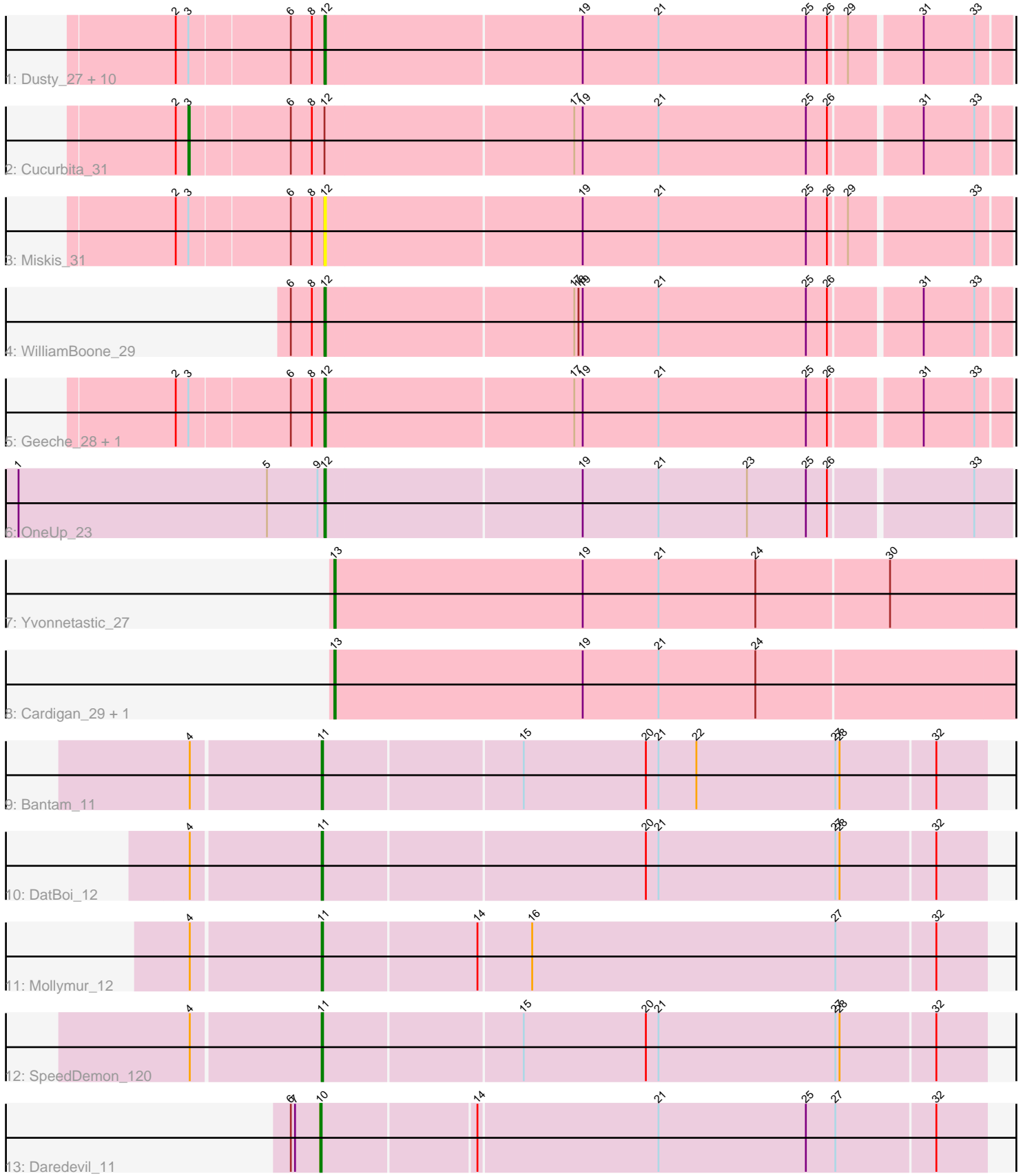


Pham 182549



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 182549 Report

This analysis was run 11/02/24 on database version 579.

Pham number 182549 has 25 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Dusty\_27, Smoothie\_30, Culver\_29, Lozinak\_29, PhinkBoden\_29, Engineer\_30, Abscondus\_28, ClubL\_29, Toniann\_29, Bachita\_31, Aphelion\_29
- Track 2 : Cucurbita\_31
- Track 3 : Miskis\_31
- Track 4 : WilliamBoone\_29
- Track 5 : Geeche\_28, Norvs\_30
- Track 6 : OneUp\_23
- Track 7 : Yvonnestic\_27
- Track 8 : Cardigan\_29, JonJames\_29
- Track 9 : Bantam\_11
- Track 10 : DatBoi\_12
- Track 11 : Mollymur\_12
- Track 12 : SpeedDemon\_120
- Track 13 : Daredevil\_11

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

The start number called the most often in the published annotations is 12, it was called in 12 of the 20 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abscondus\_28, Aphelion\_29, Bachita\_31, ClubL\_29, Culver\_29, Dusty\_27, Engineer\_30, Geeche\_28, Lozinak\_29, Miskis\_31, Norvs\_30, OneUp\_23, PhinkBoden\_29, Smoothie\_30, Toniann\_29, WilliamBoone\_29,

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

- Cucurbita\_31,

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

- Bantam\_11, Cardigan\_29, Daredevil\_11, DatBoi\_12, JonJames\_29, Mollymur\_12, SpeedDemon\_120, Yvonnestic\_27,

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

Start 3:

- Found in 15 of 25 ( 60.0% ) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called 6.7% of time when present
- Phage (with cluster) where this start called: Cucurbita\_31 (CQ1),

Start 10:

- Found in 1 of 25 ( 4.0% ) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Daredevil\_11 (DL),

Start 11:

- Found in 4 of 25 ( 16.0% ) of genes in pham
- Manual Annotations of this start: 4 of 20
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bantam\_11 (DL), DatBoi\_12 (DL), Mollymur\_12 (DL), SpeedDemon\_120 (DL),

Start 12:

- Found in 17 of 25 ( 68.0% ) of genes in pham
- Manual Annotations of this start: 12 of 20
- Called 94.1% of time when present
- Phage (with cluster) where this start called: Abscondus\_28 (CQ1), Aphelion\_29 (CQ1), Bachita\_31 (CQ1), ClubL\_29 (CQ1), Culver\_29 (CQ1), Dusty\_27 (CQ1), Engineer\_30 (CQ1), Geeche\_28 (CQ1), Lozinak\_29 (CQ1), Miskis\_31 (CQ1), Norvs\_30 (CQ1), OneUp\_23 (CQ2), PhinkBoden\_29 (CQ1), Smoothie\_30 (CQ1), Toniann\_29 (CQ1), WilliamBoone\_29 (CQ1),

Start 13:

- Found in 3 of 25 ( 12.0% ) of genes in pham
- Manual Annotations of this start: 2 of 20
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cardigan\_29 (DD), JonJames\_29 (DD), Yvonnestic\_27 (DD),

**Summary by clusters:**

There are 4 clusters represented in this pham: CQ2, DD, CQ1, DL,

Info for manual annotations of cluster CQ1:

- Start number 3 was manually annotated 1 time for cluster CQ1.
- Start number 12 was manually annotated 11 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 12 was manually annotated 1 time for cluster CQ2.

Info for manual annotations of cluster DD:

- Start number 13 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster DL:

- Start number 10 was manually annotated 1 time for cluster DL.
- Start number 11 was manually annotated 4 times for cluster DL.

**Gene Information:**

Gene: Abscondus\_28 Start: 7960, Stop: 8433, Start Num: 12

Candidate Starts for Abscondus\_28:

(2, 7858), (Start: 3 @7867 has 1 MA's), (6, 7936), (8, 7951), (Start: 12 @7960 has 12 MA's), (19, 8140), (21, 8194), (25, 8299), (26, 8314), (29, 8326), (31, 8374), (33, 8410),

Gene: Aphelion\_29 Start: 8207, Stop: 8680, Start Num: 12

Candidate Starts for Aphelion\_29:

(2, 8105), (Start: 3 @8114 has 1 MA's), (6, 8183), (8, 8198), (Start: 12 @8207 has 12 MA's), (19, 8387), (21, 8441), (25, 8546), (26, 8561), (29, 8573), (31, 8621), (33, 8657),

Gene: Bachita\_31 Start: 8640, Stop: 9113, Start Num: 12

Candidate Starts for Bachita\_31:

(2, 8538), (Start: 3 @8547 has 1 MA's), (6, 8616), (8, 8631), (Start: 12 @8640 has 12 MA's), (19, 8820), (21, 8874), (25, 8979), (26, 8994), (29, 9006), (31, 9054), (33, 9090),

Gene: Bantam\_11 Start: 5625, Stop: 6089, Start Num: 11

Candidate Starts for Bantam\_11:

(4, 5535), (Start: 11 @5625 has 4 MA's), (15, 5763), (20, 5850), (21, 5859), (22, 5886), (27, 5985), (28, 5988), (32, 6054),

Gene: Cardigan\_29 Start: 10212, Stop: 10694, Start Num: 13

Candidate Starts for Cardigan\_29:

(Start: 13 @10212 has 2 MA's), (19, 10389), (21, 10443), (24, 10512),

Gene: ClubL\_29 Start: 8141, Stop: 8614, Start Num: 12

Candidate Starts for ClubL\_29:

(2, 8039), (Start: 3 @8048 has 1 MA's), (6, 8117), (8, 8132), (Start: 12 @8141 has 12 MA's), (19, 8321), (21, 8375), (25, 8480), (26, 8495), (29, 8507), (31, 8555), (33, 8591),

Gene: Cucurbita\_31 Start: 9406, Stop: 9972, Start Num: 3

Candidate Starts for Cucurbita\_31:

(2, 9397), (Start: 3 @9406 has 1 MA's), (6, 9475), (8, 9490), (Start: 12 @9499 has 12 MA's), (17, 9673), (19, 9679), (21, 9733), (25, 9838), (26, 9853), (31, 9913), (33, 9949),

Gene: Culver\_29 Start: 7960, Stop: 8433, Start Num: 12

Candidate Starts for Culver\_29:

(2, 7858), (Start: 3 @7867 has 1 MA's), (6, 7936), (8, 7951), (Start: 12 @7960 has 12 MA's), (19, 8140), (21, 8194), (25, 8299), (26, 8314), (29, 8326), (31, 8374), (33, 8410),

Gene: Daredevil\_11 Start: 4538, Stop: 4999, Start Num: 10

Candidate Starts for Daredevil\_11:

(6, 4517), (7, 4520), (Start: 10 @4538 has 1 MA's), (14, 4643), (21, 4769), (25, 4874), (27, 4895), (32, 4964),

Gene: DatBoi\_12 Start: 6450, Stop: 6914, Start Num: 11

Candidate Starts for DatBoi\_12:

(4, 6360), (Start: 11 @6450 has 4 MA's), (20, 6675), (21, 6684), (27, 6810), (28, 6813), (32, 6879),

Gene: Dusty\_27 Start: 7960, Stop: 8433, Start Num: 12

Candidate Starts for Dusty\_27:

(2, 7858), (Start: 3 @7867 has 1 MA's), (6, 7936), (8, 7951), (Start: 12 @7960 has 12 MA's), (19, 8140), (21, 8194), (25, 8299), (26, 8314), (29, 8326), (31, 8374), (33, 8410),

Gene: Engineer\_30 Start: 8155, Stop: 8628, Start Num: 12

Candidate Starts for Engineer\_30:

(2, 8053), (Start: 3 @8062 has 1 MA's), (6, 8131), (8, 8146), (Start: 12 @8155 has 12 MA's), (19, 8335), (21, 8389), (25, 8494), (26, 8509), (29, 8521), (31, 8569), (33, 8605),

Gene: Geeche\_28 Start: 8029, Stop: 8502, Start Num: 12

Candidate Starts for Geeche\_28:

(2, 7927), (Start: 3 @7936 has 1 MA's), (6, 8005), (8, 8020), (Start: 12 @8029 has 12 MA's), (17, 8203), (19, 8209), (21, 8263), (25, 8368), (26, 8383), (31, 8443), (33, 8479),

Gene: JonJames\_29 Start: 11407, Stop: 11889, Start Num: 13

Candidate Starts for JonJames\_29:

(Start: 13 @11407 has 2 MA's), (19, 11584), (21, 11638), (24, 11707),

Gene: Lozinak\_29 Start: 8210, Stop: 8683, Start Num: 12

Candidate Starts for Lozinak\_29:

(2, 8108), (Start: 3 @8117 has 1 MA's), (6, 8186), (8, 8201), (Start: 12 @8210 has 12 MA's), (19, 8390), (21, 8444), (25, 8549), (26, 8564), (29, 8576), (31, 8624), (33, 8660),

Gene: Miskis\_31 Start: 7985, Stop: 8458, Start Num: 12

Candidate Starts for Miskis\_31:

(2, 7883), (Start: 3 @7892 has 1 MA's), (6, 7961), (8, 7976), (Start: 12 @7985 has 12 MA's), (19, 8165), (21, 8219), (25, 8324), (26, 8339), (29, 8351), (33, 8435),

Gene: Mollymur\_12 Start: 6532, Stop: 6996, Start Num: 11

Candidate Starts for Mollymur\_12:

(4, 6442), (Start: 11 @6532 has 4 MA's), (14, 6640), (16, 6676), (27, 6892), (32, 6961),

Gene: Norvs\_30 Start: 8212, Stop: 8685, Start Num: 12

Candidate Starts for Norvs\_30:

(2, 8110), (Start: 3 @8119 has 1 MA's), (6, 8188), (8, 8203), (Start: 12 @8212 has 12 MA's), (17, 8386), (19, 8392), (21, 8446), (25, 8551), (26, 8566), (31, 8626), (33, 8662),

Gene: OneUp\_23 Start: 6025, Stop: 6501, Start Num: 12

Candidate Starts for OneUp\_23:

(1, 5809), (5, 5986), (9, 6022), (Start: 12 @6025 has 12 MA's), (19, 6205), (21, 6259), (23, 6322), (25, 6364), (26, 6379), (33, 6475),

Gene: PhinkBoden\_29 Start: 8593, Stop: 9066, Start Num: 12

Candidate Starts for PhinkBoden\_29:

(2, 8491), (Start: 3 @8500 has 1 MA's), (6, 8569), (8, 8584), (Start: 12 @8593 has 12 MA's), (19, 8773), (21, 8827), (25, 8932), (26, 8947), (29, 8959), (31, 9007), (33, 9043),

Gene: Smoothie\_30 Start: 8210, Stop: 8683, Start Num: 12

Candidate Starts for Smoothie\_30:

(2, 8108), (Start: 3 @8117 has 1 MA's), (6, 8186), (8, 8201), (Start: 12 @8210 has 12 MA's), (19, 8390), (21, 8444), (25, 8549), (26, 8564), (29, 8576), (31, 8624), (33, 8660),

Gene: SpeedDemon\_120 Start: 5931, Stop: 6395, Start Num: 11

Candidate Starts for SpeedDemon\_120:

(4, 5841), (Start: 11 @5931 has 4 MA's), (15, 6069), (20, 6156), (21, 6165), (27, 6291), (28, 6294), (32, 6360),

Gene: Toniann\_29 Start: 8155, Stop: 8628, Start Num: 12

Candidate Starts for Toniann\_29:

(2, 8053), (Start: 3 @8062 has 1 MA's), (6, 8131), (8, 8146), (Start: 12 @8155 has 12 MA's), (19, 8335), (21, 8389), (25, 8494), (26, 8509), (29, 8521), (31, 8569), (33, 8605),

Gene: WilliamBoone\_29 Start: 7554, Stop: 8027, Start Num: 12

Candidate Starts for WilliamBoone\_29:

(6, 7530), (8, 7545), (Start: 12 @7554 has 12 MA's), (17, 7728), (18, 7731), (19, 7734), (21, 7788), (25, 7893), (26, 7908), (31, 7968), (33, 8004),

Gene: Yvonnetastic\_27 Start: 9976, Stop: 10458, Start Num: 13

Candidate Starts for Yvonnetastic\_27:

(Start: 13 @9976 has 2 MA's), (19, 10153), (21, 10207), (24, 10276), (30, 10369),