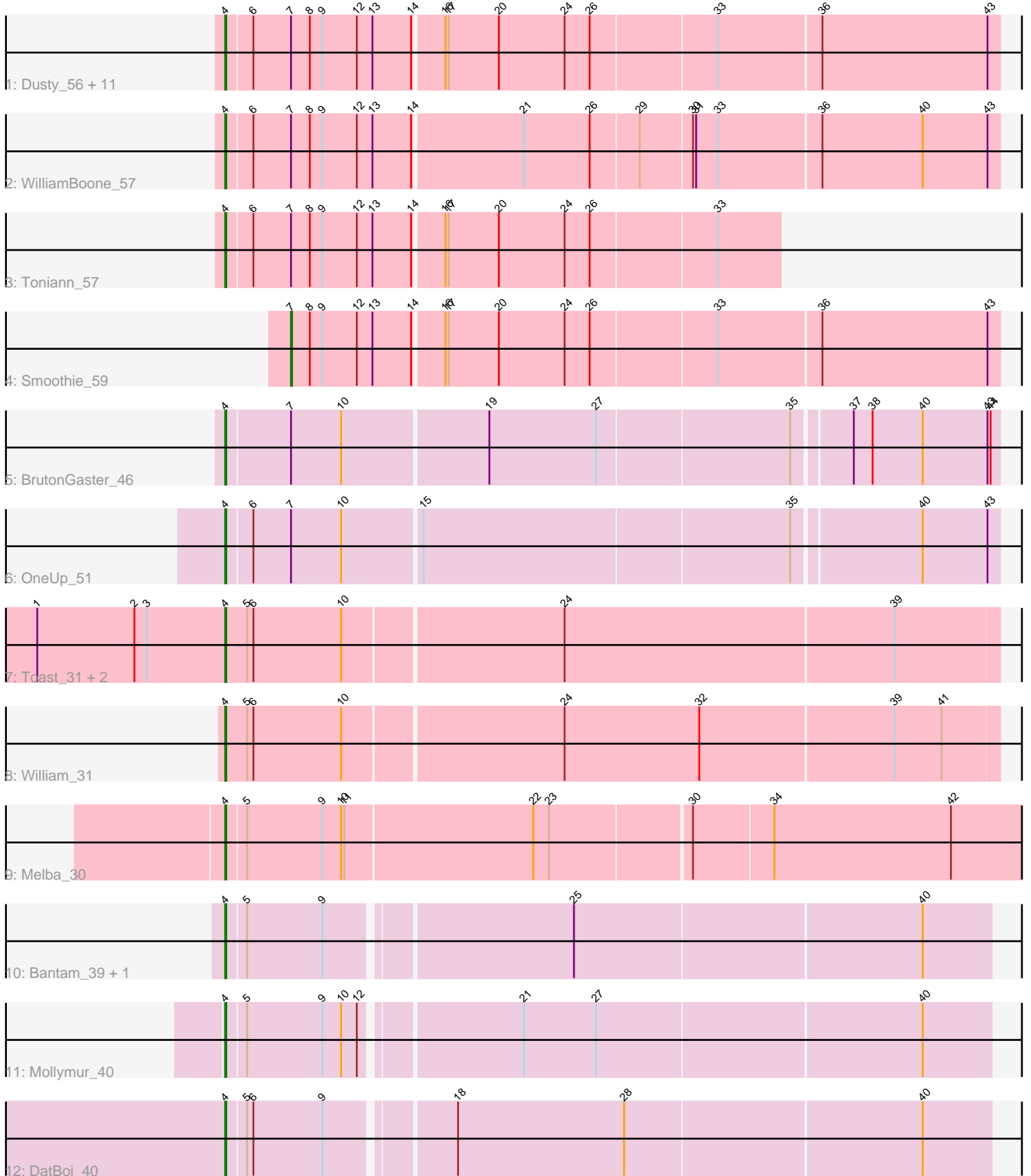


Pham 305257



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 305257 Report

This analysis was run 06/08/26 on database version 649.

Pham number 305257 has 26 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Dusty\_56, Cucurbita\_59, Geeche\_56, Aphelion\_57, Bachita\_59, Miskis\_55, Abscondus\_56, Norvs\_58, PhinkBoden\_57, Engineer\_59, Lozinak\_58, ClubL\_57
- Track 2 : WilliamBoone\_57
- Track 3 : Toniann\_57
- Track 4 : Smoothie\_59
- Track 5 : BrutonGaster\_46
- Track 6 : OneUp\_51
- Track 7 : Toast\_31, PCoral7\_31, Fairfaxidum\_30
- Track 8 : William\_31
- Track 9 : Melba\_30
- Track 10 : Bantam\_39, SpeedDemon\_410
- Track 11 : Mollymur\_40
- Track 12 : DatBoi\_40

### ***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 24 of the 25 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abscondus\_56, Aphelion\_57, Bachita\_59, Bantam\_39, BrutonGaster\_46, ClubL\_57, Cucurbita\_59, DatBoi\_40, Dusty\_56, Engineer\_59, Fairfaxidum\_30, Geeche\_56, Lozinak\_58, Melba\_30, Miskis\_55, Mollymur\_40, Norvs\_58, OneUp\_51, PCoral7\_31, PhinkBoden\_57, SpeedDemon\_410, Toast\_31, Toniann\_57, WilliamBoone\_57, William\_31,

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

- 

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

- Smoothie\_59,

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

Start 4:

- Found in 25 of 26 ( 96.2% ) of genes in pham
- Manual Annotations of this start: 24 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abscondus\_56 (CQ1), Aphelion\_57 (CQ1), Bachita\_59 (CQ1), Bantam\_39 (DL), BrutonGaster\_46 (CQ2), ClubL\_57 (CQ1), Cucurbita\_59 (CQ1), DatBoi\_40 (DL), Dusty\_56 (CQ1), Engineer\_59 (CQ1), Fairfaxidum\_30 (CV), Geeche\_56 (CQ1), Lozinak\_58 (CQ1), Melba\_30 (CV), Miskis\_55 (CQ1), Mollymur\_40 (DL), Norvs\_58 (CQ1), OneUp\_51 (CQ2), PCoral7\_31 (CV), PhinkBoden\_57 (CQ1), SpeedDemon\_410 (DL), Toast\_31 (CV), Toniann\_57 (CQ1), WilliamBoone\_57 (CQ1), William\_31 (CV),

Start 7:

- Found in 17 of 26 ( 65.4% ) of genes in pham
- Manual Annotations of this start: 1 of 25
- Called 5.9% of time when present
- Phage (with cluster) where this start called: Smoothie\_59 (CQ1),

**Summary by clusters:**

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

Info for manual annotations of cluster CQ1:

- Start number 4 was manually annotated 13 times for cluster CQ1.
- Start number 7 was manually annotated 1 time for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 4 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster CV:

- Start number 4 was manually annotated 5 times for cluster CV.

Info for manual annotations of cluster DL:

- Start number 4 was manually annotated 4 times for cluster DL.

**Gene Information:**

Gene: Abscondus\_56 Start: 36969, Stop: 37688, Start Num: 4

Candidate Starts for Abscondus\_56:

(Start: 4 @36969 has 24 MA's), (6, 36993), (Start: 7 @37029 has 1 MA's), (8, 37047), (9, 37059), (12, 37092), (13, 37107), (14, 37143), (16, 37170), (17, 37173), (20, 37221), (24, 37284), (26, 37308), (33, 37425), (36, 37521), (43, 37677),

Gene: Aphelion\_57 Start: 37238, Stop: 37957, Start Num: 4

Candidate Starts for Aphelion\_57:

(Start: 4 @37238 has 24 MA's), (6, 37262), (Start: 7 @37298 has 1 MA's), (8, 37316), (9, 37328), (12, 37361), (13, 37376), (14, 37412), (16, 37439), (17, 37442), (20, 37490), (24, 37553), (26, 37577), (33, 37694), (36, 37790), (43, 37946),

Gene: Bachita\_59 Start: 37671, Stop: 38390, Start Num: 4

Candidate Starts for Bachita\_59:

(Start: 4 @37671 has 24 MA's), (6, 37695), (Start: 7 @37731 has 1 MA's), (8, 37749), (9, 37761), (12, 37794), (13, 37809), (14, 37845), (16, 37872), (17, 37875), (20, 37923), (24, 37986), (26, 38010), (33, 38127), (36, 38223), (43, 38379),

Gene: Bantam\_39 Start: 34863, Stop: 35567, Start Num: 4

Candidate Starts for Bantam\_39:

(Start: 4 @34863 has 24 MA's), (5, 34881), (9, 34953), (25, 35175), (40, 35502),

Gene: BrutonGaster\_46 Start: 34284, Stop: 34997, Start Num: 4

Candidate Starts for BrutonGaster\_46:

(Start: 4 @34284 has 24 MA's), (Start: 7 @34344 has 1 MA's), (10, 34392), (19, 34527), (27, 34629), (35, 34809), (37, 34860), (38, 34878), (40, 34926), (43, 34986), (44, 34989),

Gene: ClubL\_57 Start: 37160, Stop: 37879, Start Num: 4

Candidate Starts for ClubL\_57:

(Start: 4 @37160 has 24 MA's), (6, 37184), (Start: 7 @37220 has 1 MA's), (8, 37238), (9, 37250), (12, 37283), (13, 37298), (14, 37334), (16, 37361), (17, 37364), (20, 37412), (24, 37475), (26, 37499), (33, 37616), (36, 37712), (43, 37868),

Gene: Cucurbita\_59 Start: 38530, Stop: 39249, Start Num: 4

Candidate Starts for Cucurbita\_59:

(Start: 4 @38530 has 24 MA's), (6, 38554), (Start: 7 @38590 has 1 MA's), (8, 38608), (9, 38620), (12, 38653), (13, 38668), (14, 38704), (16, 38731), (17, 38734), (20, 38782), (24, 38845), (26, 38869), (33, 38986), (36, 39082), (43, 39238),

Gene: DatBoi\_40 Start: 35520, Stop: 36224, Start Num: 4

Candidate Starts for DatBoi\_40:

(Start: 4 @35520 has 24 MA's), (5, 35538), (6, 35544), (9, 35610), (18, 35721), (28, 35880), (40, 36159),

Gene: Dusty\_56 Start: 36969, Stop: 37688, Start Num: 4

Candidate Starts for Dusty\_56:

(Start: 4 @36969 has 24 MA's), (6, 36993), (Start: 7 @37029 has 1 MA's), (8, 37047), (9, 37059), (12, 37092), (13, 37107), (14, 37143), (16, 37170), (17, 37173), (20, 37221), (24, 37284), (26, 37308), (33, 37425), (36, 37521), (43, 37677),

Gene: Engineer\_59 Start: 37644, Stop: 38363, Start Num: 4

Candidate Starts for Engineer\_59:

(Start: 4 @37644 has 24 MA's), (6, 37668), (Start: 7 @37704 has 1 MA's), (8, 37722), (9, 37734), (12, 37767), (13, 37782), (14, 37818), (16, 37845), (17, 37848), (20, 37896), (24, 37959), (26, 37983), (33, 38100), (36, 38196), (43, 38352),

Gene: Fairfaxidum\_30 Start: 24917, Stop: 25642, Start Num: 4

Candidate Starts for Fairfaxidum\_30:

(1, 24737), (2, 24830), (3, 24842), (Start: 4 @24917 has 24 MA's), (5, 24938), (6, 24944), (10, 25028), (24, 25232), (39, 25544),

Gene: Geeche\_56 Start: 37060, Stop: 37779, Start Num: 4

Candidate Starts for Geeche\_56:

(Start: 4 @37060 has 24 MA's), (6, 37084), (Start: 7 @37120 has 1 MA's), (8, 37138), (9, 37150), (12, 37183), (13, 37198), (14, 37234), (16, 37261), (17, 37264), (20, 37312), (24, 37375), (26, 37399), (33, 37516), (36, 37612), (43, 37768),

Gene: Lozinak\_58 Start: 37699, Stop: 38418, Start Num: 4

Candidate Starts for Lozinak\_58:

(Start: 4 @37699 has 24 MA's), (6, 37723), (Start: 7 @37759 has 1 MA's), (8, 37777), (9, 37789), (12, 37822), (13, 37837), (14, 37873), (16, 37900), (17, 37903), (20, 37951), (24, 38014), (26, 38038), (33, 38155), (36, 38251), (43, 38407),

Gene: Melba\_30 Start: 25225, Stop: 25989, Start Num: 4

Candidate Starts for Melba\_30:

(Start: 4 @25225 has 24 MA's), (5, 25243), (9, 25315), (10, 25333), (11, 25336), (22, 25513), (23, 25528), (30, 25657), (34, 25732), (42, 25900),

Gene: Miskis\_55 Start: 37004, Stop: 37723, Start Num: 4

Candidate Starts for Miskis\_55:

(Start: 4 @37004 has 24 MA's), (6, 37028), (Start: 7 @37064 has 1 MA's), (8, 37082), (9, 37094), (12, 37127), (13, 37142), (14, 37178), (16, 37205), (17, 37208), (20, 37256), (24, 37319), (26, 37343), (33, 37460), (36, 37556), (43, 37712),

Gene: Mollymur\_40 Start: 36053, Stop: 36757, Start Num: 4

Candidate Starts for Mollymur\_40:

(Start: 4 @36053 has 24 MA's), (5, 36071), (9, 36143), (10, 36161), (12, 36176), (21, 36317), (27, 36386), (40, 36692),

Gene: Norvs\_58 Start: 37243, Stop: 37962, Start Num: 4

Candidate Starts for Norvs\_58:

(Start: 4 @37243 has 24 MA's), (6, 37267), (Start: 7 @37303 has 1 MA's), (8, 37321), (9, 37333), (12, 37366), (13, 37381), (14, 37417), (16, 37444), (17, 37447), (20, 37495), (24, 37558), (26, 37582), (33, 37699), (36, 37795), (43, 37951),

Gene: OneUp\_51 Start: 34604, Stop: 35317, Start Num: 4

Candidate Starts for OneUp\_51:

(Start: 4 @34604 has 24 MA's), (6, 34628), (Start: 7 @34664 has 1 MA's), (10, 34712), (15, 34784), (35, 35129), (40, 35246), (43, 35306),

Gene: PCoral7\_31 Start: 24834, Stop: 25559, Start Num: 4

Candidate Starts for PCoral7\_31:

(1, 24654), (2, 24747), (3, 24759), (Start: 4 @24834 has 24 MA's), (5, 24855), (6, 24861), (10, 24945), (24, 25149), (39, 25461),

Gene: PhinkBoden\_57 Start: 37624, Stop: 38343, Start Num: 4

Candidate Starts for PhinkBoden\_57:

(Start: 4 @37624 has 24 MA's), (6, 37648), (Start: 7 @37684 has 1 MA's), (8, 37702), (9, 37714), (12, 37747), (13, 37762), (14, 37798), (16, 37825), (17, 37828), (20, 37876), (24, 37939), (26, 37963), (33, 38080), (36, 38176), (43, 38332),

Gene: Smoothie\_59 Start: 37759, Stop: 38418, Start Num: 7

Candidate Starts for Smoothie\_59:

(Start: 7 @37759 has 1 MA's), (8, 37777), (9, 37789), (12, 37822), (13, 37837), (14, 37873), (16, 37900), (17, 37903), (20, 37951), (24, 38014), (26, 38038), (33, 38155), (36, 38251), (43, 38407),

Gene: SpeedDemon\_410 Start: 36640, Stop: 37344, Start Num: 4

Candidate Starts for SpeedDemon\_410:

(Start: 4 @36640 has 24 MA's), (5, 36658), (9, 36730), (25, 36952), (40, 37279),

Gene: Toast\_31 Start: 24834, Stop: 25559, Start Num: 4

Candidate Starts for Toast\_31:

(1, 24654), (2, 24747), (3, 24759), (Start: 4 @24834 has 24 MA's), (5, 24855), (6, 24861), (10, 24945), (24, 25149), (39, 25461),

Gene: Toniann\_57 Start: 37186, Stop: 37701, Start Num: 4

Candidate Starts for Toniann\_57:

(Start: 4 @37186 has 24 MA's), (6, 37210), (Start: 7 @37246 has 1 MA's), (8, 37264), (9, 37276), (12, 37309), (13, 37324), (14, 37360), (16, 37387), (17, 37390), (20, 37438), (24, 37501), (26, 37525), (33, 37642),

Gene: William\_31 Start: 24660, Stop: 25385, Start Num: 4

Candidate Starts for William\_31:

(Start: 4 @24660 has 24 MA's), (5, 24681), (6, 24687), (10, 24771), (24, 24975), (32, 25104), (39, 25287), (41, 25332),

Gene: WilliamBoone\_57 Start: 36532, Stop: 37251, Start Num: 4

Candidate Starts for WilliamBoone\_57:

(Start: 4 @36532 has 24 MA's), (6, 36556), (Start: 7 @36592 has 1 MA's), (8, 36610), (9, 36622), (12, 36655), (13, 36670), (14, 36706), (21, 36808), (26, 36871), (29, 36916), (30, 36964), (31, 36967), (33, 36988), (36, 37084), (40, 37180), (43, 37240),