

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 87059 Report

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

Pham number 87059 has 16 members, 2 are drafts.

Phages represented in each track:

- Track 1: Norvs_65, PhinkBoden_64, Aphelion_64, Toniann_65, Culver_66, Cucurbita 66, Miskis 66
- Track 2 : Abscondus_64
- Track 3: WilliamBoone 64
- Track 4 : Engineer_66, Bachita_66Track 5 : ClubL_65, Smoothie_66
- Track 6 : Lozinak 65
- Track 7 : BrutonGaster 53
- Track 8 : OneUp_57

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 11 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Aphelion_64, Bachita_66, ClubL_65, Cucurbita_66, Culver_66, Engineer_66, Miskis_66, Norvs_65, PhinkBoden_64, Smoothie_66, Toniann_65, WilliamBoone_64,

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

Abscondus_64, Lozinak_65,

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

BrutonGaster_53, OneUp_57,

Summary by start number:

Start 1

- Found in 14 of 16 (87.5%) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Abscondus_64 (CQ), Lozinak_65 (CQ1),

Start 2:

- Found in 14 of 16 (87.5%) of genes in pham
- Manual Annotation's of this start: 11 of 14
- Called 85.7% of time when present
- Phage (with cluster) where this start called: Aphelion_64 (CQ1), Bachita_66 (CQ1), ClubL_65 (CQ1), Cucurbita_66 (CQ1), Culver_66 (CQ1), Engineer_66 (CQ1), Miskis_66 (CQ), Norvs_65 (CQ), PhinkBoden_64 (CQ1), Smoothie_66 (CQ1), Toniann_65 (CQ1), WilliamBoone_64 (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: BrutonGaster_53 (CQ2), OneUp_57 (CQ2),

Summary by clusters:

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

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 1 was manually annotated 1 time for cluster CQ1.
- •Start number 2 was manually annotated 10 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

•Start number 3 was manually annotated 2 times for cluster CQ2.

Gene Information:

Gene: Abscondus 64 Start: 43163, Stop: 43372, Start Num: 1

Candidate Starts for Abscondus 64:

(Start: 1 @43163 has 1 MA's), (Start: 2 @43178 has 11 MA's), (4, 43205), (5, 43226), (7, 43256), (9, 43349),

Gene: Aphelion 64 Start: 43446, Stop: 43640, Start Num: 2

Candidate Starts for Aphelion 64:

(Start: 1 @43431 has 1 MA's), (Start: 2 @43446 has 11 MA's), (4, 43473), (5, 43494), (7, 43524), (9, 43617),

Gene: Bachita_66 Start: 43880, Stop: 44074, Start Num: 2

Candidate Starts for Bachita_66:

(Start: 1 @43865 has 1 MA's), (Start: 2 @43880 has 11 MA's), (4, 43907), (5, 43928), (7, 43958), (9, 44051),

Gene: BrutonGaster 53 Start: 41166, Stop: 41351, Start Num: 3

Candidate Starts for BrutonGaster_53: (Start: 3 @41166 has 2 MA's), (6, 41229),

Gene: ClubL_65 Start: 43370, Stop: 43564, Start Num: 2

Candidate Starts for ClubL 65:

(Start: 1 @43355 has 1 MA's), (Start: 2 @43370 has 11 MA's), (4, 43397), (5, 43418), (7, 43448), (9, 43541), (10, 43553),

Gene: Cucurbita_66 Start: 44738, Stop: 44932, Start Num: 2

Candidate Starts for Cucurbita 66:

(Start: 1 @44723 has 1 MA's), (Start: 2 @44738 has 11 MA's), (4, 44765), (5, 44786), (7, 44816), (9, 44909).

Gene: Culver_66 Start: 43049, Stop: 43243, Start Num: 2

Candidate Starts for Culver 66:

(Start: 1 @43034 has 1 MA's), (Start: 2 @43049 has 11 MA's), (4, 43076), (5, 43097), (7, 43127), (9, 43220),

Gene: Engineer_66 Start: 43853, Stop: 44047, Start Num: 2

Candidate Starts for Engineer_66:

(Start: 1 @43838 has 1 MA's), (Start: 2 @43853 has 11 MA's), (4, 43880), (5, 43901), (7, 43931), (9, 44024),

Gene: Lozinak_65 Start: 43664, Stop: 43873, Start Num: 1

Candidate Starts for Lozinak 65:

(Start: 1 @43664 has 1 MA's), (Start: 2 @43679 has 11 MA's), (4, 43706), (5, 43727), (7, 43757), (9, 43850), (10, 43862),

Gene: Miskis_66 Start: 43212, Stop: 43406, Start Num: 2

Candidate Starts for Miskis_66:

(Start: 1 @43197 has 1 MA's), (Start: 2 @43212 has 11 MA's), (4, 43239), (5, 43260), (7, 43290), (9, 43383),

Gene: Norvs_65 Start: 43451, Stop: 43645, Start Num: 2

Candidate Starts for Norvs_65:

(Start: 1 @43436 has 1 MA's), (Start: 2 @43451 has 11 MA's), (4, 43478), (5, 43499), (7, 43529), (9, 43622),

Gene: OneUp_57 Start: 42866, Stop: 43051, Start Num: 3

Candidate Starts for OneUp 57:

(Start: 3 @ 42866 has 2 MA's), (6, 42929), (8, 43004),

Gene: PhinkBoden_64 Start: 43832, Stop: 44026, Start Num: 2

Candidate Starts for PhinkBoden 64:

(Start: 1 @43817 has 1 MA's), (Start: 2 @43832 has 11 MA's), (4, 43859), (5, 43880), (7, 43910), (9, 44003),

Gene: Smoothie 66 Start: 43679, Stop: 43873, Start Num: 2

Candidate Starts for Smoothie 66:

(Start: 1 @43664 has 1 MA's), (Start: 2 @43679 has 11 MA's), (4, 43706), (5, 43727), (7, 43757), (9, 43850), (10, 43862),

Gene: Toniann_65 Start: 43394, Stop: 43588, Start Num: 2

Candidate Starts for Toniann 65:

(Start: 1 @43379 has 1 MA's), (Start: 2 @43394 has 11 MA's), (4, 43421), (5, 43442), (7, 43472), (9, 43565),

Gene: WilliamBoone_64 Start: 42346, Stop: 42540, Start Num: 2

Candidate Starts for WilliamBoone_64: (Start: 1 @42331 has 1 MA's), (Start: 2 @42346 has 11 MA's), (5, 42394), (9, 42517),