

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 04/28/24 on database version 559.

Pham number 4586 has 17 members, 3 are drafts.

Phages represented in each track:

Track 1 : Abscondus_66, Dusty_65

• 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, Dusty_65, 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:

•

Summary by start number:

Start 2:

- Found in 17 of 17 (100.0%) of genes in pham
- Manual Annotation's of this start: 12 of 14
- Called 82.4% 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), Dusty_65 (CQ), 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 17 (11.8%) 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 15 of 17 (88.2%) of genes in pham
- No Manual Annotations of this start.
- Called 6.7% 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: Dusty_65 Start: 43528, Stop: 43764, Start Num: 2

Candidate Starts for Dusty_65:

(Start: 2 @43528 has 12 MA's), (5, 43549), (6, 43555),

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),