

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 224939 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224939 has 18 members, 4 are drafts.

Phages represented in each track:

Track 1 : AikoCarson 64

• Track 2 : Amok\_63

• Track 3: Blondies 68

 Track 4: SweatNTears\_65, Yummy\_65, Horseradish\_65, Buttrmlkdreams\_65, SketchMex 63, Biskit 65

• Track 5 : Troje\_65, MScarn\_67

Track 6 : BillDoor\_64

Track 7 : GTE2\_52

• Track 8 : Emalyn\_62

Track 9 : Starburst\_64

Track 10 : McGonagall\_22, Jeanie\_22

• Track 11 : 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 5, it was called in 9 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• BillDoor\_64, Biskit\_65, Blondies\_68, Buttrmlkdreams\_65, Horseradish\_65, MScarn\_67, SketchMex\_63, Starburst\_64, 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, GMA5\_22, GTE2\_52, Jeanie\_22, McGonagall\_22,

### **Summary by start number:**

#### Start 3:

- Found in 2 of 18 (11.1%) 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: Jeanie\_22 (CW1), McGonagall\_22 (CW1),

## Start 4:

- Found in 1 of 18 (5.6%) 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 5:

- Found in 11 of 18 (61.1%) of genes in pham
- Manual Annotations of this start: 9 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BillDoor\_64 (CT), Biskit\_65 (CT), Blondies\_68 (CT), Buttrmlkdreams\_65 (CT), Horseradish\_65 (CT), MScarn\_67 (CT), SketchMex\_63 (CT), Starburst\_64 (CT), SweatNTears\_65 (CT), Troje\_65 (CT), Yummy\_65 (CT),

### Start 7:

- Found in 4 of 18 (22.2%) of genes in pham
- Manual Annotations of this start: 3 of 14
- 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 3 clusters represented in this pham: CW1, CW2, CT,

Info for manual annotations of cluster CT:

- •Start number 5 was manually annotated 9 times for cluster CT.
- Start number 7 was manually annotated 3 times for cluster CT.

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: 7

Candidate Starts for AikoCarson\_64:

(Start: 7 @43232 has 3 MA's), (8, 43247), (9, 43283), (10, 43289), (11, 43301), (14, 43343), (17, 43373), (18, 43412),

Gene: Amok\_63 Start: 43138, Stop: 43320, Start Num: 7

Candidate Starts for Amok 63:

(Start: 7 @ 43138 has 3 MA's), (10, 43195), (11, 43207), (16, 43267), (17, 43279),

Gene: BillDoor\_64 Start: 42496, Stop: 42717, Start Num: 5

Candidate Starts for BillDoor\_64:

(2, 42388), (Start: 5 @42496 has 9 MA's), (8, 42511), (10, 42553), (11, 42565), (13, 42586), (17, 42637), (19, 42691),

Gene: Biskit\_65 Start: 43416, Stop: 43616, Start Num: 5

Candidate Starts for Biskit\_65:

(Start: 5 @43416 has 9 MA's), (10, 43479), (11, 43491), (15, 43542), (16, 43551), (17, 43563),

Gene: Blondies 68 Start: 43735, Stop: 43935, Start Num: 5

Candidate Starts for Blondies\_68:

(Start: 5 @ 43735 has 9 MA's), (10, 43798), (11, 43810), (15, 43861), (16, 43870), (17, 43882),

Gene: Buttrmlkdreams 65 Start: 43594, Stop: 43794, Start Num: 5

Candidate Starts for Buttrmlkdreams\_65:

(Start: 5 @ 43594 has 9 MA's), (10, 43657), (11, 43669), (15, 43720), (16, 43729), (17, 43741),

Gene: Emalyn\_62 Start: 41970, Stop: 42161, Start Num: 7

Candidate Starts for Emalyn\_62:

(Start: 7 @41970 has 3 MA's), (9, 42012), (10, 42018), (11, 42030), (14, 42072), (17, 42102), (18, 42141),

Gene: GMA5\_22 Start: 15142, Stop: 15327, Start Num: 4

Candidate Starts for GMA5\_22: (4, 15142), (12, 15241), (15, 15274),

Gene: GTE2\_52 Start: 43208, Stop: 43396, Start Num: 7

Candidate Starts for GTE2\_52:

(Start: 7 @ 43208 has 3 MA's), (8, 43223), (10, 43265), (11, 43277), (16, 43337), (17, 43349),

Gene: Horseradish\_65 Start: 43349, Stop: 43549, Start Num: 5

Candidate Starts for Horseradish\_65:

(Start: 5 @ 43349 has 9 MA's), (10, 43412), (11, 43424), (15, 43475), (16, 43484), (17, 43496),

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

Candidate Starts for Jeanie 22:

(Start: 3 @14650 has 2 MA's), (10, 14722), (11, 14734),

Gene: MScarn\_67 Start: 43263, Stop: 43472, Start Num: 5

Candidate Starts for MScarn\_67:

(1, 43137), (Start: 5 @43263 has 9 MA's), (6, 43269), (8, 43293), (11, 43347), (13, 43368), (16, 43407), (17, 43419),

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

Candidate Starts for McGonagall 22:

(Start: 3 @14651 has 2 MA's), (10, 14723), (11, 14735),

Gene: SketchMex\_63 Start: 43416, Stop: 43616, Start Num: 5

Candidate Starts for SketchMex\_63:

(Start: 5 @ 43416 has 9 MA's), (10, 43479), (11, 43491), (15, 43542), (16, 43551), (17, 43563),

Gene: Starburst\_64 Start: 43650, Stop: 43835, Start Num: 5

Candidate Starts for Starburst 64:

(Start: 5 @43650 has 9 MA's), (10, 43719), (11, 43731), (13, 43752), (15, 43782), (16, 43791), (17, 43803),

Gene: SweatNTears\_65 Start: 43520, Stop: 43720, Start Num: 5

Candidate Starts for SweatNTears\_65:

(Start: 5 @ 43520 has 9 MA's), (10, 43583), (11, 43595), (15, 43646), (16, 43655), (17, 43667),

Gene: Troje\_65 Start: 43486, Stop: 43695, Start Num: 5

Candidate Starts for Troje\_65:

(1, 43360), (Start: 5 @43486 has 9 MA's), (6, 43492), (8, 43516), (11, 43570), (13, 43591), (16, 43630), (17, 43642),

Gene: Yummy\_65 Start: 43463, Stop: 43663, Start Num: 5

Candidate Starts for Yummy\_65:

(Start: 5 @ 43463 has 9 MA's), (10, 43526), (11, 43538), (15, 43589), (16, 43598), (17, 43610),