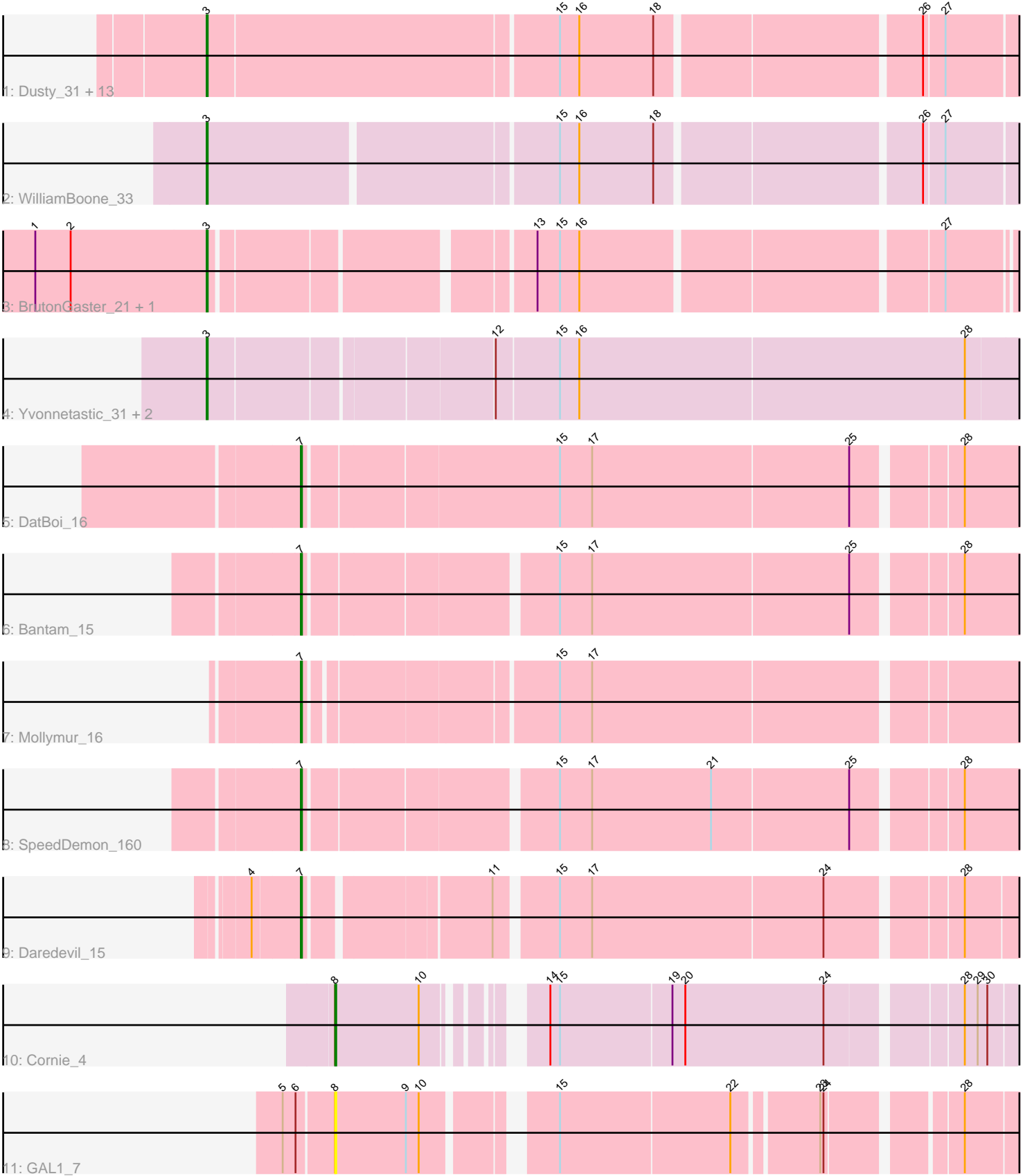


Pham 3186



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 3186 Report

This analysis was run 04/28/24 on database version 559.

Pham number 3186 has 27 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Dusty\_31, Smoothie\_34, Culver\_33, Miskis\_35, PhinkBoden\_33, Lozinak\_33, Cucurbita\_35, Engineer\_34, Abscondus\_32, ClubL\_33, Toniann\_33, Bachita\_35, Aphelion\_33, Norvs\_34
- Track 2 : WilliamBoone\_33
- Track 3 : BrutonGaster\_21, OneUp\_27
- Track 4 : Yvonnetastic\_31, Cardigan\_33, JonJames\_33
- Track 5 : DatBoi\_16
- Track 6 : Bantam\_15
- Track 7 : Mollymur\_16
- Track 8 : SpeedDemon\_160
- Track 9 : Daredevil\_15
- Track 10 : Cornie\_4
- Track 11 : GAL1\_7

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

The start number called the most often in the published annotations is 3, it was called in 16 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abscondus\_32, Aphelion\_33, Bachita\_35, BrutonGaster\_21, Cardigan\_33, ClubL\_33, Cucurbita\_35, Culver\_33, Dusty\_31, Engineer\_34, JonJames\_33, Lozinak\_33, Miskis\_35, Norvs\_34, OneUp\_27, PhinkBoden\_33, Smoothie\_34, Toniann\_33, WilliamBoone\_33, Yvonnetastic\_31,

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

- 

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

- Bantam\_15, Cornie\_4, Daredevil\_15, DatBoi\_16, GAL1\_7, Mollymur\_16, SpeedDemon\_160,

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

#### Start 3:

- Found in 20 of 27 ( 74.1% ) of genes in pham
- Manual Annotations of this start: 16 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abscondus\_32 (CQ), Aphelion\_33 (CQ1), Bachita\_35 (CQ1), BrutonGaster\_21 (CQ2), Cardigan\_33 (DD), ClubL\_33 (CQ1), Cucurbita\_35 (CQ1), Culver\_33 (CQ1), Dusty\_31 (CQ), Engineer\_34 (CQ1), JonJames\_33 (DD), Lozinak\_33 (CQ1), Miskis\_35 (CQ), Norvs\_34 (CQ), OneUp\_27 (CQ2), PhinkBoden\_33 (CQ1), Smoothie\_34 (CQ1), Toniann\_33 (CQ1), WilliamBoone\_33 (CQ1), Yvonnetastic\_31 (DD),

#### Start 7:

- Found in 5 of 27 ( 18.5% ) of genes in pham
- Manual Annotations of this start: 5 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bantam\_15 (DL), Daredevil\_15 (DL), DatBoi\_16 (DL), Mollymur\_16 (DL), SpeedDemon\_160 (DL),

#### Start 8:

- Found in 2 of 27 ( 7.4% ) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cornie\_4 (F5), GAL1\_7 (singleton),

### Summary by clusters:

There are 7 clusters represented in this pham: DL, F5, DD, singleton, CQ2, CQ, CQ1,

Info for manual annotations of cluster CQ:

- Start number 3 was manually annotated 1 time for cluster CQ.

Info for manual annotations of cluster CQ1:

- Start number 3 was manually annotated 11 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 3 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster DD:

- Start number 3 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster DL:

- Start number 7 was manually annotated 5 times for cluster DL.

Info for manual annotations of cluster F5:

- Start number 8 was manually annotated 1 time for cluster F5.

### Gene Information:

Gene: Abscondus\_32 Start: 12787, Stop: 13629, Start Num: 3

Candidate Starts for Abscondus\_32:

(Start: 3 @12787 has 16 MA's), (15, 13105), (16, 13123), (18, 13192), (26, 13423), (27, 13441),

Gene: Aphelion\_33 Start: 13034, Stop: 13876, Start Num: 3

Candidate Starts for Aphelion\_33:

(Start: 3 @13034 has 16 MA's), (15, 13352), (16, 13370), (18, 13439), (26, 13670), (27, 13688),

Gene: Bachita\_35 Start: 13467, Stop: 14309, Start Num: 3

Candidate Starts for Bachita\_35:

(Start: 3 @13467 has 16 MA's), (15, 13785), (16, 13803), (18, 13872), (26, 14103), (27, 14121),

Gene: Bantam\_15 Start: 10395, Stop: 11135, Start Num: 7

Candidate Starts for Bantam\_15:

(Start: 7 @10395 has 5 MA's), (15, 10611), (17, 10641), (25, 10878), (28, 10968),

Gene: BrutonGaster\_21 Start: 9761, Stop: 10567, Start Num: 3

Candidate Starts for BrutonGaster\_21:

(1, 9602), (2, 9635), (Start: 3 @9761 has 16 MA's), (13, 10031), (15, 10052), (16, 10070), (27, 10388),

Gene: Cardigan\_33 Start: 14968, Stop: 15837, Start Num: 3

Candidate Starts for Cardigan\_33:

(Start: 3 @14968 has 16 MA's), (12, 15217), (15, 15274), (16, 15292), (28, 15649),

Gene: ClubL\_33 Start: 12968, Stop: 13810, Start Num: 3

Candidate Starts for ClubL\_33:

(Start: 3 @12968 has 16 MA's), (15, 13286), (16, 13304), (18, 13373), (26, 13604), (27, 13622),

Gene: Cornie\_4 Start: 3792, Stop: 4448, Start Num: 8

Candidate Starts for Cornie\_4:

(Start: 8 @3792 has 1 MA's), (10, 3870), (14, 3945), (15, 3954), (19, 4056), (20, 4068), (24, 4197), (28, 4308), (29, 4320), (30, 4329),

Gene: Cucurbita\_35 Start: 14326, Stop: 15168, Start Num: 3

Candidate Starts for Cucurbita\_35:

(Start: 3 @14326 has 16 MA's), (15, 14644), (16, 14662), (18, 14731), (26, 14962), (27, 14980),

Gene: Culver\_33 Start: 12787, Stop: 13629, Start Num: 3

Candidate Starts for Culver\_33:

(Start: 3 @12787 has 16 MA's), (15, 13105), (16, 13123), (18, 13192), (26, 13423), (27, 13441),

Gene: Daredevil\_15 Start: 9291, Stop: 10022, Start Num: 7

Candidate Starts for Daredevil\_15:

(4, 9249), (Start: 7 @9291 has 5 MA's), (11, 9447), (15, 9498), (17, 9528), (24, 9741), (28, 9855),

Gene: DatBoi\_16 Start: 11219, Stop: 11971, Start Num: 7

Candidate Starts for DatBoi\_16:

(Start: 7 @11219 has 5 MA's), (15, 11447), (17, 11477), (25, 11714), (28, 11804),

Gene: Dusty\_31 Start: 12787, Stop: 13629, Start Num: 3

Candidate Starts for Dusty\_31:

(Start: 3 @12787 has 16 MA's), (15, 13105), (16, 13123), (18, 13192), (26, 13423), (27, 13441),

Gene: Engineer\_34 Start: 12982, Stop: 13824, Start Num: 3

Candidate Starts for Engineer\_34:

(Start: 3 @12982 has 16 MA's), (15, 13300), (16, 13318), (18, 13387), (26, 13618), (27, 13636),

Gene: GAL1\_7 Start: 5721, Stop: 6392, Start Num: 8

Candidate Starts for GAL1\_7:

(5, 5676), (6, 5688), (Start: 8 @5721 has 1 MA's), (9, 5787), (10, 5799), (15, 5898), (22, 6054), (23, 6126), (24, 6129), (28, 6237),

Gene: JonJames\_33 Start: 17183, Stop: 18052, Start Num: 3

Candidate Starts for JonJames\_33:

(Start: 3 @17183 has 16 MA's), (12, 17432), (15, 17489), (16, 17507), (28, 17864),

Gene: Lozinak\_33 Start: 13037, Stop: 13879, Start Num: 3

Candidate Starts for Lozinak\_33:

(Start: 3 @13037 has 16 MA's), (15, 13355), (16, 13373), (18, 13442), (26, 13673), (27, 13691),

Gene: Miskis\_35 Start: 12812, Stop: 13654, Start Num: 3

Candidate Starts for Miskis\_35:

(Start: 3 @12812 has 16 MA's), (15, 13130), (16, 13148), (18, 13217), (26, 13448), (27, 13466),

Gene: Mollymur\_16 Start: 11310, Stop: 12056, Start Num: 7

Candidate Starts for Mollymur\_16:

(Start: 7 @11310 has 5 MA's), (15, 11523), (17, 11553),

Gene: Norvs\_34 Start: 13039, Stop: 13881, Start Num: 3

Candidate Starts for Norvs\_34:

(Start: 3 @13039 has 16 MA's), (15, 13357), (16, 13375), (18, 13444), (26, 13675), (27, 13693),

Gene: OneUp\_27 Start: 10856, Stop: 11653, Start Num: 3

Candidate Starts for OneUp\_27:

(1, 10697), (2, 10730), (Start: 3 @10856 has 16 MA's), (13, 11117), (15, 11138), (16, 11156), (27, 11474),

Gene: PhinkBoden\_33 Start: 13420, Stop: 14262, Start Num: 3

Candidate Starts for PhinkBoden\_33:

(Start: 3 @13420 has 16 MA's), (15, 13738), (16, 13756), (18, 13825), (26, 14056), (27, 14074),

Gene: Smoothie\_34 Start: 13037, Stop: 13879, Start Num: 3

Candidate Starts for Smoothie\_34:

(Start: 3 @13037 has 16 MA's), (15, 13355), (16, 13373), (18, 13442), (26, 13673), (27, 13691),

Gene: SpeedDemon\_160 Start: 10701, Stop: 11441, Start Num: 7

Candidate Starts for SpeedDemon\_160:

(Start: 7 @10701 has 5 MA's), (15, 10917), (17, 10947), (21, 11058), (25, 11184), (28, 11274),

Gene: Toniann\_33 Start: 12982, Stop: 13824, Start Num: 3

Candidate Starts for Toniann\_33:

(Start: 3 @12982 has 16 MA's), (15, 13300), (16, 13318), (18, 13387), (26, 13618), (27, 13636),

Gene: WilliamBoone\_33 Start: 12377, Stop: 13213, Start Num: 3

Candidate Starts for WilliamBoone\_33:

(Start: 3 @12377 has 16 MA's), (15, 12689), (16, 12707), (18, 12776), (26, 13007), (27, 13025),

Gene: Yvonnetastic\_31 Start: 14732, Stop: 15601, Start Num: 3

Candidate Starts for Yvonnetastic\_31:

(Start: 3 @14732 has 16 MA's), (12, 14981), (15, 15038), (16, 15056), (28, 15413),