Pham 288126

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 288126 Report

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

Pham number 288126 has 28 members, 3 are drafts.

Phages represented in each track:
• Track 1 : Smoothie_33, Cucurbita_34, ClubL_32, Toniann_32, Bachita_34
• Track 2 : Dusty_31, Culver_32, Abscondus_31
• Track 3 : Aphelion_32, PhinkBoden_32, Lozinak_32, Engineer_33, Norvs_33, Geeche_31
• Track 4 : Miskis_30
• Track 5 : WilliamBoone_32
• Track 6 : BrutonGaster_20
• Track 7 : OneUp_26
• Track 8 : Yvonnetastic_30
• Track 9 : Cardigan_32
• Track 10 : JonJames_32
• Track 11 : Bantam_14
• Track 12 : DatBoi_15
• Track 13 : Mollymur_15
• Track 14 : Towmatter_13, Daredevil_14
• Track 15 : SpeedDemon_150
• Track 16 : GAL1_6

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

The start number called the most often in the published annotations is 4, it was called in 15 of the 25 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Abscondus_31, Aphelion_32, Bantam_14, Cardigan_32, Culver_32, DatBoi_15, Dusty_31, Engineer_33, Geeche_31, JonJames_32, Lozinak_32, Miskis_30, Mollymur_15, Norvs_33, PhinkBoden_32, SpeedDemon_150, WilliamBoone_32,

Genes that have the "Most Annotated" start but do not call it:
• Bachita_34, ClubL_32, Cucurbita_34, Smoothie_33, Toniann_32, Yvonnetastic_30,

Genes that do not have the "Most Annotated" start:
• BrutonGaster_20, Daredevil_14, GAL1_6, OneUp_26, Towmatter_13,

Summary by start number:

Start 2:
• Found in 2 of 28 (7.1%) of genes in pham
• Manual Annotations of this start: 1 of 25
• Called 50.0% of time when present
• Phage (with cluster) where this start called: BrutonGaster_20 (CQ2),

Start 3:
• Found in 18 of 28 (64.3%) of genes in pham
• Manual Annotations of this start: 9 of 25
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Bachita_34 (CQ1), ClubL_32 (CQ1), Cucurbita_34 (CQ1), Daredevil_14 (DL), OneUp_26 (CQ2), Smoothie_33 (CQ1), Toniann_32 (CQ1), Towmatter_13 (DL), Yvonnetastic_30 (DD),

Start 4:
• Found in 23 of 28 (82.1%) of genes in pham
• Manual Annotations of this start: 15 of 25
• Called 73.9% of time when present
• Phage (with cluster) where this start called: Abscondus_31 (CQ1), Aphelion_32 (CQ1), Bantam_14 (DL), Cardigan_32 (DD), Culver_32 (CQ1), DatBoi_15 (DL), Dusty_31 (CQ1), Engineer_33 (CQ1), Geeche_31 (CQ1), JonJames_32 (DD), Lozinak_32 (CQ1), Miskis_30 (CQ1), Mollymur_15 (DL), Norvs_33 (CQ1), PhinkBoden_32 (CQ1), SpeedDemon_150 (DL), WilliamBoone_32 (CQ1),

Start 7:
• 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: GAL1_6 (singleton),

Summary by clusters:

There are 5 clusters represented in this pham: CQ2, CQ1, DD, DL, singleton,

Info for manual annotations of cluster CQ1:
•Start number 3 was manually annotated 5 times for cluster CQ1.
•Start number 4 was manually annotated 10 times for cluster CQ1.

Info for manual annotations of cluster CQ2:
•Start number 2 was manually annotated 1 time for cluster CQ2.
•Start number 3 was manually annotated 1 time for cluster CQ2.

Info for manual annotations of cluster DD:
•Start number 3 was manually annotated 1 time for cluster DD.
•Start number 4 was manually annotated 1 time for cluster DD.

Info for manual annotations of cluster DL:
•Start number 3 was manually annotated 2 times for cluster DL.
•Start number 4 was manually annotated 4 times for cluster DL.

Gene Information:

Gene: Abscondus_31 Start: 11810, Stop: 12727, Start Num: 4
Candidate Starts for Abscondus_31:
(Start: 4 @11810 has 15 MA's), (14, 11936), (16, 11963), (25, 12035), (26, 12050), (33, 12131), (43, 12212), (44, 12266), (49, 12296),

Gene: Aphelion_32 Start: 12057, Stop: 12974, Start Num: 4
Candidate Starts for Aphelion_32:
(Start: 3 @12054 has 9 MA's), (Start: 4 @12057 has 15 MA's), (14, 12183), (16, 12210), (25, 12282), (26, 12297), (33, 12378), (43, 12459), (44, 12513), (49, 12543),

Gene: Bachita_34 Start: 12487, Stop: 13407, Start Num: 3
Candidate Starts for Bachita_34:
(Start: 3 @12487 has 9 MA's), (Start: 4 @12490 has 15 MA's), (14, 12616), (16, 12643), (25, 12715), (26, 12730), (33, 12811), (43, 12892), (44, 12946), (49, 12976),

Gene: Bantam_14 Start: 9393, Stop: 10283, Start Num: 4
Candidate Starts for Bantam_14:
(Start: 4 @9393 has 15 MA's), (12, 9477), (13, 9492), (21, 9576), (38, 9747), (44, 9843), (47, 9867),

Gene: BrutonGaster_20 Start: 8770, Stop: 9699, Start Num: 2
Candidate Starts for BrutonGaster_20:
(Start: 2 @8770 has 1 MA's), (Start: 3 @8773 has 9 MA's), (13, 8881), (16, 8932), (19, 8959), (24, 8995), (25, 9004), (26, 9019), (28, 9031), (32, 9058), (39, 9148), (43, 9181), (49, 9265), (51, 9385), (59, 9490),

Gene: Cardigan_32 Start: 13987, Stop: 14907, Start Num: 4
Candidate Starts for Cardigan_32:
(Start: 4 @13987 has 15 MA's), (9, 14044), (11, 14068), (14, 14113), (18, 14146), (19, 14167), (26, 14227), (41, 14368), (44, 14440), (56, 14668), (57, 14671),

Gene: ClubL_32 Start: 11988, Stop: 12908, Start Num: 3
Candidate Starts for ClubL_32:
(Start: 3 @11988 has 9 MA's), (Start: 4 @11991 has 15 MA's), (14, 12117), (16, 12144), (25, 12216), (26, 12231), (33, 12312), (43, 12393), (44, 12447), (49, 12477),

Gene: Cucurbita_34 Start: 13346, Stop: 14266, Start Num: 3
Candidate Starts for Cucurbita_34:
(Start: 3 @13346 has 9 MA's), (Start: 4 @13349 has 15 MA's), (14, 13475), (16, 13502), (25, 13574), (26, 13589), (33, 13670), (43, 13751), (44, 13805), (49, 13835),

Gene: Culver_32 Start: 11810, Stop: 12727, Start Num: 4
Candidate Starts for Culver_32:
(Start: 4 @11810 has 15 MA's), (14, 11936), (16, 11963), (25, 12035), (26, 12050), (33, 12131), (43, 12212), (44, 12266), (49, 12296),

Gene: Daredevil_14 Start: 8310, Stop: 9206, Start Num: 3
Candidate Starts for Daredevil_14:
(Start: 3 @8310 has 9 MA's), (12, 8397), (16, 8463), (22, 8499), (30, 8568), (39, 8676), (44, 8763), (47, 8787), (48, 8790), (54, 8940), (63, 9150),

Gene: DatBoi_15 Start: 10218, Stop: 11108, Start Num: 4

Candidate Starts for DatBoi_15:
(Start: 4 @10218 has 15 MA's), (12, 10302), (13, 10317), (21, 10401), (38, 10572), (44, 10668), (47, 10692),

Gene: Dusty_31 Start: 11810, Stop: 12727, Start Num: 4
Candidate Starts for Dusty_31:
(Start: 4 @11810 has 15 MA's), (14, 11936), (16, 11963), (25, 12035), (26, 12050), (33, 12131), (43, 12212), (44, 12266), (49, 12296),

Gene: Engineer_33 Start: 12005, Stop: 12922, Start Num: 4
Candidate Starts for Engineer_33:
(Start: 3 @12002 has 9 MA's), (Start: 4 @12005 has 15 MA's), (14, 12131), (16, 12158), (25, 12230), (26, 12245), (33, 12326), (43, 12407), (44, 12461), (49, 12491),

Gene: GAL1_6 Start: 4710, Stop: 5651, Start Num: 7
Candidate Starts for GAL1_6:
(1, 4602), (5, 4698), (6, 4701), (7, 4710), (10, 4758), (17, 4842), (18, 4845), (19, 4866), (27, 4935), (29, 4950), (30, 4956), (31, 4989), (35, 5076), (36, 5082), (37, 5088), (39, 5112), (40, 5115), (42, 5133), (45, 5205), (46, 5211), (48, 5226), (50, 5322), (51, 5337), (52, 5346), (55, 5388), (58, 5430), (60, 5517), (61, 5538), (62, 5571),

Gene: Geeche_31 Start: 11879, Stop: 12796, Start Num: 4
Candidate Starts for Geeche_31:
(Start: 3 @11876 has 9 MA's), (Start: 4 @11879 has 15 MA's), (14, 12005), (16, 12032), (25, 12104), (26, 12119), (33, 12200), (43, 12281), (44, 12335), (49, 12365),

Gene: JonJames_32 Start: 16202, Stop: 17122, Start Num: 4
Candidate Starts for JonJames_32:
(Start: 4 @16202 has 15 MA's), (9, 16259), (11, 16283), (14, 16328), (18, 16361), (19, 16382), (26, 16442), (41, 16583), (44, 16655), (56, 16883), (57, 16886),

Gene: Lozinak_32 Start: 12060, Stop: 12977, Start Num: 4
Candidate Starts for Lozinak_32:
(Start: 3 @12057 has 9 MA's), (Start: 4 @12060 has 15 MA's), (14, 12186), (16, 12213), (25, 12285), (26, 12300), (33, 12381), (43, 12462), (44, 12516), (49, 12546),

Gene: Miskis_30 Start: 11835, Stop: 12752, Start Num: 4
Candidate Starts for Miskis_30:
(Start: 3 @11832 has 9 MA's), (Start: 4 @11835 has 15 MA's), (14, 11961), (16, 11988), (20, 12018), (25, 12060), (26, 12075), (33, 12156), (43, 12237), (44, 12291), (49, 12321),

Gene: Mollymur_15 Start: 10309, Stop: 11199, Start Num: 4
Candidate Starts for Mollymur_15:
(Start: 4 @10309 has 15 MA's), (12, 10393), (16, 10459), (23, 10513), (30, 10564), (34, 10627), (39, 10672), (44, 10759), (47, 10783), (63, 11146),

Gene: Norvs_33 Start: 12062, Stop: 12979, Start Num: 4
Candidate Starts for Norvs_33:
(Start: 3 @12059 has 9 MA's), (Start: 4 @12062 has 15 MA's), (14, 12188), (16, 12215), (25, 12287), (26, 12302), (33, 12383), (43, 12464), (44, 12518), (49, 12548),

Gene: OneUp_26 Start: 9868, Stop: 10794, Start Num: 3
Candidate Starts for OneUp_26:

(Start: 2 @9865 has 1 MA's), (Start: 3 @9868 has 9 MA's), (8, 9901), (16, 10027), (19, 10054), (25, 10099), (26, 10114), (28, 10126), (32, 10153), (39, 10243), (43, 10276), (49, 10360), (51, 10480), (59, 10585),

Gene: PhinkBoden_32 Start: 12443, Stop: 13360, Start Num: 4
Candidate Starts for PhinkBoden_32:
(Start: 3 @12440 has 9 MA's), (Start: 4 @12443 has 15 MA's), (14, 12569), (16, 12596), (25, 12668), (26, 12683), (33, 12764), (43, 12845), (44, 12899), (49, 12929),

Gene: Smoothie_33 Start: 12057, Stop: 12977, Start Num: 3
Candidate Starts for Smoothie_33:
(Start: 3 @12057 has 9 MA's), (Start: 4 @12060 has 15 MA's), (14, 12186), (16, 12213), (25, 12285), (26, 12300), (33, 12381), (43, 12462), (44, 12516), (49, 12546),

Gene: SpeedDemon_150 Start: 9699, Stop: 10589, Start Num: 4
Candidate Starts for SpeedDemon_150:
(Start: 4 @9699 has 15 MA's), (12, 9783), (13, 9798), (21, 9882), (38, 10053), (44, 10149), (47, 10173),

Gene: Toniann_32 Start: 12002, Stop: 12922, Start Num: 3
Candidate Starts for Toniann_32:
(Start: 3 @12002 has 9 MA's), (Start: 4 @12005 has 15 MA's), (14, 12131), (16, 12158), (25, 12230), (26, 12245), (33, 12326), (43, 12407), (44, 12461), (49, 12491),

Gene: Towmatter_13 Start: 8132, Stop: 9028, Start Num: 3
Candidate Starts for Towmatter_13:
(Start: 3 @8132 has 9 MA's), (12, 8219), (16, 8285), (22, 8321), (30, 8390), (39, 8498), (44, 8585), (47, 8609), (48, 8612), (54, 8762), (63, 8972),

Gene: WilliamBoone_32 Start: 11401, Stop: 12318, Start Num: 4
Candidate Starts for WilliamBoone_32:
(Start: 3 @11398 has 9 MA's), (Start: 4 @11401 has 15 MA's), (14, 11527), (16, 11554), (25, 11626), (26, 11641), (28, 11653), (43, 11803), (44, 11857), (53, 12040),

Gene: Yvonnetastic_30 Start: 13748, Stop: 14671, Start Num: 3
Candidate Starts for Yvonnetastic_30:
(Start: 3 @13748 has 9 MA's), (Start: 4 @13751 has 15 MA's), (9, 13808), (11, 13832), (14, 13877), (15, 13889), (18, 13910), (19, 13931), (26, 13991), (41, 14132), (44, 14204), (56, 14432), (57, 14435),