

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 158219 Report

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

Pham number 158219 has 17 members, 2 are drafts.

Phages represented in each track:

Track 1: AikoCarson 64

• Track 2: Amok 63

 Track 3: SweatNTears\_65, Yummy\_65, Horseradish\_65, Buttrmlkdreams\_65, SketchMex 63, Biskit 65

• Track 4 : Emalyn 62

Track 5 : BillDoor\_64

• Track 6 : GTE2 52

Track 7: Troje\_65, MScarn\_67

Track 8 : Frokostdame\_60

Track 9 : McGonagall\_22, Jeanie\_22

• Track 10 : GMA5\_22

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

The start number called the most often in the published annotations is 6, it was called in 9 of the 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• BillDoor\_64, Biskit\_65, Buttrmlkdreams\_65, Horseradish\_65, MScarn\_67, SketchMex\_63, SweatNTears\_65, Troje\_65, Yummy\_65,

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

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

• AikoCarson\_64, Amok\_63, Emalyn\_62, Frokostdame\_60, GMA5\_22, GTE2\_52, Jeanie\_22, McGonagall\_22,

## Summary by start number:

### Start 3:

- Found in 2 of 17 (11.8%) of genes in pham
- Manual Annotations of this start: 2 of 15
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Jeanie\_22 (CW1), McGonagall\_22 (CW1),

## Start 4:

- Found in 1 of 17 (5.9%) 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: Frokostdame\_60 (CV),

#### Start 5:

- Found in 1 of 17 (5.9%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA5\_22 (CW2),

#### Start 6:

- Found in 9 of 17 (52.9%) of genes in pham
- Manual Annotations of this start: 9 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BillDoor\_64 (CT), Biskit\_65 (CT), Buttrmlkdreams\_65 (CT), Horseradish\_65 (CT), MScarn\_67 (CT), SketchMex\_63 (CT), SweatNTears 65 (CT), Troje 65 (CT), Yummy 65 (CT),

#### Start 8:

- Found in 4 of 17 (23.5%) of genes in pham
- Manual Annotations of this start: 3 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AikoCarson\_64 (CT), Amok\_63 (CT), Emalyn\_62 (CT), GTE2\_52 (CT),

### Summary by clusters:

There are 4 clusters represented in this pham: CW1, CW2, CV, CT,

Info for manual annotations of cluster CT:

- •Start number 6 was manually annotated 9 times for cluster CT.
- •Start number 8 was manually annotated 3 times for cluster CT.

Info for manual annotations of cluster CV:

Start number 4 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster CW1:

•Start number 3 was manually annotated 2 times for cluster CW1.

#### Gene Information:

Gene: AikoCarson\_64 Start: 43232, Stop: 43432, Start Num: 8

Candidate Starts for AikoCarson 64:

(Start: 8 @43232 has 3 MA's), (9, 43247), (10, 43283), (11, 43289), (12, 43301), (16, 43343), (20, 43373), (21, 43412),

Gene: Amok\_63 Start: 43138, Stop: 43320, Start Num: 8

Candidate Starts for Amok\_63:

(Start: 8 @43138 has 3 MA's), (11, 43195), (12, 43207), (19, 43267), (20, 43279),

Gene: BillDoor\_64 Start: 42496, Stop: 42717, Start Num: 6

Candidate Starts for BillDoor 64:

(2, 42388), (Start: 6 @42496 has 9 MA's), (9, 42511), (11, 42553), (12, 42565), (15, 42586), (20, 42637), (22, 42691),

Gene: Biskit 65 Start: 43416, Stop: 43616, Start Num: 6

Candidate Starts for Biskit 65:

(Start: 6 @43416 has 9 MA's), (11, 43479), (12, 43491), (17, 43542), (19, 43551), (20, 43563),

Gene: Buttrmlkdreams\_65 Start: 43594, Stop: 43794, Start Num: 6

Candidate Starts for Buttrmlkdreams\_65:

(Start: 6 @43594 has 9 MA's), (11, 43657), (12, 43669), (17, 43720), (19, 43729), (20, 43741),

Gene: Emalyn 62 Start: 41970, Stop: 42161, Start Num: 8

Candidate Starts for Emalyn\_62:

(Start: 8 @41970 has 3 MA's), (10, 42012), (11, 42018), (12, 42030), (16, 42072), (20, 42102), (21, 42141),

Gene: Frokostdame\_60 Start: 40539, Stop: 40772, Start Num: 4

Candidate Starts for Frokostdame\_60:

(Start: 4 @ 40539 has 1 MA's), (12, 40629), (13, 40632), (18, 40683), (20, 40701),

Gene: GMA5 22 Start: 15142, Stop: 15327, Start Num: 5

Candidate Starts for GMA5\_22:

(5, 15142), (14, 15241), (17, 15274),

Gene: GTE2\_52 Start: 43208, Stop: 43396, Start Num: 8

Candidate Starts for GTE2 52:

(Start: 8 @ 43208 has 3 MA's), (9, 43223), (11, 43265), (12, 43277), (19, 43337), (20, 43349),

Gene: Horseradish\_65 Start: 43349, Stop: 43549, Start Num: 6

Candidate Starts for Horseradish\_65:

(Start: 6 @43349 has 9 MA's), (11, 43412), (12, 43424), (17, 43475), (19, 43484), (20, 43496),

Gene: Jeanie\_22 Start: 14650, Stop: 14841, Start Num: 3

Candidate Starts for Jeanie 22:

(Start: 3 @14650 has 2 MA's), (11, 14722), (12, 14734),

Gene: MScarn 67 Start: 43263, Stop: 43472, Start Num: 6

Candidate Starts for MScarn 67:

(1, 43137), (Start: 6 @43263 has 9 MA's), (7, 43269), (9, 43293), (12, 43347), (15, 43368), (19, 43407), (20, 43419),

Gene: McGonagall\_22 Start: 14651, Stop: 14842, Start Num: 3

Candidate Starts for McGonagall\_22:

(Start: 3 @14651 has 2 MA's), (11, 14723), (12, 14735),

Gene: SketchMex\_63 Start: 43416, Stop: 43616, Start Num: 6

Candidate Starts for SketchMex\_63:

(Start: 6 @ 43416 has 9 MA's), (11, 43479), (12, 43491), (17, 43542), (19, 43551), (20, 43563),

Gene: SweatNTears\_65 Start: 43520, Stop: 43720, Start Num: 6

Candidate Starts for SweatNTears\_65:

(Start: 6 @ 43520 has 9 MA's), (11, 43583), (12, 43595), (17, 43646), (19, 43655), (20, 43667),

Gene: Troje\_65 Start: 43486, Stop: 43695, Start Num: 6

Candidate Starts for Troje\_65:

(1, 43360), (Start: 6 @43486 has 9 MA's), (7, 43492), (9, 43516), (12, 43570), (15, 43591), (19, 43630), (20, 43642),

Gene: Yummy\_65 Start: 43463, Stop: 43663, Start Num: 6

Candidate Starts for Yummy\_65:

(Start: 6 @ 43463 has 9 MA's), (11, 43526), (12, 43538), (17, 43589), (19, 43598), (20, 43610),