

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 216609 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216609 has 18 members, 11 are drafts.

Phages represented in each track:

- Track 1: Zaheer 45, Schism 46
- Track 2 : Guinevere 44
- Track 3 : Gusanita 42
- Track 4: AllBusiness 41
- Track 5 : Donatella\_43
- Track 6 : IsHungry\_39
- Track 7 : Ryan 45
- Track 8 : Nandita 45
- Track 9 : Kihatsu\_44
- Track 10 : Popper 43
- Track 11 : Julie\_41
- Track 12 : CocoCinnamon\_40
- Track 13: EvenBluerMoon\_41, Aoka\_34, PrairieDogTown\_50
- Track 14 : Maja\_36
- Track 15 : Ball 33

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

The start number called the most often in the published annotations is 8, it was called in 5 of the 7 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• AllBusiness\_41, Ball\_33, Guinevere\_44, Gusanita\_42, IsHungry\_39, Julie\_41, Kihatsu\_44, Nandita\_45, Popper\_43, Ryan\_45, Schism\_46, Zaheer\_45,

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

Donatella\_43,

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

• Aoka\_34, CocoCinnamon\_40, EvenBluerMoon\_41, Maja\_36, PrairieDogTown\_50,

### Summary by start number:

Start 8:

- Found in 13 of 18 (72.2%) of genes in pham
- Manual Annotation's of this start: 5 of 7
- Called 92.3% of time when present
- Phage (with cluster) where this start called: AllBusiness\_41 (FF), Ball\_33 (singleton), Guinevere\_44 (FF), Gusanita\_42 (FF), IsHungry\_39 (FF), Julie\_41 (FF), Kihatsu\_44 (FF), Nandita\_45 (FF), Popper\_43 (FF), Ryan\_45 (FF), Schism\_46 (FF), Zaheer\_45 (FF),

#### Start 10:

- 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: Donatella\_43 (FF),

#### Start 11:

- Found in 3 of 18 (16.7%) 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: Aoka\_34 (FO), EvenBluerMoon\_41 (FO), PrairieDogTown\_50 (FO),

#### Start 12:

- 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: CocoCinnamon\_40 (FO),

### Start 13:

- Found in 1 of 18 (5.6%) 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: Maja 36 (FO),

### **Summary by clusters:**

There are 3 clusters represented in this pham: singleton, FF, FO,

Info for manual annotations of cluster FF:

•Start number 8 was manually annotated 5 times for cluster FF.

Info for manual annotations of cluster FO:

- •Start number 11 was manually annotated 1 time for cluster FO.
- •Start number 13 was manually annotated 1 time for cluster FO.

#### Gene Information:

Gene: AllBusiness 41 Start: 31586, Stop: 32197, Start Num: 8

Candidate Starts for AllBusiness 41:

(3, 31499), (Start: 8 @31586 has 5 MA's), (20, 31919),

Gene: Aoka\_34 Start: 26615, Stop: 27118, Start Num: 11

Candidate Starts for Aoka 34:

(7, 26579), (Start: 11 @26615 has 1 MA's),

Gene: Ball\_33 Start: 25781, Stop: 26335, Start Num: 8

Candidate Starts for Ball\_33:

(Start: 8 @25781 has 5 MA's), (15, 25934), (18, 26090), (21, 26177),

Gene: CocoCinnamon 40 Start: 26860, Stop: 27327, Start Num: 12

Candidate Starts for CocoCinnamon\_40:

(12, 26860), (16, 27022), (22, 27262), (23, 27313),

Gene: Donatella\_43 Start: 30858, Stop: 31337, Start Num: 10

Candidate Starts for Donatella\_43:

(5, 30798), (Start: 8 @ 30831 has 5 MA's), (10, 30858), (15, 30981),

Gene: EvenBluerMoon\_41 Start: 26853, Stop: 27356, Start Num: 11

Candidate Starts for EvenBluerMoon\_41: (7, 26817), (Start: 11 @26853 has 1 MA's),

Gene: Guinevere\_44 Start: 30524, Stop: 31096, Start Num: 8

Candidate Starts for Guinevere 44:

(Start: 8 @ 30524 has 5 MA's), (16, 30707), (17, 30812), (19, 30860), (24, 31082),

Gene: Gusanita\_42 Start: 30992, Stop: 31609, Start Num: 8

Candidate Starts for Gusanita 42:

(4, 30956), (6, 30980), (Start: 8 @30992 has 5 MA's), (15, 31142), (20, 31325),

Gene: IsHungry 39 Start: 29178, Stop: 29774, Start Num: 8

Candidate Starts for IsHungry\_39:

(Start: 8 @ 29178 has 5 MA's), (15, 29328), (20, 29511),

Gene: Julie\_41 Start: 30946, Stop: 31563, Start Num: 8

Candidate Starts for Julie 41:

(Start: 8 @ 30946 has 5 MA's), (20, 31279),

Gene: Kihatsu\_44 Start: 31494, Stop: 32066, Start Num: 8

Candidate Starts for Kihatsu\_44:

(Start: 8 @ 31494 has 5 MA's), (16, 31677), (17, 31782), (19, 31830),

Gene: Maja\_36 Start: 27371, Stop: 27832, Start Num: 13

Candidate Starts for Maja\_36:

(1, 27146), (4, 27293), (9, 27341), (Start: 13 @27371 has 1 MA's), (14, 27485), (15, 27494), (16,

27527), (22, 27767),

Gene: Nandita 45 Start: 30585, Stop: 31091, Start Num: 8

Candidate Starts for Nandita\_45:

(2, 30459), (Start: 8 @ 30585 has 5 MA's),

Gene: Popper\_43 Start: 30514, Stop: 31131, Start Num: 8

Candidate Starts for Popper 43:

(Start: 8 @ 30514 has 5 MA's), (15, 30664), (20, 30847),

Gene: PrairieDogTown\_50 Start: 26855, Stop: 27358, Start Num: 11

Candidate Starts for PrairieDogTown\_50: (7, 26819), (Start: 11 @26855 has 1 MA's),

Gene: Ryan\_45 Start: 31133, Stop: 31639, Start Num: 8

Candidate Starts for Ryan\_45:

(5, 31100), (Start: 8 @31133 has 5 MA's), (15, 31283),

Gene: Schism\_46 Start: 31313, Stop: 31885, Start Num: 8

Candidate Starts for Schism\_46:

(Start: 8 @31313 has 5 MA's), (16, 31496), (17, 31601), (19, 31649), (24, 31871),

Gene: Zaheer\_45 Start: 31748, Stop: 32320, Start Num: 8

Candidate Starts for Zaheer\_45:

(Start: 8 @31748 has 5 MA's), (16, 31931), (17, 32036), (19, 32084), (24, 32306),