



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 208971 Report

This analysis was run 02/22/25 on database version 588.

Pham number 208971 has 21 members, 5 are drafts.

Phages represented in each track:

- Track 1 : ClubL\_105
- Track 2 : Culver\_106, Engineer\_105, Smoothie\_105, Cucurbita\_105, PhinkBoden\_103, Dusty\_101, Bachita\_106, Lozinak\_104, Toniann\_106
- Track 3 : Abscondus\_103, Aphelion\_105, Norvs\_106
- Track 4 : Miskis\_102
- Track 5 : WilliamBoone\_106
- Track 6 : Geeche\_103
- Track 7 : BrutonGaster\_85
- Track 8 : OneUp\_91
- Track 9 : Cardigan\_120
- Track 10 : JonJames\_119
- Track 11 : Yvonnetastic\_116

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

The start number called the most often in the published annotations is 7, it was called in 13 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abscondus\_103, Aphelion\_105, Bachita\_106, BrutonGaster\_85, Cardigan\_120, ClubL\_105, Cucurbita\_105, Culver\_106, Dusty\_101, Engineer\_105, Geeche\_103, Lozinak\_104, Norvs\_106, OneUp\_91, PhinkBoden\_103, Smoothie\_105, Toniann\_106,

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

- Miskis\_102,

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

- JonJames\_119, WilliamBoone\_106, Yvonnetastic\_116,

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

Start 6:

- Found in 2 of 21 ( 9.5% ) of genes in pham

- Manual Annotations of this start: 2 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JonJames\_119 (DD), Yvonnetastic\_116 (DD),

#### Start 7:

- Found in 18 of 21 ( 85.7% ) of genes in pham
- Manual Annotations of this start: 13 of 16
- Called 94.4% of time when present
- Phage (with cluster) where this start called: Abscondus\_103 (CQ1), Aphelion\_105 (CQ1), Bachita\_106 (CQ1), BrutonGaster\_85 (CQ2), Cardigan\_120 (DD), ClubL\_105 (CQ1), Cucurbita\_105 (CQ1), Culver\_106 (CQ1), Dusty\_101 (CQ1), Engineer\_105 (CQ1), Geeche\_103 (CQ1), Lozinak\_104 (CQ1), Norvs\_106 (CQ1), OneUp\_91 (CQ2), PhinkBoden\_103 (CQ1), Smoothie\_105 (CQ1), Toniann\_106 (CQ1),

#### Start 8:

- Found in 1 of 21 ( 4.8% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: WilliamBoone\_106 (CQ1),

#### Start 13:

- Found in 16 of 21 ( 76.2% ) of genes in pham
- No Manual Annotations of this start.
- Called 6.2% of time when present
- Phage (with cluster) where this start called: Miskis\_102 (CQ1),

### **Summary by clusters:**

There are 3 clusters represented in this pham: CQ2, CQ1, DD,

Info for manual annotations of cluster CQ1:

- Start number 7 was manually annotated 11 times for cluster CQ1.
- Start number 8 was manually annotated 1 time for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 7 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster DD:

- Start number 6 was manually annotated 2 times for cluster DD.

### **Gene Information:**

Gene: Abscondus\_103 Start: 62014, Stop: 62550, Start Num: 7

Candidate Starts for Abscondus\_103:

(Start: 7 @62014 has 13 MA's), (9, 62047), (11, 62053), (13, 62071), (19, 62143), (21, 62164), (23, 62224), (24, 62227), (27, 62266), (28, 62344), (29, 62353), (34, 62503), (35, 62530), (36, 62539),

Gene: Aphelion\_105 Start: 63567, Stop: 64103, Start Num: 7

Candidate Starts for Aphelion\_105:

(Start: 7 @63567 has 13 MA's), (9, 63600), (11, 63606), (13, 63624), (19, 63696), (21, 63717), (23, 63777), (24, 63780), (27, 63819), (28, 63897), (29, 63906), (34, 64056), (35, 64083), (36, 64092),

Gene: Bachita\_106 Start: 63225, Stop: 63761, Start Num: 7

Candidate Starts for Bachita\_106:

(Start: 7 @63225 has 13 MA's), (9, 63258), (13, 63282), (19, 63354), (21, 63375), (23, 63435), (24, 63438), (26, 63471), (27, 63477), (28, 63555), (29, 63564), (34, 63714), (36, 63750),

Gene: BrutonGaster\_85 Start: 57332, Stop: 57871, Start Num: 7

Candidate Starts for BrutonGaster\_85:

(Start: 7 @57332 has 13 MA's), (12, 57374), (14, 57404), (16, 57410), (17, 57431), (24, 57545), (25, 57560), (28, 57662), (31, 57764), (32, 57785), (33, 57809), (34, 57821), (36, 57860),

Gene: Cardigan\_120 Start: 68409, Stop: 68963, Start Num: 7

Candidate Starts for Cardigan\_120:

(Start: 7 @68409 has 13 MA's), (10, 68445), (11, 68448), (15, 68493), (20, 68556), (26, 68664), (30, 68814), (34, 68910),

Gene: ClubL\_105 Start: 62155, Stop: 62691, Start Num: 7

Candidate Starts for ClubL\_105:

(Start: 7 @62155 has 13 MA's), (9, 62188), (13, 62212), (19, 62284), (21, 62305), (23, 62365), (24, 62368), (27, 62407), (28, 62485), (29, 62494), (34, 62644), (35, 62671), (36, 62680),

Gene: Cucurbita\_105 Start: 63732, Stop: 64268, Start Num: 7

Candidate Starts for Cucurbita\_105:

(Start: 7 @63732 has 13 MA's), (9, 63765), (13, 63789), (19, 63861), (21, 63882), (23, 63942), (24, 63945), (26, 63978), (27, 63984), (28, 64062), (29, 64071), (34, 64221), (36, 64257),

Gene: Culver\_106 Start: 62054, Stop: 62590, Start Num: 7

Candidate Starts for Culver\_106:

(Start: 7 @62054 has 13 MA's), (9, 62087), (13, 62111), (19, 62183), (21, 62204), (23, 62264), (24, 62267), (26, 62300), (27, 62306), (28, 62384), (29, 62393), (34, 62543), (36, 62579),

Gene: Dusty\_101 Start: 62073, Stop: 62609, Start Num: 7

Candidate Starts for Dusty\_101:

(Start: 7 @62073 has 13 MA's), (9, 62106), (13, 62130), (19, 62202), (21, 62223), (23, 62283), (24, 62286), (26, 62319), (27, 62325), (28, 62403), (29, 62412), (34, 62562), (36, 62598),

Gene: Engineer\_105 Start: 63198, Stop: 63734, Start Num: 7

Candidate Starts for Engineer\_105:

(Start: 7 @63198 has 13 MA's), (9, 63231), (13, 63255), (19, 63327), (21, 63348), (23, 63408), (24, 63411), (26, 63444), (27, 63450), (28, 63528), (29, 63537), (34, 63687), (36, 63723),

Gene: Geeche\_103 Start: 62296, Stop: 62832, Start Num: 7

Candidate Starts for Geeche\_103:

(Start: 7 @62296 has 13 MA's), (9, 62329), (13, 62353), (19, 62425), (21, 62446), (23, 62506), (24, 62509), (26, 62542), (27, 62548), (28, 62626), (29, 62635), (34, 62785), (36, 62821),

Gene: JonJames\_119 Start: 69097, Stop: 69654, Start Num: 6

Candidate Starts for JonJames\_119:

(Start: 6 @69097 has 2 MA's), (15, 69184), (18, 69226), (20, 69247), (26, 69355), (27, 69361), (30, 69505), (34, 69601),

Gene: Lozinak\_104 Start: 63036, Stop: 63572, Start Num: 7

Candidate Starts for Lozinak\_104:

(Start: 7 @63036 has 13 MA's), (9, 63069), (13, 63093), (19, 63165), (21, 63186), (23, 63246), (24, 63249), (26, 63282), (27, 63288), (28, 63366), (29, 63375), (34, 63525), (36, 63561),

Gene: Miskis\_102 Start: 61793, Stop: 62272, Start Num: 13

Candidate Starts for Miskis\_102:

(Start: 7 @61736 has 13 MA's), (9, 61769), (13, 61793), (19, 61865), (21, 61886), (23, 61946), (24, 61949), (27, 61988), (28, 62066), (34, 62225), (36, 62261),

Gene: Norvs\_106 Start: 63063, Stop: 63599, Start Num: 7

Candidate Starts for Norvs\_106:

(Start: 7 @63063 has 13 MA's), (9, 63096), (11, 63102), (13, 63120), (19, 63192), (21, 63213), (23, 63273), (24, 63276), (27, 63315), (28, 63393), (29, 63402), (34, 63552), (35, 63579), (36, 63588),

Gene: OneUp\_91 Start: 59239, Stop: 59778, Start Num: 7

Candidate Starts for OneUp\_91:

(Start: 7 @59239 has 13 MA's), (12, 59281), (13, 59296), (22, 59416), (24, 59452), (28, 59569), (31, 59671), (33, 59716), (34, 59728), (36, 59767),

Gene: PhinkBoden\_103 Start: 62826, Stop: 63362, Start Num: 7

Candidate Starts for PhinkBoden\_103:

(Start: 7 @62826 has 13 MA's), (9, 62859), (13, 62883), (19, 62955), (21, 62976), (23, 63036), (24, 63039), (26, 63072), (27, 63078), (28, 63156), (29, 63165), (34, 63315), (36, 63351),

Gene: Smoothie\_105 Start: 63036, Stop: 63572, Start Num: 7

Candidate Starts for Smoothie\_105:

(Start: 7 @63036 has 13 MA's), (9, 63069), (13, 63093), (19, 63165), (21, 63186), (23, 63246), (24, 63249), (26, 63282), (27, 63288), (28, 63366), (29, 63375), (34, 63525), (36, 63561),

Gene: Toniann\_106 Start: 63006, Stop: 63542, Start Num: 7

Candidate Starts for Toniann\_106:

(Start: 7 @63006 has 13 MA's), (9, 63039), (13, 63063), (19, 63135), (21, 63156), (23, 63216), (24, 63219), (26, 63252), (27, 63258), (28, 63336), (29, 63345), (34, 63495), (36, 63531),

Gene: WilliamBoone\_106 Start: 61643, Stop: 62158, Start Num: 8

Candidate Starts for WilliamBoone\_106:

(5, 61622), (Start: 8 @61643 has 1 MA's), (14, 61694), (16, 61700), (21, 61772), (24, 61835), (27, 61874), (28, 61952), (29, 61961), (36, 62147),

Gene: Yvonnetastic\_116 Start: 65875, Stop: 66432, Start Num: 6

Candidate Starts for Yvonnetastic\_116:

(1, 65575), (2, 65578), (3, 65626), (4, 65764), (Start: 6 @65875 has 2 MA's), (15, 65962), (18, 66004), (20, 66025), (26, 66133), (27, 66139), (30, 66283), (34, 66379),