 47514, Start Num: 7
Candidate Starts for FrostedClock_83:
(Start: 7 @45955 has 8 MA's), (10, 46015), (11, 46030), (20, 46240), (26, 46381), (31, 46495), (33, 46546), (35, 46594), (39, 46828), (43, 46963), (46, 47026), (49, 47245), (52, 47371), (54, 47437),

Gene: GoldenEssence_66 Start: 40260, Stop: 41819, Start Num: 7
Candidate Starts for GoldenEssence_66:
(Start: 7 @40260 has 8 MA's), (10, 40320), (11, 40335), (20, 40545), (26, 40686), (31, 40800), (33, 40851), (35, 40899), (39, 41133), (43, 41268), (49, 41550), (52, 41676), (54, 41742),

Gene: KSunshine22_75 Start: 43249, Stop: 44763, Start Num: 6
Candidate Starts for KSunshine22_75:
(3, 43156), (Start: 6 @43249 has 3 MA's), (9, 43282), (10, 43309), (15, 43417), (18, 43435), (19, 43474), (20, 43504), (21, 43516), (23, 43546), (26, 43645), (33, 43792), (34, 43798), (35, 43840), (38, 43960), (40, 44080), (52, 44617), (54, 44683),

Gene: Laure_82 Start: 46131, Stop: 47720, Start Num: 7
Candidate Starts for Laure_82:
(Start: 7 @46131 has 8 MA's), (8, 46140), (10, 46191), (15, 46371), (20, 46458), (25, 46527), (26, 46602), (27, 46605), (29, 46635), (30, 46692), (33, 46749), (35, 46797), (37, 46842), (40, 47037), (41, 47052), (42, 47100), (45, 47220), (52, 47574), (53, 47586), (54, 47640),

Gene: LeoJr_80 Start: 45284, Stop: 46792, Start Num: 7
Candidate Starts for LeoJr_80:
(4, 45242), (5, 45245), (Start: 7 @45284 has 8 MA's), (8, 45293), (10, 45344), (20, 45539), (21, 45551), (22, 45578), (26, 45680), (33, 45821), (36, 45872), (40, 46109), (44, 46259), (45, 46289), (47, 46355), (52, 46646), (54, 46712), (55, 46715),

Gene: Mimi_80 Start: 45814, Stop: 47373, Start Num: 7
Candidate Starts for Mimi_80:

(Start: 7 @45814 has 8 MA's), (10, 45874), (11, 45889), (20, 46099), (26, 46240), (31, 46354), (33, 46405), (35, 46453), (39, 46687), (43, 46822), (46, 46885), (49, 47104), (52, 47230), (54, 47296),

Gene: Panchaali_73 Start: 42946, Stop: 44454, Start Num: 6
Candidate Starts for Panchaali_73:
(Start: 6 @42946 has 3 MA's), (10, 43006), (13, 43063), (15, 43114), (16, 43117), (20, 43201), (21, 43213), (23, 43243), (26, 43342), (28, 43369), (32, 43459), (33, 43483), (34, 43489), (35, 43531), (38, 43651), (40, 43771), (46, 43960), (52, 44308), (54, 44374),

Gene: Patbob_79 Start: 46680, Stop: 48245, Start Num: 7
Candidate Starts for Patbob_79:
(Start: 7 @46680 has 8 MA's), (10, 46740), (11, 46755), (12, 46758), (20, 46965), (26, 47106), (31, 47220), (33, 47271), (35, 47319), (39, 47559), (43, 47694), (46, 47757), (49, 47976), (52, 48102), (54, 48168),

Gene: Phrampa_72 Start: 43330, Stop: 44889, Start Num: 7
Candidate Starts for Phrampa_72:
(Start: 7 @43330 has 8 MA's), (10, 43390), (11, 43405), (20, 43615), (26, 43756), (31, 43870), (33, 43921), (35, 43969), (38, 44089), (39, 44203), (43, 44338), (50, 44668), (52, 44746), (54, 44812),

Gene: Racecar_81 Start: 46467, Stop: 48026, Start Num: 7
Candidate Starts for Racecar_81:
(Start: 7 @46467 has 8 MA's), (10, 46527), (11, 46542), (20, 46752), (26, 46893), (31, 47007), (33, 47058), (35, 47106), (39, 47340), (43, 47475), (46, 47538), (49, 47757), (52, 47883), (54, 47949),

Gene: ReginaGlobina_80 Start: 46036, Stop: 47544, Start Num: 7
Candidate Starts for ReginaGlobina_80:
(4, 45994), (5, 45997), (Start: 7 @46036 has 8 MA's), (8, 46045), (10, 46096), (20, 46291), (21, 46303), (22, 46330), (26, 46432), (33, 46573), (36, 46624), (40, 46861), (44, 47011), (45, 47041), (48, 47194), (52, 47398), (54, 47464), (55, 47467),

Gene: SJReid_83 Start: 47777, Stop: 49324, Start Num: 7
Candidate Starts for SJReid_83:
(2, 47672), (4, 47735), (5, 47738), (Start: 7 @47777 has 8 MA's), (8, 47786), (10, 47837), (11, 47852), (14, 47942), (17, 47981), (20, 48062), (24, 48107), (26, 48203), (30, 48290), (33, 48353), (35, 48401), (40, 48641), (51, 49130), (52, 49178), (54, 49244),

Gene: Stewart25555_71 Start: 42369, Stop: 43883, Start Num: 6
Candidate Starts for Stewart25555_71:
(1, 42207), (Start: 6 @42369 has 3 MA's), (9, 42402), (10, 42429), (13, 42486), (15, 42537), (18, 42555), (20, 42624), (21, 42636), (23, 42666), (26, 42765), (33, 42912), (34, 42918), (35, 42960), (40, 43200), (52, 43737), (53, 43749), (54, 43803),

Gene: Talia1610_80 Start: 45832, Stop: 47391, Start Num: 7
Candidate Starts for Talia1610_80:
(Start: 7 @45832 has 8 MA's), (10, 45892), (11, 45907), (20, 46117), (26, 46258), (31, 46372), (33, 46423), (35, 46471), (39, 46705), (43, 46840), (46, 46903), (49, 47122), (52, 47248), (54, 47314),

Gene: WaddleDee_68 Start: 41867, Stop: 43381, Start Num: 6
Candidate Starts for WaddleDee_68:
(3, 41774), (Start: 6 @41867 has 3 MA's), (9, 41900), (10, 41927), (15, 42035), (18, 42053), (19, 42092), (20, 42122), (21, 42134), (23, 42164), (26, 42263), (33, 42410), (34, 42416), (35, 42458), (38, 42578), (40, 42698), (52, 43235), (54, 43301),