



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 168613 Report

This analysis was run 07/09/24 on database version 566.

Pham number 168613 has 16 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Nedarya\_89
- Track 2 : Abscondus\_174
- Track 3 : Dusty\_170, Engineer\_178
- Track 4 : Bachita\_179
- Track 5 : Lozinak\_177, PhinkBoden\_174, Aphelion\_175, Norvs\_174, Toniann\_177,
- Miskis\_177, Smoothie\_178, Cucurbita\_176, ClubL\_177
- Track 6 : WilliamBoone\_182
- Track 7 : Culver\_179

## 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 12 of the 13 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Abscondus\_174, Aphelion\_175, ClubL\_177, Cucurbita\_176, Culver\_179, Dusty\_170, Engineer\_178, Lozinak\_177, Miskis\_177, Nedarya\_89, Norvs\_174, PhinkBoden\_174, Smoothie\_178, Toniann\_177, WilliamBoone\_182,

Genes that have the "Most Annotated" start but do not call it: • Bachita\_179,

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

### Summary by start number:

Start 6:

- Found in 13 of 16 (81.2%) of genes in pham
- Manual Annotations of this start: 1 of 13
- Called 7.7% of time when present
- Phage (with cluster) where this start called: Bachita\_179 (CQ1),

Start 7:

- Found in 16 of 16 (100.0%) of genes in pham
- Manual Annotations of this start: 12 of 13
- Called 93.8% of time when present

• Phage (with cluster) where this start called: Abscondus\_174 (CQ), Aphelion\_175 (CQ1), ClubL\_177 (CQ1), Cucurbita\_176 (CQ1), Culver\_179 (CQ1), Dusty\_170 (CQ), Engineer\_178 (CQ1), Lozinak\_177 (CQ1), Miskis\_177 (CQ), Nedarya\_89 (A15), Norvs\_174 (CQ), PhinkBoden\_174 (CQ1), Smoothie\_178 (CQ1), Toniann\_177 (CQ1), WilliamBoone\_182 (CQ1),

### Summary by clusters:

There are 3 clusters represented in this pham: A15, CQ1, CQ,

Info for manual annotations of cluster A15:Start number 7 was manually annotated 1 time for cluster A15.

Info for manual annotations of cluster CQ: •Start number 7 was manually annotated 1 time for cluster CQ.

Info for manual annotations of cluster CQ1:

•Start number 6 was manually annotated 1 time for cluster CQ1.

•Start number 7 was manually annotated 10 times for cluster CQ1.

#### Gene Information:

Gene: Abscondus\_174 Start: 87999, Stop: 87820, Start Num: 7 Candidate Starts for Abscondus\_174: (1, 88182), (Start: 6 @88014 has 1 MA's), (Start: 7 @87999 has 12 MA's), (9, 87984), (17, 87927), (18, 87852),

Gene: Aphelion\_175 Start: 88897, Stop: 88718, Start Num: 7 Candidate Starts for Aphelion\_175: (Start: 6 @88912 has 1 MA's), (Start: 7 @88897 has 12 MA's), (9, 88882), (10, 88867), (17, 88825), (18, 88750),

Gene: Bachita\_179 Start: 88991, Stop: 88794, Start Num: 6 Candidate Starts for Bachita\_179: (2, 89093), (3, 89081), (4, 89063), (Start: 6 @88991 has 1 MA's), (Start: 7 @88973 has 12 MA's), (9, 88958), (11, 88937), (17, 88901), (18, 88826),

Gene: ClubL\_177 Start: 88218, Stop: 88039, Start Num: 7 Candidate Starts for ClubL\_177: (Start: 6 @88233 has 1 MA's), (Start: 7 @88218 has 12 MA's), (9, 88203), (10, 88188), (17, 88146), (18, 88071),

Gene: Cucurbita\_176 Start: 89279, Stop: 89100, Start Num: 7 Candidate Starts for Cucurbita\_176: (Start: 6 @89294 has 1 MA's), (Start: 7 @89279 has 12 MA's), (9, 89264), (10, 89249), (17, 89207), (18, 89132),

Gene: Culver\_179 Start: 87812, Stop: 87633, Start Num: 7

Candidate Starts for Culver\_179: (5, 87830), (Start: 7 @87812 has 12 MA's), (9, 87797), (11, 87776), (15, 87752), (17, 87740), (18, 87665),

Gene: Dusty\_170 Start: 87623, Stop: 87444, Start Num: 7 Candidate Starts for Dusty\_170: (Start: 6 @87638 has 1 MA's), (Start: 7 @87623 has 12 MA's), (9, 87608), (11, 87587), (17, 87551), (18, 87476),

Gene: Engineer\_178 Start: 88974, Stop: 88795, Start Num: 7 Candidate Starts for Engineer\_178: (Start: 6 @88989 has 1 MA's), (Start: 7 @88974 has 12 MA's), (9, 88959), (11, 88938), (17, 88902), (18, 88827),

Gene: Lozinak\_177 Start: 88822, Stop: 88643, Start Num: 7 Candidate Starts for Lozinak\_177: (Start: 6 @88837 has 1 MA's), (Start: 7 @88822 has 12 MA's), (9, 88807), (10, 88792), (17, 88750), (18, 88675),

Gene: Miskis\_177 Start: 87663, Stop: 87484, Start Num: 7 Candidate Starts for Miskis\_177: (Start: 6 @87678 has 1 MA's), (Start: 7 @87663 has 12 MA's), (9, 87648), (10, 87633), (17, 87591), (18, 87516),

Gene: Nedarya\_89 Start: 48485, Stop: 48312, Start Num: 7 Candidate Starts for Nedarya\_89: (Start: 7 @48485 has 12 MA's), (10, 48455), (11, 48449), (12, 48437), (13, 48434), (14, 48431), (16, 48422), (18, 48344),

Gene: Norvs\_174 Start: 87998, Stop: 87819, Start Num: 7 Candidate Starts for Norvs\_174: (Start: 6 @88013 has 1 MA's), (Start: 7 @87998 has 12 MA's), (9, 87983), (10, 87968), (17, 87926), (18, 87851),

Gene: PhinkBoden\_174 Start: 88396, Stop: 88217, Start Num: 7 Candidate Starts for PhinkBoden\_174: (Start: 6 @88411 has 1 MA's), (Start: 7 @88396 has 12 MA's), (9, 88381), (10, 88366), (17, 88324), (18, 88249),

Gene: Smoothie\_178 Start: 88694, Stop: 88515, Start Num: 7 Candidate Starts for Smoothie\_178: (Start: 6 @88709 has 1 MA's), (Start: 7 @88694 has 12 MA's), (9, 88679), (10, 88664), (17, 88622), (18, 88547),

Gene: Toniann\_177 Start: 88139, Stop: 87960, Start Num: 7 Candidate Starts for Toniann\_177: (Start: 6 @88154 has 1 MA's), (Start: 7 @88139 has 12 MA's), (9, 88124), (10, 88109), (17, 88067), (18, 87992),

Gene: WilliamBoone\_182 Start: 87648, Stop: 87454, Start Num: 7 Candidate Starts for WilliamBoone\_182: (5, 87666), (Start: 7 @87648 has 12 MA's), (8, 87633), (9, 87618), (11, 87597), (15, 87573), (17, 87561), (18, 87486),