



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 153209 Report

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

Pham number 153209 has 60 members, 20 are drafts.

Phages represented in each track:

- Track 1 : JohnDoe\_9, Cyan\_9, KeAlii\_9, Tallboi\_9, Kaylissa\_9, Turab\_9, Simpson\_9, Adumb2043\_9, Lizalica\_9, AEgle\_9, Joemato\_9
- Track 2 : Elezi\_9, Eraser\_9, Asa16\_9, Nitro\_9, Ascela\_9, Berrie\_9, London\_9, Jstan\_9, Niobe\_9, Iter\_9
- Track 3 : Pixelle\_9, Amyev\_9, Community\_10, Tian\_9, Phives\_10
- Track 4 : Warda\_9, Powerpuff\_9, Lego\_9, Crewmate\_10, Tutumahutu\_9, Tuck\_10, Mudpuppy\_9, AGrandiflora\_9, Tbone\_9, YesChef\_9
- Track 5 : Adolin\_9
- Track 6 : IttyBittyPiggy\_9
- Track 7 : DrManhattan\_9, MissSwiss\_9
- Track 8 : Sue2\_9
- Track 9 : Pumpkins\_18, ObiToo\_9, JuneStar\_9, Cassia\_9, Yang\_9
- Track 10 : VResidence\_9
- Track 11 : Reedo\_9
- Track 12 : Janeemi\_10
- Track 13 : TforTroy\_9
- Track 14 : DrSierra\_9
- Track 15 : Wildwest\_10
- Track 16 : MaGuCo\_8, Liebe\_8, Maureen\_8
- Track 17 : ShakeltOph\_8, Tweety19\_9, JasmineDragon\_8, Snek\_9
- Track 18 : VroomVroom\_8

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

The start number called the most often in the published annotations is 2, it was called in 37 of the 40 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AEgle\_9, AGrandiflora\_9, Adolin\_9, Adumb2043\_9, Amyev\_9, Asa16\_9, Ascela\_9, Berrie\_9, Cassia\_9, Community\_10, Crewmate\_10, Cyan\_9, DrManhattan\_9, DrSierra\_9, Elezi\_9, Eraser\_9, Iter\_9, IttyBittyPiggy\_9, Janeemi\_10, JasmineDragon\_8, Joemato\_9, JohnDoe\_9, Jstan\_9, JuneStar\_9, Kaylissa\_9, KeAlii\_9, Lego\_9, Lizalica\_9, London\_9, MissSwiss\_9, Mudpuppy\_9, Niobe\_9, Nitro\_9, ObiToo\_9, Phives\_10, Pixelle\_9, Powerpuff\_9, Pumpkins\_18, Reedo\_9,

ShakeltOph\_8, Simpson\_9, Snek\_9, Tallboi\_9, Tbone\_9, TforTroy\_9, Tian\_9, Tuck\_10, Turab\_9, Tutumahutu\_9, Tweety19\_9, VResidence\_9, VroomVroom\_8, Warda\_9, Wildwest\_10, Yang\_9, YesChef\_9,

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:

- Liebe\_8, MaGuCo\_8, Maureen\_8, Sue2\_9,

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

Start 1:

- Found in 1 of 60 ( 1.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sue2\_9 (AZ1),

Start 2:

- Found in 56 of 60 ( 93.3% ) of genes in pham
- Manual Annotations of this start: 37 of 40
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AEgle\_9 (AZ1), AGrandiflora\_9 (AZ1), Adolin\_9 (AZ1), Adumb2043\_9 (AZ1), Amyev\_9 (AZ1), Asa16\_9 (AZ1), Ascela\_9 (AZ1), Berrie\_9 (AZ1), Cassia\_9 (AZ1), Community\_10 (AZ1), Crewmate\_10 (AZ1), Cyan\_9 (AZ1), DrManhattan\_9 (AZ1), DrSierra\_9 (AZ1), Elezi\_9 (AZ1), Eraser\_9 (AZ1), Iter\_9 (AZ1), IttyBittyPiggy\_9 (AZ1), Janeemi\_10 (AZ1), JasmineDragon\_8 (AZ4), Joemato\_9 (AZ1), JohnDoe\_9 (AZ1), Jstan\_9 (AZ1), JuneStar\_9 (AZ1), Kaylissa\_9 (AZ1), KeAlii\_9 (AZ1), Lego\_9 (AZ1), Lizalica\_9 (AZ1), London\_9 (AZ1), MissSwiss\_9 (AZ1), Mudpuppy\_9 (AZ1), Niobe\_9 (AZ1), Nitro\_9 (AZ1), ObiToo\_9 (AZ1), Phives\_10 (AZ1), Pixelle\_9 (AZ1), Powerpuff\_9 (AZ1), Pumpkins\_18 (AZ1), Reedo\_9 (AZ1), ShakeltOph\_8 (AZ4), Simpson\_9 (AZ1), Snek\_9 (AZ3), Tallboi\_9 (AZ1), Tbone\_9 (AZ1), TforTroy\_9 (AZ1), Tian\_9 (AZ1), Tuck\_10 (AZ1), Turab\_9 (AZ1), Tutumahutu\_9 (AZ1), Tweety19\_9 (AZ3), VResidence\_9 (AZ1), VroomVroom\_8 (AZ4), Warda\_9 (AZ1), Wildwest\_10 (AZ1), Yang\_9 (AZ1), YesChef\_9 (AZ1),

Start 3:

- Found in 3 of 60 ( 5.0% ) of genes in pham
- Manual Annotations of this start: 3 of 40
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Liebe\_8 (AZ2), MaGuCo\_8 (AZ2), Maureen\_8 (AZ2),

### **Summary by clusters:**

There are 4 clusters represented in this pham: AZ1, AZ2, AZ3, AZ4,

Info for manual annotations of cluster AZ1:

- Start number 2 was manually annotated 34 times for cluster AZ1.

Info for manual annotations of cluster AZ2:

- Start number 3 was manually annotated 3 times for cluster AZ2.

Info for manual annotations of cluster AZ3:

- Start number 2 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster AZ4:

- Start number 2 was manually annotated 1 time for cluster AZ4.

**Gene Information:**

Gene: AEgle\_9 Start: 8278, Stop: 8385, Start Num: 2

Candidate Starts for AEgle\_9:

(Start: 2 @8278 has 37 MA's),

Gene: AGrandiflora\_9 Start: 8259, Stop: 8369, Start Num: 2

Candidate Starts for AGrandiflora\_9:

(Start: 2 @8259 has 37 MA's), (5, 8325),

Gene: Adolin\_9 Start: 8255, Stop: 8371, Start Num: 2

Candidate Starts for Adolin\_9:

(Start: 2 @8255 has 37 MA's),

Gene: Adumb2043\_9 Start: 8277, Stop: 8384, Start Num: 2

Candidate Starts for Adumb2043\_9:

(Start: 2 @8277 has 37 MA's),

Gene: Amyev\_9 Start: 8290, Stop: 8400, Start Num: 2

Candidate Starts for Amyev\_9:

(Start: 2 @8290 has 37 MA's),

Gene: Asa16\_9 Start: 8244, Stop: 8354, Start Num: 2

Candidate Starts for Asa16\_9:

(Start: 2 @8244 has 37 MA's),

Gene: Ascela\_9 Start: 8270, Stop: 8380, Start Num: 2

Candidate Starts for Ascela\_9:

(Start: 2 @8270 has 37 MA's),

Gene: Berrie\_9 Start: 8249, Stop: 8356, Start Num: 2

Candidate Starts for Berrie\_9:

(Start: 2 @8249 has 37 MA's),

Gene: Cassia\_9 Start: 8363, Stop: 8479, Start Num: 2

Candidate Starts for Cassia\_9:

(Start: 2 @8363 has 37 MA's), (5, 8432),

Gene: Community\_10 Start: 9325, Stop: 9435, Start Num: 2

Candidate Starts for Community\_10:

(Start: 2 @9325 has 37 MA's),

Gene: Crewmate\_10 Start: 8711, Stop: 8821, Start Num: 2

Candidate Starts for Crewmate\_10:

(Start: 2 @8711 has 37 MA's), (5, 8777),

Gene: Cyan\_9 Start: 8263, Stop: 8373, Start Num: 2

Candidate Starts for Cyan\_9:

(Start: 2 @8263 has 37 MA's),

Gene: DrManhattan\_9 Start: 8245, Stop: 8361, Start Num: 2

Candidate Starts for DrManhattan\_9:

(Start: 2 @8245 has 37 MA's),

Gene: DrSierra\_9 Start: 8272, Stop: 8382, Start Num: 2

Candidate Starts for DrSierra\_9:

(Start: 2 @8272 has 37 MA's), (5, 8338), (8, 8359),

Gene: Elezi\_9 Start: 8245, Stop: 8355, Start Num: 2

Candidate Starts for Elezi\_9:

(Start: 2 @8245 has 37 MA's),

Gene: Eraser\_9 Start: 8245, Stop: 8355, Start Num: 2

Candidate Starts for Eraser\_9:

(Start: 2 @8245 has 37 MA's),

Gene: Iter\_9 Start: 8270, Stop: 8380, Start Num: 2

Candidate Starts for Iter\_9:

(Start: 2 @8270 has 37 MA's),

Gene: IttyBittyPiggy\_9 Start: 8267, Stop: 8377, Start Num: 2

Candidate Starts for IttyBittyPiggy\_9:

(Start: 2 @8267 has 37 MA's), (5, 8333),

Gene: Janeemi\_10 Start: 9359, Stop: 9490, Start Num: 2

Candidate Starts for Janeemi\_10:

(Start: 2 @9359 has 37 MA's), (5, 9425), (7, 9443),

Gene: JasmineDragon\_8 Start: 6570, Stop: 6671, Start Num: 2

Candidate Starts for JasmineDragon\_8:

(Start: 2 @6570 has 37 MA's),

Gene: Joemato\_9 Start: 8263, Stop: 8373, Start Num: 2

Candidate Starts for Joemato\_9:

(Start: 2 @8263 has 37 MA's),

Gene: JohnDoe\_9 Start: 8261, Stop: 8371, Start Num: 2

Candidate Starts for JohnDoe\_9:

(Start: 2 @8261 has 37 MA's),

Gene: Jstan\_9 Start: 8245, Stop: 8355, Start Num: 2

Candidate Starts for Jstan\_9:

(Start: 2 @8245 has 37 MA's),

Gene: JuneStar\_9 Start: 8364, Stop: 8477, Start Num: 2

Candidate Starts for JuneStar\_9:

(Start: 2 @8364 has 37 MA's), (5, 8430),

Gene: Kaylissa\_9 Start: 8264, Stop: 8374, Start Num: 2  
Candidate Starts for Kaylissa\_9:  
(Start: 2 @8264 has 37 MA's),

Gene: KeAlii\_9 Start: 8290, Stop: 8406, Start Num: 2  
Candidate Starts for KeAlii\_9:  
(Start: 2 @8290 has 37 MA's),

Gene: Lego\_9 Start: 8262, Stop: 8372, Start Num: 2  
Candidate Starts for Lego\_9:  
(Start: 2 @8262 has 37 MA's), (5, 8328),

Gene: Liebe\_8 Start: 6731, Stop: 6844, Start Num: 3  
Candidate Starts for Liebe\_8:  
(Start: 3 @6731 has 3 MA's), (4, 6749),

Gene: Lizalica\_9 Start: 8254, Stop: 8361, Start Num: 2  
Candidate Starts for Lizalica\_9:  
(Start: 2 @8254 has 37 MA's),

Gene: London\_9 Start: 8245, Stop: 8355, Start Num: 2  
Candidate Starts for London\_9:  
(Start: 2 @8245 has 37 MA's),

Gene: MaGuCo\_8 Start: 6590, Stop: 6703, Start Num: 3  
Candidate Starts for MaGuCo\_8:  
(Start: 3 @6590 has 3 MA's), (4, 6608),

Gene: Maureen\_8 Start: 6731, Stop: 6844, Start Num: 3  
Candidate Starts for Maureen\_8:  
(Start: 3 @6731 has 3 MA's), (4, 6749),

Gene: MissSwiss\_9 Start: 8258, Stop: 8365, Start Num: 2  
Candidate Starts for MissSwiss\_9:  
(Start: 2 @8258 has 37 MA's),

Gene: Mudpuppy\_9 Start: 8262, Stop: 8372, Start Num: 2  
Candidate Starts for Mudpuppy\_9:  
(Start: 2 @8262 has 37 MA's), (5, 8328),

Gene: Niobe\_9 Start: 8245, Stop: 8355, Start Num: 2  
Candidate Starts for Niobe\_9:  
(Start: 2 @8245 has 37 MA's),

Gene: Nitro\_9 Start: 8262, Stop: 8372, Start Num: 2  
Candidate Starts for Nitro\_9:  
(Start: 2 @8262 has 37 MA's),

Gene: ObiToo\_9 Start: 8448, Stop: 8558, Start Num: 2  
Candidate Starts for ObiToo\_9:  
(Start: 2 @8448 has 37 MA's), (5, 8514),

Gene: Phives\_10 Start: 9350, Stop: 9460, Start Num: 2  
Candidate Starts for Phives\_10:  
(Start: 2 @9350 has 37 MA's),

Gene: Pixelle\_9 Start: 8293, Stop: 8403, Start Num: 2  
Candidate Starts for Pixelle\_9:  
(Start: 2 @8293 has 37 MA's),

Gene: Powerpuff\_9 Start: 8313, Stop: 8423, Start Num: 2  
Candidate Starts for Powerpuff\_9:  
(Start: 2 @8313 has 37 MA's), (5, 8379),

Gene: Pumpkins\_18 Start: 8365, Stop: 8481, Start Num: 2  
Candidate Starts for Pumpkins\_18:  
(Start: 2 @8365 has 37 MA's), (5, 8434),

Gene: Reedo\_9 Start: 8309, Stop: 8425, Start Num: 2  
Candidate Starts for Reedo\_9:  
(Start: 2 @8309 has 37 MA's),

Gene: ShakeltOph\_8 Start: 6570, Stop: 6671, Start Num: 2  
Candidate Starts for ShakeltOph\_8:  
(Start: 2 @6570 has 37 MA's),

Gene: Simpson\_9 Start: 8263, Stop: 8373, Start Num: 2  
Candidate Starts for Simpson\_9:  
(Start: 2 @8263 has 37 MA's),

Gene: Snek\_9 Start: 7366, Stop: 7482, Start Num: 2  
Candidate Starts for Snek\_9:  
(Start: 2 @7366 has 37 MA's),

Gene: Sue2\_9 Start: 8280, Stop: 8396, Start Num: 1  
Candidate Starts for Sue2\_9:  
(1, 8280),

Gene: Tallboi\_9 Start: 8282, Stop: 8389, Start Num: 2  
Candidate Starts for Tallboi\_9:  
(Start: 2 @8282 has 37 MA's),

Gene: Tbone\_9 Start: 8259, Stop: 8369, Start Num: 2  
Candidate Starts for Tbone\_9:  
(Start: 2 @8259 has 37 MA's), (5, 8325),

Gene: TforTroy\_9 Start: 8391, Stop: 8504, Start Num: 2  
Candidate Starts for TforTroy\_9:  
(Start: 2 @8391 has 37 MA's), (5, 8457),

Gene: Tian\_9 Start: 8290, Stop: 8400, Start Num: 2  
Candidate Starts for Tian\_9:  
(Start: 2 @8290 has 37 MA's),

Gene: Tuck\_10 Start: 9308, Stop: 9439, Start Num: 2

Candidate Starts for Tuck\_10:  
(Start: 2 @9308 has 37 MA's), (5, 9374),

Gene: Turab\_9 Start: 8277, Stop: 8384, Start Num: 2  
Candidate Starts for Turab\_9:  
(Start: 2 @8277 has 37 MA's),

Gene: Tutumahutu\_9 Start: 8313, Stop: 8423, Start Num: 2  
Candidate Starts for Tutumahutu\_9:  
(Start: 2 @8313 has 37 MA's), (5, 8379),

Gene: Tweety19\_9 Start: 7365, Stop: 7481, Start Num: 2  
Candidate Starts for Tweety19\_9:  
(Start: 2 @7365 has 37 MA's),

Gene: VResidence\_9 Start: 8334, Stop: 8441, Start Num: 2  
Candidate Starts for VResidence\_9:  
(Start: 2 @8334 has 37 MA's), (5, 8400),

Gene: VroomVroom\_8 Start: 6582, Stop: 6683, Start Num: 2  
Candidate Starts for VroomVroom\_8:  
(Start: 2 @6582 has 37 MA's), (6, 6639),

Gene: Warda\_9 Start: 8259, Stop: 8369, Start Num: 2  
Candidate Starts for Warda\_9:  
(Start: 2 @8259 has 37 MA's), (5, 8325),

Gene: Wildwest\_10 Start: 9179, Stop: 9289, Start Num: 2  
Candidate Starts for Wildwest\_10:  
(Start: 2 @9179 has 37 MA's), (5, 9245), (8, 9266),

Gene: Yang\_9 Start: 8364, Stop: 8477, Start Num: 2  
Candidate Starts for Yang\_9:  
(Start: 2 @8364 has 37 MA's), (5, 8430),

Gene: YesChef\_9 Start: 8313, Stop: 8423, Start Num: 2  
Candidate Starts for YesChef\_9:  
(Start: 2 @8313 has 37 MA's), (5, 8379),