

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 4586 Report

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

Pham number 4586 has 16 members, 2 are drafts.

Phages represented in each track:

• Track 1 : Abscondus 66

• Track 2: Miskis 68

• Track 3: PhinkBoden\_66, Bachita\_68, Aphelion\_66, Norvs\_67, Engineer\_68,

Toniann\_67, Cucurbita\_68

Track 4 : Culver\_68

Track 5 : Smoothie\_68, Lozinak\_67, ClubL\_67

Track 6 : WilliamBoone\_66Track 7 : BrutonGaster 55

Track 8 : OneUp\_59

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

The start number called the most often in the published annotations is 2, it was called in 12 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Abscondus\_66, Aphelion\_66, Bachita\_68, BrutonGaster\_55, ClubL\_67, Cucurbita\_68, Engineer\_68, Lozinak\_67, Norvs\_67, OneUp\_59, PhinkBoden\_66, Smoothie\_68, Toniann\_67,

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

Culver\_68, Miskis\_68, WilliamBoone\_66,

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

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### Summary by start number:

#### Start 2:

- Found in 16 of 16 (100.0%) of genes in pham
- Manual Annotations of this start: 12 of 14
- Called 81.2% of time when present
- Phage (with cluster) where this start called: Abscondus\_66 (CQ), Aphelion\_66 (CQ1), Bachita\_68 (CQ1), BrutonGaster\_55 (CQ2), ClubL\_67 (CQ1), Cucurbita\_68

(CQ1), Engineer\_68 (CQ1), Lozinak\_67 (CQ1), Norvs\_67 (CQ), OneUp\_59 (CQ2), PhinkBoden\_66 (CQ1), Smoothie\_68 (CQ1), Toniann\_67 (CQ1),

#### Start 3:

- Found in 2 of 16 (12.5%) of genes in pham
- Manual Annotations of this start: 2 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Culver\_68 (CQ1), WilliamBoone\_66 (CQ1),

#### Start 6:

- Found in 14 of 16 (87.5%) of genes in pham
- No Manual Annotations of this start.
- Called 7.1% of time when present
- Phage (with cluster) where this start called: Miskis\_68 (CQ),

### Summary by clusters:

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

Info for manual annotations of cluster CQ:

•Start number 2 was manually annotated 1 time for cluster CQ.

Info for manual annotations of cluster CQ1:

- •Start number 2 was manually annotated 9 times for cluster CQ1.
- •Start number 3 was manually annotated 2 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

•Start number 2 was manually annotated 2 times for cluster CQ2.

#### Gene Information:

Gene: Abscondus 66 Start: 43521, Stop: 43757, Start Num: 2

Candidate Starts for Abscondus\_66:

(Start: 2 @43521 has 12 MA's), (5, 43542), (6, 43548),

Gene: Aphelion 66 Start: 43789, Stop: 44025, Start Num: 2

Candidate Starts for Aphelion 66:

(Start: 2 @43789 has 12 MA's), (5, 43810), (6, 43816),

Gene: Bachita 68 Start: 44223, Stop: 44459, Start Num: 2

Candidate Starts for Bachita\_68:

(Start: 2 @44223 has 12 MA's), (5, 44244), (6, 44250),

Gene: BrutonGaster\_55 Start: 41500, Stop: 41748, Start Num: 2

Candidate Starts for BrutonGaster 55:

(1, 41311), (Start: 2 @41500 has 12 MA's), (4, 41527), (7, 41548), (11, 41644), (13, 41692), (14, 41740).

Gene: ClubL 67 Start: 43713, Stop: 43949, Start Num: 2

Candidate Starts for ClubL\_67:

(Start: 2 @ 43713 has 12 MA's), (5, 43734), (6, 43740), (8, 43761),

Gene: Cucurbita\_68 Start: 45081, Stop: 45317, Start Num: 2

Candidate Starts for Cucurbita\_68:

(Start: 2 @ 45081 has 12 MA's), (5, 45102), (6, 45108),

Gene: Culver\_68 Start: 43395, Stop: 43631, Start Num: 3

Candidate Starts for Culver 68:

(Start: 2 @43392 has 12 MA's), (Start: 3 @43395 has 2 MA's), (5, 43416), (6, 43422), (9, 43473), (10, 43494),

Gene: Engineer\_68 Start: 44196, Stop: 44432, Start Num: 2

Candidate Starts for Engineer\_68:

(Start: 2 @44196 has 12 MA's), (5, 44217), (6, 44223),

Gene: Lozinak\_67 Start: 44022, Stop: 44258, Start Num: 2

Candidate Starts for Lozinak\_67:

(Start: 2 @44022 has 12 MA's), (5, 44043), (6, 44049), (8, 44070),

Gene: Miskis\_68 Start: 43582, Stop: 43791, Start Num: 6

Candidate Starts for Miskis 68:

(Start: 2 @43555 has 12 MA's), (5, 43576), (6, 43582),

Gene: Norvs\_67 Start: 43794, Stop: 44030, Start Num: 2

Candidate Starts for Norvs\_67:

(Start: 2 @43794 has 12 MA's), (5, 43815), (6, 43821),

Gene: OneUp 59 Start: 43200, Stop: 43445, Start Num: 2

Candidate Starts for OneUp\_59:

(1, 43011), (Start: 2 @43200 has 12 MA's), (12, 43368), (13, 43389), (14, 43437),

Gene: PhinkBoden\_66 Start: 44175, Stop: 44411, Start Num: 2

Candidate Starts for PhinkBoden 66:

(Start: 2 @44175 has 12 MA's), (5, 44196), (6, 44202),

Gene: Smoothie\_68 Start: 44022, Stop: 44258, Start Num: 2

Candidate Starts for Smoothie\_68:

(Start: 2 @ 44022 has 12 MA's), (5, 44043), (6, 44049), (8, 44070),

Gene: Toniann\_67 Start: 43737, Stop: 43973, Start Num: 2

Candidate Starts for Toniann 67:

(Start: 2 @43737 has 12 MA's), (5, 43758), (6, 43764),

Gene: WilliamBoone\_66 Start: 42692, Stop: 42928, Start Num: 3

Candidate Starts for WilliamBoone\_66:

(Start: 2 @ 42689 has 12 MA's), (Start: 3 @ 42692 has 2 MA's), (5, 42713), (6, 42719), (10, 42791),