



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 3062 Report

This analysis was run 04/05/24 on database version 557.

Pham number 3062 has 26 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Blueberry\_45, Gambino\_48, Azula\_46, MissRona\_46
- Track 2 : JuJu\_49, CarolAnn\_47, Blino\_48
- Track 3 : PCoral7\_45, PrincePatrick\_44, Toast\_45
- Track 4 : Mellie\_42, ZiggyZoo\_45, Samba\_43, Malachai\_43, Begonia\_43, Utz\_38, Wisp\_42
- Track 5 : Fairfaxidum\_46
- Track 6 : Frokostdame\_46
- Track 7 : Fenry\_42
- Track 8 : Wocket\_44, KappaFarmDelta\_45
- Track 9 : Murp\_46
- Track 10 : Jalammah\_47
- Track 11 : William\_46
- Track 12 : Lysidious\_43

### ***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 13 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Azula\_46, Blino\_48, Blueberry\_45, CarolAnn\_47, Fenry\_42, Frokostdame\_46, Gambino\_48, Jalammah\_47, JuJu\_49, KappaFarmDelta\_45, Lysidious\_43, MissRona\_46, Wocket\_44,

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:

- Begonia\_43, Fairfaxidum\_46, Malachai\_43, Mellie\_42, Murp\_46, PCoral7\_45, PrincePatrick\_44, Samba\_43, Toast\_45, Utz\_38, William\_46, Wisp\_42, ZiggyZoo\_45,

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

Start 7:

- Found in 7 of 26 ( 26.9% ) of genes in pham
- Manual Annotations of this start: 6 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Begonia\_43 (CV), Malachai\_43 (CV), Mellie\_42 (CV), Samba\_43 (CV), Utz\_38 (CV), Wisp\_42 (CV), ZiggyZoo\_45 (CV),

#### Start 8:

- Found in 13 of 26 ( 50.0% ) of genes in pham
- Manual Annotations of this start: 13 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Azula\_46 (CV), Blino\_48 (CV), Blueberry\_45 (CV), CarolAnn\_47 (CV), Fenry\_42 (CV), Frokostdame\_46 (CV), Gambino\_48 (CV), Jalammah\_47 (CV), JuJu\_49 (CV), KappaFarmDelta\_45 (CV), Lysidious\_43 (CV), MissRona\_46 (CV), Wocket\_44 (CV),

#### Start 9:

- Found in 1 of 26 ( 3.8% ) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Murp\_46 (CV),

#### Start 10:

- Found in 5 of 26 ( 19.2% ) of genes in pham
- Manual Annotations of this start: 4 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fairfaxidum\_46 (CV), PCoral7\_45 (CV), PrincePatrick\_44 (CV), Toast\_45 (CV), William\_46 (CV),

### Summary by clusters:

There is one cluster represented in this pham: CV

Info for manual annotations of cluster CV:

- Start number 7 was manually annotated 6 times for cluster CV.
- Start number 8 was manually annotated 13 times for cluster CV.
- Start number 9 was manually annotated 1 time for cluster CV.
- Start number 10 was manually annotated 4 times for cluster CV.

### Gene Information:

Gene: Azula\_46 Start: 35025, Stop: 35198, Start Num: 8

Candidate Starts for Azula\_46:

(Start: 8 @35025 has 13 MA's),

Gene: Begonia\_43 Start: 35129, Stop: 35308, Start Num: 7

Candidate Starts for Begonia\_43:

(Start: 7 @35129 has 6 MA's),

Gene: Blino\_48 Start: 38318, Stop: 38494, Start Num: 8

Candidate Starts for Blino\_48:

(5, 38282), (Start: 8 @38318 has 13 MA's),

Gene: Blueberry\_45 Start: 35025, Stop: 35198, Start Num: 8  
Candidate Starts for Blueberry\_45:  
(Start: 8 @35025 has 13 MA's),

Gene: CarolAnn\_47 Start: 38317, Stop: 38493, Start Num: 8  
Candidate Starts for CarolAnn\_47:  
(5, 38281), (Start: 8 @38317 has 13 MA's),

Gene: Fairfaxidum\_46 Start: 35753, Stop: 35917, Start Num: 10  
Candidate Starts for Fairfaxidum\_46:  
(4, 35624), (6, 35708), (Start: 10 @35753 has 4 MA's), (12, 35819),

Gene: Fenry\_42 Start: 34029, Stop: 34205, Start Num: 8  
Candidate Starts for Fenry\_42:  
(Start: 8 @34029 has 13 MA's),

Gene: Frokostdame\_46 Start: 34763, Stop: 34939, Start Num: 8  
Candidate Starts for Frokostdame\_46:  
(1, 34346), (2, 34412), (Start: 8 @34763 has 13 MA's), (11, 34802),

Gene: Gambino\_48 Start: 35025, Stop: 35198, Start Num: 8  
Candidate Starts for Gambino\_48:  
(Start: 8 @35025 has 13 MA's),

Gene: Jalammah\_47 Start: 35342, Stop: 35518, Start Num: 8  
Candidate Starts for Jalammah\_47:  
(Start: 8 @35342 has 13 MA's),

Gene: JuJu\_49 Start: 36104, Stop: 36280, Start Num: 8  
Candidate Starts for JuJu\_49:  
(5, 36068), (Start: 8 @36104 has 13 MA's),

Gene: KappaFarmDelta\_45 Start: 32970, Stop: 33143, Start Num: 8  
Candidate Starts for KappaFarmDelta\_45:  
(Start: 8 @32970 has 13 MA's),

Gene: Lysidious\_43 Start: 34068, Stop: 34247, Start Num: 8  
Candidate Starts for Lysidious\_43:  
(Start: 8 @34068 has 13 MA's), (11, 34107),

Gene: Malachai\_43 Start: 35129, Stop: 35308, Start Num: 7  
Candidate Starts for Malachai\_43:  
(Start: 7 @35129 has 6 MA's),

Gene: Mellie\_42 Start: 32848, Stop: 33027, Start Num: 7  
Candidate Starts for Mellie\_42:  
(Start: 7 @32848 has 6 MA's),

Gene: MissRona\_46 Start: 35026, Stop: 35199, Start Num: 8  
Candidate Starts for MissRona\_46:  
(Start: 8 @35026 has 13 MA's),

Gene: Murp\_46 Start: 36602, Stop: 36769, Start Num: 9  
Candidate Starts for Murp\_46:  
(Start: 9 @36602 has 1 MA's),

Gene: PCoral7\_45 Start: 35171, Stop: 35335, Start Num: 10  
Candidate Starts for PCoral7\_45:  
(4, 35042), (Start: 10 @35171 has 4 MA's), (12, 35237),

Gene: PrincePatrick\_44 Start: 33524, Stop: 33688, Start Num: 10  
Candidate Starts for PrincePatrick\_44:  
(4, 33395), (Start: 10 @33524 has 4 MA's), (12, 33590),

Gene: Samba\_43 Start: 35238, Stop: 35417, Start Num: 7  
Candidate Starts for Samba\_43:  
(Start: 7 @35238 has 6 MA's),

Gene: Toast\_45 Start: 35171, Stop: 35335, Start Num: 10  
Candidate Starts for Toast\_45:  
(4, 35042), (Start: 10 @35171 has 4 MA's), (12, 35237),

Gene: Utz\_38 Start: 33928, Stop: 34107, Start Num: 7  
Candidate Starts for Utz\_38:  
(Start: 7 @33928 has 6 MA's),

Gene: William\_46 Start: 35209, Stop: 35373, Start Num: 10  
Candidate Starts for William\_46:  
(3, 35059), (4, 35080), (Start: 10 @35209 has 4 MA's), (12, 35275),

Gene: Wisp\_42 Start: 33979, Stop: 34158, Start Num: 7  
Candidate Starts for Wisp\_42:  
(Start: 7 @33979 has 6 MA's),

Gene: Wocket\_44 Start: 33135, Stop: 33308, Start Num: 8  
Candidate Starts for Wocket\_44:  
(Start: 8 @33135 has 13 MA's),

Gene: ZiggyZoo\_45 Start: 35199, Stop: 35378, Start Num: 7  
Candidate Starts for ZiggyZoo\_45:  
(Start: 7 @35199 has 6 MA's),