

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 5683 Report

This analysis was run 04/05/24 on database version 557.

Pham number 5683 has 13 members, 2 are drafts.

Phages represented in each track:

• Track 1 : Smoothie\_88, Miskis\_83, Aphelion\_86, Norvs\_87, Toniann\_87, Abscondus\_86, ClubL\_86

Track 2 : Culver\_88, WilliamBoone\_86

Track 3: PhinkBoden\_86, Cucurbita\_88, Bachita\_88, Engineer\_88

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

The start number called the most often in the published annotations is 9, it was called in 11 of the 11 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Abscondus\_86, Aphelion\_86, Bachita\_88, ClubL\_86, Cucurbita\_88, Culver\_88, Engineer\_88, Miskis\_83, Norvs\_87, PhinkBoden\_86, Smoothie\_88, Toniann\_87, WilliamBoone\_86,

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

•

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

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# Summary by start number:

#### Start 9:

- Found in 13 of 13 (100.0%) of genes in pham
- Manual Annotations of this start: 11 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abscondus\_86 (CQ), Aphelion\_86 (CQ1), Bachita\_88 (CQ1), ClubL\_86 (CQ1), Cucurbita\_88 (CQ1), Culver\_88 (CQ1), Engineer\_88 (CQ1), Miskis\_83 (CQ), Norvs\_87 (CQ), PhinkBoden\_86 (CQ1), Smoothie\_88 (CQ1), Toniann\_87 (CQ1), WilliamBoone\_86 (CQ1),

### Summary by clusters:

There are 2 clusters represented in this pham: CQ1, CQ,

Info for manual annotations of cluster CQ:

Start number 9 was manually annotated 1 time for cluster CQ.

Info for manual annotations of cluster CQ1:

•Start number 9 was manually annotated 10 times for cluster CQ1.

### Gene Information:

Gene: Abscondus 86 Start: 53433, Stop: 53597, Start Num: 9

Candidate Starts for Abscondus\_86:

(2, 53265), (6, 53355), (7, 53364), (8, 53379), (Start: 9 @53433 has 11 MA's),

Gene: Aphelion 86 Start: 54055, Stop: 54219, Start Num: 9

Candidate Starts for Aphelion 86:

(2, 53887), (6, 53977), (7, 53986), (8, 54001), (Start: 9 @54055 has 11 MA's),

Gene: Bachita\_88 Start: 54481, Stop: 54645, Start Num: 9

Candidate Starts for Bachita 88:

(7, 54412), (8, 54427), (Start: 9 @54481 has 11 MA's),

Gene: ClubL\_86 Start: 53168, Stop: 53332, Start Num: 9

Candidate Starts for ClubL 86:

(2, 53000), (6, 53090), (7, 53099), (8, 53114), (Start: 9 @53168 has 11 MA's),

Gene: Cucurbita\_88 Start: 54988, Stop: 55152, Start Num: 9

Candidate Starts for Cucurbita 88:

(7, 54919), (8, 54934), (Start: 9 @54988 has 11 MA's),

Gene: Culver 88 Start: 53092, Stop: 53256, Start Num: 9

Candidate Starts for Culver 88:

(1, 52876), (3, 52930), (4, 52957), (5, 52981), (6, 53014), (7, 53023), (8, 53038), (Start: 9 @53092 has 11 MA's), (10, 53233),

Gene: Engineer\_88 Start: 54454, Stop: 54618, Start Num: 9

Candidate Starts for Engineer\_88:

(7, 54385), (8, 54400), (Start: 9 @54454 has 11 MA's),

Gene: Miskis\_83 Start: 52196, Stop: 52360, Start Num: 9

Candidate Starts for Miskis 83:

(2, 52028), (6, 52118), (7, 52127), (8, 52142), (Start: 9 @52196 has 11 MA's),

Gene: Norvs\_87 Start: 53700, Stop: 53864, Start Num: 9

Candidate Starts for Norvs\_87:

(2, 53532), (6, 53622), (7, 53631), (8, 53646), (Start: 9 @53700 has 11 MA's),

Gene: PhinkBoden 86 Start: 54082, Stop: 54246, Start Num: 9

Candidate Starts for PhinkBoden 86:

(7, 54013), (8, 54028), (Start: 9 @54082 has 11 MA's),

Gene: Smoothie\_88 Start: 54291, Stop: 54455, Start Num: 9

Candidate Starts for Smoothie\_88:

(2, 54123), (6, 54213), (7, 54222), (8, 54237), (Start: 9 @54291 has 11 MA's),

Gene: Toniann\_87 Start: 53643, Stop: 53807, Start Num: 9

Candidate Starts for Toniann\_87:

(2, 53475), (6, 53565), (7, 53574), (8, 53589), (Start: 9 @53643 has 11 MA's),

Gene: WilliamBoone\_86 Start: 52395, Stop: 52559, Start Num: 9

Candidate Starts for WilliamBoone\_86:

 $(1,\,52179),\,(3,\,52233),\,(4,\,52260),\,(5,\,52284),\,(6,\,52317),\,(7,\,52326),\,(8,\,52341),\,(Start:\,9\,\,@52395\,\,has)$ 

11 MA's), (10, 52536),