

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 153699 Report

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

Pham number 153699 has 11 members, 4 are drafts.

Phages represented in each track:

• Track 1 : Claus\_71

Track 2 : Tourach\_69

Track 3 : Baoshan\_68

Track 4: MiniMac\_72, MiniLon\_72, Lolly9\_68

• Track 5 : Whirlwind\_69

Track 6 : Ellson\_67

Track 7 : Douge\_68, Chaser\_66

Track 8 : DyoEdafos\_72

# 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 6 of the 7 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Baoshan\_68, Chaser\_66, Claus\_71, Douge\_68, Ellson\_67, Lolly9\_68, MiniLon\_72, MiniMac\_72, Tourach\_69, Whirlwind\_69,

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

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

DyoEdafos\_72,

## Summary by start number:

#### Start 3:

- Found in 1 of 11 (9.1%) 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: DyoEdafos\_72 (L4),

#### Start 4:

• Found in 10 of 11 (90.9%) of genes in pham

- Manual Annotations of this start: 6 of 7
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Baoshan\_68 (L2), Chaser\_66 (L4), Claus\_71 (L2), Douge\_68 (L4), Ellson\_67 (L3), Lolly9\_68 (L3), MiniLon\_72 (L3), MiniMac\_72 (L3), Tourach\_69 (L2), Whirlwind\_69 (L3),

### **Summary by clusters:**

There are 3 clusters represented in this pham: L4, L2, L3,

Info for manual annotations of cluster L2:

•Start number 4 was manually annotated 1 time for cluster L2.

Info for manual annotations of cluster L3:

•Start number 4 was manually annotated 4 times for cluster L3.

Info for manual annotations of cluster L4:

- •Start number 3 was manually annotated 1 time for cluster L4.
- •Start number 4 was manually annotated 1 time for cluster L4.

#### Gene Information:

Gene: Baoshan\_68 Start: 47526, Stop: 47816, Start Num: 4

Candidate Starts for Baoshan 68:

(Start: 4 @ 47526 has 6 MA's), (5, 47532), (7, 47559), (8, 47595), (9, 47613), (11, 47637), (15, 47709), (21, 47751), (24, 47757),

Gene: Chaser\_66 Start: 46254, Stop: 46541, Start Num: 4

Candidate Starts for Chaser\_66:

(Start: 4 @46254 has 6 MA's), (7, 46290), (9, 46344), (13, 46407), (16, 46443), (19, 46464), (20, 46467),

Gene: Claus 71 Start: 47664, Stop: 47954, Start Num: 4

Candidate Starts for Claus\_71:

(Start: 4 @ 47664 has 6 MA's), (5, 47670), (7, 47697), (8, 47733), (9, 47751), (11, 47775), (15, 47847), (21, 47889), (23, 47892), (24, 47895),

Gene: Douge 68 Start: 46254, Stop: 46541, Start Num: 4

Candidate Starts for Douge 68:

(Start: 4 @ 46254 has 6 MA's), (7, 46290), (9, 46344), (13, 46407), (16, 46443), (19, 46464), (20, 46467),

Gene: DyoEdafos\_72 Start: 46743, Stop: 47033, Start Num: 3

Candidate Starts for DyoEdafos\_72:

(1, 46710), (2, 46725), (Start: 3 @46743 has 1 MA's), (7, 46782), (12, 46896), (13, 46899), (17, 46941), (22, 46980),

Gene: Ellson 67 Start: 47978, Stop: 48265, Start Num: 4

Candidate Starts for Ellson 67:

(1, 47942), (Start: 4 @ 47978 has 6 MA's), (7, 48011), (8, 48047), (12, 48125), (14, 48152), (16, 48164),

Gene: Lolly9\_68 Start: 47737, Stop: 48036, Start Num: 4

Candidate Starts for Lolly9\_68:

(Start: 4 @ 47737 has 6 MA's), (6, 47770), (7, 47773), (8, 47809), (10, 47842), (18, 47944), (24, 47974), (25, 47989),

Gene: MiniLon\_72 Start: 47738, Stop: 48037, Start Num: 4

Candidate Starts for MiniLon 72:

(Start: 4 @47738 has 6 MA's), (6, 47771), (7, 47774), (8, 47810), (10, 47843), (18, 47945), (24, 47975), (25, 47990),

Gene: MiniMac\_72 Start: 47736, Stop: 48035, Start Num: 4

Candidate Starts for MiniMac\_72:

(Start: 4 @47736 has 6 MA's), (6, 47769), (7, 47772), (8, 47808), (10, 47841), (18, 47943), (24, 47973), (25, 47988),

Gene: Tourach\_69 Start: 47665, Stop: 47955, Start Num: 4

Candidate Starts for Tourach\_69:

(Start: 4 @47665 has 6 MA's), (7, 47698), (8, 47734), (9, 47752), (11, 47776), (21, 47890), (23, 47893), (24, 47896), (25, 47911),

Gene: Whirlwind\_69 Start: 47730, Stop: 48017, Start Num: 4

Candidate Starts for Whirlwind 69:

(1, 47694), (Start: 4 @47730 has 6 MA's), (7, 47763), (8, 47799), (12, 47877), (13, 47880), (14, 47904),