

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 135966 Report

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

Pham number 135966 has 16 members, 9 are drafts.

Phages represented in each track:

- Track 1 : Pureglobe5 64
- Track 2 : Beagle\_65, Pointis\_61
- Track 3 : MellowYellow\_59
- Track 4 : Odyssey395\_65
- Track 5 : BruhMoment 56
- Track 6 : BillyTP\_89, CookieBear\_87
- Track 7: Hillester 94, RadFad 95
- Track 8 : YoungHarleezy\_89
- Track 9 : BrayBeast\_46, Raqqa\_56
- Track 10 : Shoya\_65
- Track 11 : BlackSpider\_81
- Track 12 : Khuang\_40

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

The start number called the most often in the published annotations is 17, it was called in 3 of the 7 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Beagle\_65, MellowYellow\_59, Odyssey395\_65, Pointis\_61, Pureglobe5\_64,

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:

• BillyTP\_89, BlackSpider\_81, BrayBeast\_46, BruhMoment\_56, CookieBear\_87, Hillester\_94, Khuang\_40, RadFad\_95, Raqqa\_56, Shoya\_65, YoungHarleezy\_89,

## Summary by start number:

## Start 8:

- Found in 7 of 16 (43.8%) of genes in pham
- Manual Annotations of this start: 2 of 7
- Called 100.0% of time when present

 Phage (with cluster) where this start called: BillyTP\_89 (AY), BlackSpider\_81 (FN), CookieBear\_87 (AY), Hillester\_94 (AY), RadFad\_95 (AY), Shoya\_65 (FB), YoungHarleezy\_89 (AY),

### Start 11:

- Found in 2 of 16 (12.5%) of genes in pham
- Manual Annotations of this start: 1 of 7
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BrayBeast 46 (FB), Ragga 56 (AY),

## Start 14:

- Found in 1 of 16 (6.2%) of genes in pham
- Manual Annotations of this start: 1 of 7
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BruhMoment\_56 (AP3),

### Start 15:

- Found in 1 of 16 (6.2%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Khuang\_40 (UNK),

### Start 17:

- Found in 5 of 16 (31.2%) of genes in pham
- Manual Annotations of this start: 3 of 7
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beagle\_65 (AP2), MellowYellow\_59 (AP2), Odyssey395\_65 (AP2), Pointis\_61 (AP2), Pureglobe5\_64 (AP2),

## **Summary by clusters:**

There are 6 clusters represented in this pham: AP2, AP3, FB, AY, UNK, FN,

Info for manual annotations of cluster AP2:

•Start number 17 was manually annotated 3 times for cluster AP2.

Info for manual annotations of cluster AP3:

•Start number 14 was manually annotated 1 time for cluster AP3.

Info for manual annotations of cluster AY:

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

Info for manual annotations of cluster FB:

- •Start number 8 was manually annotated 1 time for cluster FB.
- •Start number 11 was manually annotated 1 time for cluster FB.

#### Gene Information:

Gene: Beagle\_65 Start: 41716, Stop: 41399, Start Num: 17

Candidate Starts for Beagle 65:

(4, 41926), (Start: 17 @41716 has 3 MA's), (25, 41611), (27, 41605), (33, 41566), (35, 41473), (36, 41470), (37, 41467),

Gene: BillyTP\_89 Start: 50300, Stop: 50626, Start Num: 8

Candidate Starts for BillyTP\_89:

(6, 50243), (Start: 8 @ 50300 has 2 MA's), (9, 50315), (20, 50420), (36, 50549), (40, 50618),

Gene: BlackSpider\_81 Start: 47528, Stop: 47902, Start Num: 8

Candidate Starts for BlackSpider 81:

(Start: 8 @ 47528 has 2 MA's), (10, 47576), (24, 47705), (36, 47825), (38, 47882), (39, 47891),

Gene: BrayBeast\_46 Start: 28369, Stop: 28710, Start Num: 11

Candidate Starts for BrayBeast\_46:

(Start: 11 @28369 has 1 MA's), (18, 28423), (26, 28516),

Gene: BruhMoment 56 Start: 41749, Stop: 41402, Start Num: 14

Candidate Starts for BruhMoment\_56:

(Start: 14 @41749 has 1 MA's), (21, 41698), (28, 41605), (29, 41602), (30, 41599), (31, 41593),

Gene: CookieBear\_87 Start: 49508, Stop: 49834, Start Num: 8

Candidate Starts for CookieBear 87:

(6, 49451), (Start: 8 @ 49508 has 2 MA's), (9, 49523), (20, 49628), (36, 49757), (40, 49826),

Gene: Hillester\_94 Start: 49893, Stop: 50348, Start Num: 8

Candidate Starts for Hillester\_94:

(Start: 8 @49893 has 2 MA's), (10, 49941), (16, 50001), (19, 50025), (23, 50085), (28, 50130), (31, 50142), (34, 50241), (38, 50328), (39, 50337),

Gene: Khuang\_40 Start: 26307, Stop: 25885, Start Num: 15

Candidate Starts for Khuang\_40:

(3, 26559), (5, 26481), (15, 26307),

Gene: MellowYellow 59 Start: 41279, Stop: 40956, Start Num: 17

Candidate Starts for MellowYellow\_59:

(4, 41489), (Start: 17 @41279 has 3 MA's), (22, 41219),

Gene: Odyssey395\_65 Start: 41953, Stop: 41636, Start Num: 17

Candidate Starts for Odyssey395\_65:

(1, 42358), (2, 42280), (4, 42163), (Start: 17 @41953 has 3 MA's), (25, 41848), (27, 41842), (33, 41803), (35, 41710), (36, 41707), (37, 41704),

Gene: Pointis\_61 Start: 41756, Stop: 41439, Start Num: 17

Candidate Starts for Pointis 61:

(4, 41966), (Start: 17 @41756 has 3 MA's), (25, 41651), (27, 41645), (33, 41606), (35, 41513), (36, 41510), (37, 41507),

Gene: Pureglobe5\_64 Start: 42200, Stop: 41883, Start Num: 17

Candidate Starts for Pureglobe5\_64:

(4, 42410), (7, 42335), (Start: 17 @42200 has 3 MA's), (25, 42095), (27, 42089), (33, 42050), (35, 41957), (36, 41954), (37, 41951),

Gene: RadFad\_95 Start: 49893, Stop: 50348, Start Num: 8

Candidate Starts for RadFad\_95:

(Start: 8 @49893 has 2 MA's), (10, 49941), (16, 50001), (19, 50025), (23, 50085), (28, 50130), (31, 50142), (34, 50241), (38, 50328), (39, 50337),

Gene: Raqqa\_56 Start: 32398, Stop: 32739, Start Num: 11

Candidate Starts for Raqqa\_56:

(Start: 11 @32398 has 1 MA's), (18, 32452), (26, 32545),

Gene: Shoya\_65 Start: 36138, Stop: 36593, Start Num: 8

Candidate Starts for Shoya\_65:

(Start: 8 @ 36138 has 2 MA's), (10, 36186), (19, 36270), (23, 36330), (28, 36375), (31, 36387), (32, 36396), (34, 36486), (38, 36573), (39, 36582),

Gene: YoungHarleezy\_89 Start: 50369, Stop: 50743, Start Num: 8

Candidate Starts for YoungHarleezy\_89:

(Start: 8 @50369 has 2 MA's), (12, 50429), (13, 50450), (36, 50666), (37, 50669), (38, 50723), (39, 50732),