

Pham 158125



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 158125 Report

This analysis was run 04/13/24 on database version 558.

Pham number 158125 has 26 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Dusty\_30, Culver\_32, Abscondus\_31
- Track 2 : Miskis\_34
- Track 3 : Smoothie\_33, Cucurbita\_34, ClubL\_32, Toniann\_32, Bachita\_34
- Track 4 : Aphelion\_32, PhinkBoden\_32, Lozinak\_32, Engineer\_33, Norvs\_33
- Track 5 : WilliamBoone\_32
- Track 6 : BrutonGaster\_20
- Track 7 : OneUp\_26
- Track 8 : Yvonnestic\_30
- Track 9 : Cardigan\_32
- Track 10 : JonJames\_32
- Track 11 : Bantam\_14
- Track 12 : DatBoi\_15
- Track 13 : Mollymur\_15
- Track 14 : 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 12 of the 21 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\_30, Engineer\_33, JonJames\_32, Lozinak\_32, Miskis\_34, 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, Yvonnestic\_30,

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

- BrutonGaster\_20, Daredevil\_14, GAL1\_6, OneUp\_26,

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

Start 2:

- Found in 2 of 26 ( 7.7% ) of genes in pham
- Manual Annotations of this start: 1 of 21
- Called 50.0% of time when present
- Phage (with cluster) where this start called: BrutonGaster\_20 (CQ2),

Start 3:

- Found in 16 of 26 ( 61.5% ) of genes in pham
- Manual Annotations of this start: 8 of 21
- 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), Yvonnestic\_30 (DD),

Start 4:

- Found in 22 of 26 ( 84.6% ) of genes in pham
- Manual Annotations of this start: 12 of 21
- Called 72.7% of time when present
- Phage (with cluster) where this start called: Abscondus\_31 (CQ), Aphelion\_32 (CQ1), Bantam\_14 (DL), Cardigan\_32 (DD), Culver\_32 (CQ1), DatBoi\_15 (DL), Dusty\_30 (CQ), Engineer\_33 (CQ1), JonJames\_32 (DD), Lozinak\_32 (CQ1), Miskis\_34 (CQ), Mollymur\_15 (DL), Norvs\_33 (CQ), PhinkBoden\_32 (CQ1), SpeedDemon\_150 (DL), WilliamBoone\_32 (CQ1),

Start 7:

- 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: GAL1\_6 (singleton),

**Summary by clusters:**

There are 6 clusters represented in this pham: DL, DD, singleton, CQ2, CQ1, CQ,

Info for manual annotations of cluster CQ:

- Start number 4 was manually annotated 1 time for cluster CQ.

Info for manual annotations of cluster CQ1:

- Start number 3 was manually annotated 5 times for cluster CQ1.
- Start number 4 was manually annotated 6 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 1 time 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 12 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 8 MA's), (Start: 4 @12057 has 12 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 8 MA's), (Start: 4 @12490 has 12 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 12 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 8 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 12 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 8 MA's), (Start: 4 @11991 has 12 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 8 MA's), (Start: 4 @13349 has 12 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 12 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 8 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 12 MA's), (12, 10302), (13, 10317), (21, 10401), (38, 10572), (44, 10668), (47, 10692),

Gene: Dusty\_30 Start: 11810, Stop: 12727, Start Num: 4

Candidate Starts for Dusty\_30:

(Start: 4 @11810 has 12 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 8 MA's), (Start: 4 @12005 has 12 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: JonJames\_32 Start: 16202, Stop: 17122, Start Num: 4

Candidate Starts for JonJames\_32:

(Start: 4 @16202 has 12 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 8 MA's), (Start: 4 @12060 has 12 MA's), (14, 12186), (16, 12213), (25, 12285), (26, 12300), (33, 12381), (43, 12462), (44, 12516), (49, 12546),

Gene: Miskis\_34 Start: 11835, Stop: 12752, Start Num: 4

Candidate Starts for Miskis\_34:

(Start: 3 @11832 has 8 MA's), (Start: 4 @11835 has 12 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 12 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 8 MA's), (Start: 4 @12062 has 12 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 8 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 8 MA's), (Start: 4 @12443 has 12 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 8 MA's), (Start: 4 @12060 has 12 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 12 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 8 MA's), (Start: 4 @12005 has 12 MA's), (14, 12131), (16, 12158), (25, 12230), (26, 12245), (33, 12326), (43, 12407), (44, 12461), (49, 12491),

Gene: WilliamBoone\_32 Start: 11401, Stop: 12318, Start Num: 4

Candidate Starts for WilliamBoone\_32:

(Start: 3 @11398 has 8 MA's), (Start: 4 @11401 has 12 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 8 MA's), (Start: 4 @13751 has 12 MA's), (9, 13808), (11, 13832), (14, 13877), (15, 13889), (18, 13910), (19, 13931), (26, 13991), (41, 14132), (44, 14204), (56, 14432), (57, 14435),