

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 163956 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163956 has 19 members, 4 are drafts.

Phages represented in each track:

• Track 1: Dusk_37, BadStone_37, DrDrey_39, ShamWow_38, Tuco_39, Myrale_38, ABCat_37, BilboSwaggins_38

Track 2: Henry_39, Gator_36

• Track 3: Balomoji_37, Toto_38, Pumpkin_40, Teaspoon_39, Marshmallow_38

Track 4 : Harella_37
Track 5 : Glexan_36
Track 6 : Daikon_37
Track 7 : Mozy_32

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

The start number called the most often in the published annotations is 3, it was called in 7 of the 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• ABCat_37, BadStone_37, BilboSwaggins_38, DrDrey_39, Dusk_37, Myrale_38, ShamWow_38, Tuco_39,

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

Balomoji_37, Marshmallow_38, Pumpkin_40, Teaspoon_39, Toto_38,

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

Daikon_37, Gator_36, Glexan_36, Harella_37, Henry_39, Mozy_32,

Summary by start number:

Start 1:

- Found in 4 of 19 (21.1%) of genes in pham
- Manual Annotations of this start: 2 of 15
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Gator_36 (E), Henry_39 (E),

Start 2:

• Found in 4 of 19 (21.1%) of genes in pham

- Manual Annotations of this start: 1 of 15
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Glexan_36 (E),

Start 3:

- Found in 13 of 19 (68.4%) of genes in pham
- Manual Annotations of this start: 7 of 15
- Called 61.5% of time when present
- Phage (with cluster) where this start called: ABCat_37 (E), BadStone_37 (E), BilboSwaggins_38 (E), DrDrey_39 (E), Dusk_37 (E), Myrale_38 (E), ShamWow_38 (E), Tuco_39 (E),

Start 6:

- Found in 18 of 19 (94.7%) of genes in pham
- Manual Annotations of this start: 4 of 15
- Called 38.9% of time when present
- Phage (with cluster) where this start called: Balomoji_37 (E), Daikon_37 (E), Harella_37 (E), Marshmallow_38 (E), Pumpkin_40 (E), Teaspoon_39 (E), Toto_38 (E),

Start 8:

- Found in 1 of 19 (5.3%) of genes in pham
- Manual Annotations of this start: 1 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mozy_32 (F1),

Summary by clusters:

There are 2 clusters represented in this pham: F1, E,

Info for manual annotations of cluster E:

- •Start number 1 was manually annotated 2 times for cluster E.
- •Start number 2 was manually annotated 1 time for cluster E.
- •Start number 3 was manually annotated 7 times for cluster E.
- •Start number 6 was manually annotated 4 times for cluster E.

Info for manual annotations of cluster F1:

•Start number 8 was manually annotated 1 time for cluster F1.

Gene Information:

Gene: ABCat_37 Start: 34121, Stop: 33534, Start Num: 3

Candidate Starts for ABCat_37:

(Start: 3 @34121 has 7 MA's), (Start: 6 @34055 has 4 MA's), (7, 34013), (9, 33926), (14, 33848), (15, 33845), (17, 33809),

Gene: BadStone 37 Start: 34121, Stop: 33534, Start Num: 3

Candidate Starts for BadStone 37:

(Start: 3 @34121 has 7 MA's), (Start: 6 @34055 has 4 MA's), (7, 34013), (9, 33926), (14, 33848), (15, 33845), (17, 33809),

Gene: Balomoji_37 Start: 33789, Stop: 33268, Start Num: 6

Candidate Starts for Balomoji_37:

(Start: 3 @33855 has 7 MA's), (Start: 6 @33789 has 4 MA's), (7, 33747), (9, 33660), (14, 33582), (15, 33579), (17, 33543),

Gene: BilboSwaggins_38 Start: 34129, Stop: 33542, Start Num: 3

Candidate Starts for BilboSwaggins_38:

(Start: 3 @34129 has 7 MA's), (Start: 6 @34063 has 4 MA's), (7, 34021), (9, 33934), (14, 33856), (15, 33853), (17, 33817),

Gene: Daikon 37 Start: 33801, Stop: 33280, Start Num: 6

Candidate Starts for Daikon 37:

(4, 33867), (Start: 6 @33801 has 4 MA's), (7, 33759), (9, 33672), (14, 33594), (15, 33591), (17, 33555).

Gene: DrDrey_39 Start: 34621, Stop: 34034, Start Num: 3

Candidate Starts for DrDrey_39:

(Start: 3 @34621 has 7 MA's), (Start: 6 @34555 has 4 MA's), (7, 34513), (9, 34426), (14, 34348), (15, 34345), (17, 34309),

Gene: Dusk_37 Start: 33781, Stop: 33194, Start Num: 3

Candidate Starts for Dusk_37:

(Start: 3 @33781 has 7 MA's), (Start: 6 @33715 has 4 MA's), (7, 33673), (9, 33586), (14, 33508), (15, 33505), (17, 33469),

Gene: Gator_36 Start: 33782, Stop: 33150, Start Num: 1

Candidate Starts for Gator_36:

(Start: 1 @33782 has 2 MA's), (Start: 2 @33743 has 1 MA's), (4, 33737), (Start: 6 @33671 has 4 MA's), (7, 33629), (9, 33542), (14, 33464), (15, 33461), (17, 33425),

Gene: Glexan_36 Start: 33731, Stop: 33138, Start Num: 2

Candidate Starts for Glexan_36:

(Start: 1 @33770 has 2 MA's), (Start: 2 @33731 has 1 MA's), (4, 33725), (Start: 6 @33659 has 4 MA's), (7, 33617), (9, 33530), (14, 33452), (15, 33449), (17, 33413),

Gene: Harella_37 Start: 34175, Stop: 33654, Start Num: 6

Candidate Starts for Harella_37:

(Start: 1 @34286 has 2 MA's), (Start: 2 @34247 has 1 MA's), (4, 34241), (Start: 6 @34175 has 4 MA's), (7, 34133), (9, 34046), (14, 33968), (15, 33965), (17, 33929),

Gene: Henry_39 Start: 34174, Stop: 33542, Start Num: 1

Candidate Starts for Henry_39:

(Start: 1 @34174 has 2 MA's), (Start: 2 @34135 has 1 MA's), (4, 34129), (Start: 6 @34063 has 4 MA's), (7, 34021), (9, 33934), (14, 33856), (15, 33853), (17, 33817),

Gene: Marshmallow_38 Start: 34061, Stop: 33540, Start Num: 6

Candidate Starts for Marshmallow_38:

(Start: 3 @34127 has 7 MA's), (Start: 6 @34061 has 4 MA's), (7, 34019), (9, 33932), (14, 33854), (15, 33851), (17, 33815),

Gene: Mozy_32 Start: 27800, Stop: 28405, Start Num: 8

Candidate Starts for Mozy_32:

(5, 27716), (Start: 8 @27800 has 1 MA's), (10, 27872), (11, 27896), (12, 27902), (13, 27932), (16, 27953), (17, 27974), (18, 28061),

Gene: Myrale_38 Start: 33992, Stop: 33405, Start Num: 3

Candidate Starts for Myrale_38:

(Start: 3 @33992 has 7 MA's), (Start: 6 @33926 has 4 MA's), (7, 33884), (9, 33797), (14, 33719), (15, 33716), (17, 33680),

Gene: Pumpkin_40 Start: 34140, Stop: 33619, Start Num: 6

Candidate Starts for Pumpkin_40:

(Start: 3 @34206 has 7 MA's), (Start: 6 @34140 has 4 MA's), (7, 34098), (9, 34011), (14, 33933), (15, 33930), (17, 33894),

Gene: ShamWow_38 Start: 34129, Stop: 33542, Start Num: 3

Candidate Starts for ShamWow_38:

(Start: 3 @34129 has 7 MA's), (Start: 6 @34063 has 4 MA's), (7, 34021), (9, 33934), (14, 33856), (15, 33853), (17, 33817),

Gene: Teaspoon 39 Start: 34016, Stop: 33495, Start Num: 6

Candidate Starts for Teaspoon_39:

(Start: 3 @34082 has 7 MA's), (Start: 6 @34016 has 4 MA's), (7, 33974), (9, 33887), (14, 33809), (15, 33806), (17, 33770),

Gene: Toto_38 Start: 34063, Stop: 33542, Start Num: 6

Candidate Starts for Toto_38:

(Start: 3 @34129 has 7 MA's), (Start: 6 @34063 has 4 MA's), (7, 34021), (9, 33934), (14, 33856), (15, 33853), (17, 33817),

Gene: Tuco_39 Start: 34637, Stop: 34050, Start Num: 3

Candidate Starts for Tuco_39:

(Start: 3 @34637 has 7 MA's), (Start: 6 @34571 has 4 MA's), (7, 34529), (9, 34442), (14, 34364), (15, 34361), (17, 34325),