

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 87468 Report

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

Pham number 87468 has 12 members, 4 are drafts.

Phages represented in each track:

• Track 1 : Sixama 187

• Track 2 : MulchSalad 68

Track 3 : EleanorGeorge\_72

Track 4 : Frankie\_75, LilSpotty\_69

• Track 5 : Piper2020 74

Track 6 : Whouxphf\_67

• Track 7 : Bosection 6 54

Track 8 : Scitech\_48

• Track 9 : Charlie 54

• Track 10 : Tortellini 61

Track 11 : GMA4\_39

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

The start number called the most often in the published annotations is 4, it was called in 4 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Bosection6\_54, Charlie\_54, Frankie\_75, LilSpotty\_69, MulchSalad\_68, Piper2020\_74, Scitech\_48,

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

Tortellini\_61,

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

EleanorGeorge\_72, GMA4\_39, Sixama\_187, Whouxphf\_67,

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

#### Start 1:

- Found in 1 of 12 (8.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA4\_39 (singleton),

#### Start 4:

- Found in 8 of 12 (66.7%) of genes in pham
- Manual Annotations of this start: 4 of 8
- Called 87.5% of time when present
- Phage (with cluster) where this start called: Bosection6\_54 (N), Charlie\_54 (N), Frankie\_75 (F1), LilSpotty\_69 (singleton), MulchSalad\_68 (F), Piper2020\_74 (F1), Scitech\_48 (N),

#### Start 7:

- Found in 1 of 12 (8.3%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sixama\_187 (DS),

#### Start 11:

- Found in 2 of 12 (16.7%) of genes in pham
- Manual Annotations of this start: 2 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EleanorGeorge\_72 (F1), Whouxphf\_67 (F1),

#### Start 12:

- Found in 8 of 12 (66.7%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Tortellini\_61 (P2),

### Summary by clusters:

There are 6 clusters represented in this pham: P2, F1, singleton, F, N, DS,

Info for manual annotations of cluster DS:

•Start number 7 was manually annotated 1 time for cluster DS.

Info for manual annotations of cluster F1:

- •Start number 4 was manually annotated 2 times for cluster F1.
- •Start number 11 was manually annotated 2 times for cluster F1.

Info for manual annotations of cluster N:

•Start number 4 was manually annotated 1 time for cluster N.

Info for manual annotations of cluster P2:

•Start number 12 was manually annotated 1 time for cluster P2.

#### Gene Information:

Gene: Bosection6\_54 Start: 34777, Stop: 35097, Start Num: 4

Candidate Starts for Bosection6 54:

(Start: 4 @34777 has 4 MA's), (Start: 12 @34891 has 1 MA's), (17, 34960), (18, 34972), (19, 34981), (20, 34987), (23, 35035),

Gene: Charlie\_54 Start: 34401, Stop: 34721, Start Num: 4

Candidate Starts for Charlie\_54:

(3, 34398), (Start: 4 @34401 has 4 MA's), (9, 34479), (Start: 12 @34515 has 1 MA's), (17, 34584), (18, 34596), (19, 34605), (20, 34611), (23, 34659),

Gene: EleanorGeorge\_72 Start: 45777, Stop: 45989, Start Num: 11

Candidate Starts for EleanorGeorge\_72:

(Start: 11 @45777 has 2 MA's), (18, 45867), (19, 45876), (20, 45882), (22, 45918), (24, 45942),

Gene: Frankie\_75 Start: 45665, Stop: 45985, Start Num: 4

Candidate Starts for Frankie 75:

(3, 45662), (Start: 4 @45665 has 4 MA's), (9, 45743), (10, 45752), (Start: 12 @45779 has 1 MA's), (14, 45809), (17, 45848), (18, 45860), (19, 45869), (23, 45923),

Gene: GMA4\_39 Start: 29757, Stop: 30101, Start Num: 1

Candidate Starts for GMA4 39:

(1, 29757), (3, 29772), (8, 29844), (13, 29922), (14, 29934), (16, 29970), (18, 29988), (19, 29997), (21, 30018), (25, 30090),

Gene: LilSpotty\_69 Start: 42065, Stop: 42385, Start Num: 4

Candidate Starts for LilSpotty\_69:

(3, 42062), (Start: 4 @ 42065 has 4 MA's), (9, 42143), (10, 42152), (Start: 12 @ 42179 has 1 MA's), (14, 42209), (17, 42248), (18, 42260), (19, 42269), (23, 42323),

Gene: MulchSalad 68 Start: 41154, Stop: 41474, Start Num: 4

Candidate Starts for MulchSalad\_68:

(Start: 4 @41154 has 4 MA's), (Start: 12 @41268 has 1 MA's), (17, 41337), (18, 41349), (19, 41358), (20, 41364), (23, 41412),

Gene: Piper2020\_74 Start: 44604, Stop: 44924, Start Num: 4

Candidate Starts for Piper2020\_74:

(3, 44601), (Start: 4 @44604 has 4 MA's), (Start: 12 @44718 has 1 MA's), (17, 44787), (18, 44799), (19, 44808), (20, 44814), (23, 44862),

Gene: Scitech\_48 Start: 33234, Stop: 33554, Start Num: 4

Candidate Starts for Scitech\_48:

(3, 33231), (Start: 4 @33234 has 4 MA's), (Start: 12 @33348 has 1 MA's), (17, 33417), (18, 33429), (19, 33438), (20, 33444), (23, 33492),

Gene: Sixama\_187 Start: 108291, Stop: 108040, Start Num: 7

Candidate Starts for Sixama 187:

(6, 108303), (Start: 7 @108291 has 1 MA's), (15, 108198),

Gene: Tortellini\_61 Start: 42938, Stop: 43144, Start Num: 12

Candidate Starts for Tortellini\_61:

(3, 42821), (Start: 4 @ 42824 has 4 MA's), (9, 42902), (Start: 12 @ 42938 has 1 MA's), (17, 43007), (18, 43019), (19, 43028), (20, 43034),

Gene: Whouxphf 67 Start: 45276, Stop: 45488, Start Num: 11

Candidate Starts for Whouxphf\_67:

(2, 45153), (5, 45195), (Start: 11 @45276 has 2 MA's), (19, 45375), (20, 45381),