



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 295083 Report

This analysis was run 04/18/26 on database version 643.

Pham number 295083 has 22 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Ellson\_3, Whirlwind\_4, LiyuLake\_3, Moostard\_3
- Track 2 : Krypton555\_3, Bellis\_3, Snenia\_3, MsGreen\_3, Clautastrophe\_3, Lumos\_3, DuncansLeg\_3, Jobypre\_3, Red305\_3, Kingsolomon\_3, Jubie\_3, Nicholas\_3, TriFive\_3
- Track 3 : Samty\_3
- Track 4 : MiniLon\_3
- Track 5 : Lolly9\_3, MiniMac\_3
- Track 6 : Finnry\_3

### ***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 13 of the 19 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bellis\_3, Clautastrophe\_3, DuncansLeg\_3, Finnry\_3, Jobypre\_3, Jubie\_3, Kingsolomon\_3, Krypton555\_3, Lumos\_3, MsGreen\_3, Nicholas\_3, Red305\_3, Snenia\_3, TriFive\_3,

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

- Ellson\_3, LiyuLake\_3, Moostard\_3, Samty\_3, Whirlwind\_4,

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

- Lolly9\_3, MiniLon\_3, MiniMac\_3,

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

Start 1:

- Found in 3 of 22 ( 13.6% ) of genes in pham
- Manual Annotations of this start: 2 of 19
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Lolly9\_3 (L3), MiniMac\_3 (L3),

Start 2:

- Found in 19 of 22 ( 86.4% ) of genes in pham
- Manual Annotations of this start: 13 of 19
- Called 73.7% of time when present
- Phage (with cluster) where this start called: Bellis\_3 (L3), Clautastrophe\_3 (L3), DuncansLeg\_3 (L3), Finnry\_3 (L3), Jobypre\_3 (L3), Jubie\_3 (L3), Kingsolomon\_3 (L3), Krypton555\_3 (L3), Lumos\_3 (L3), MsGreen\_3 (L3), Nicholas\_3 (L3), Red305\_3 (L3), Snenia\_3 (L3), TriFive\_3 (L3),

#### Start 3:

- Found in 19 of 22 ( 86.4% ) of genes in pham
- Manual Annotations of this start: 2 of 19
- Called 21.1% of time when present
- Phage (with cluster) where this start called: Ellson\_3 (L3), LiyuLake\_3 (L3), Moostard\_3 (L3), Whirlwind\_4 (L3),

#### Start 4:

- Found in 22 of 22 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 2 of 19
- Called 9.1% of time when present
- Phage (with cluster) where this start called: MiniLon\_3 (L3), Samty\_3 (L3),

### Summary by clusters:

There is one cluster represented in this pham: L3

Info for manual annotations of cluster L3:

- Start number 1 was manually annotated 2 times for cluster L3.
- Start number 2 was manually annotated 13 times for cluster L3.
- Start number 3 was manually annotated 2 times for cluster L3.
- Start number 4 was manually annotated 2 times for cluster L3.

### **Gene Information:**

Gene: Bellis\_3 Start: 850, Stop: 1035, Start Num: 2

Candidate Starts for Bellis\_3:

(Start: 2 @850 has 13 MA's), (Start: 3 @859 has 2 MA's), (Start: 4 @862 has 2 MA's), (5, 997), (6, 1021),

Gene: Clautastrophe\_3 Start: 860, Stop: 1048, Start Num: 2

Candidate Starts for Clautastrophe\_3:

(Start: 2 @860 has 13 MA's), (Start: 3 @869 has 2 MA's), (Start: 4 @872 has 2 MA's), (5, 1007), (6, 1031),

Gene: DuncansLeg\_3 Start: 863, Stop: 1051, Start Num: 2

Candidate Starts for DuncansLeg\_3:

(Start: 2 @863 has 13 MA's), (Start: 3 @872 has 2 MA's), (Start: 4 @875 has 2 MA's), (5, 1010), (6, 1034),

Gene: Ellson\_3 Start: 881, Stop: 1060, Start Num: 3

Candidate Starts for Ellson\_3:

(Start: 2 @872 has 13 MA's), (Start: 3 @881 has 2 MA's), (Start: 4 @884 has 2 MA's), (5, 1019), (6, 1043),

Gene: Finnry\_3 Start: 851, Stop: 1036, Start Num: 2

Candidate Starts for Finnry\_3:

(Start: 2 @851 has 13 MA's), (Start: 3 @860 has 2 MA's), (Start: 4 @863 has 2 MA's), (5, 998), (6, 1022),

Gene: Jobypre\_3 Start: 860, Stop: 1048, Start Num: 2

Candidate Starts for Jobypre\_3:

(Start: 2 @860 has 13 MA's), (Start: 3 @869 has 2 MA's), (Start: 4 @872 has 2 MA's), (5, 1007), (6, 1031),

Gene: Jubie\_3 Start: 860, Stop: 1048, Start Num: 2

Candidate Starts for Jubie\_3:

(Start: 2 @860 has 13 MA's), (Start: 3 @869 has 2 MA's), (Start: 4 @872 has 2 MA's), (5, 1007), (6, 1031),

Gene: Kingsolomon\_3 Start: 860, Stop: 1048, Start Num: 2

Candidate Starts for Kingsolomon\_3:

(Start: 2 @860 has 13 MA's), (Start: 3 @869 has 2 MA's), (Start: 4 @872 has 2 MA's), (5, 1007), (6, 1031),

Gene: Krypton555\_3 Start: 849, Stop: 1034, Start Num: 2

Candidate Starts for Krypton555\_3:

(Start: 2 @849 has 13 MA's), (Start: 3 @858 has 2 MA's), (Start: 4 @861 has 2 MA's), (5, 996), (6, 1020),

Gene: LiyuLake\_3 Start: 872, Stop: 1051, Start Num: 3

Candidate Starts for LiyuLake\_3:

(Start: 2 @863 has 13 MA's), (Start: 3 @872 has 2 MA's), (Start: 4 @875 has 2 MA's), (5, 1010), (6, 1034),

Gene: Lolly9\_3 Start: 857, Stop: 1045, Start Num: 1

Candidate Starts for Lolly9\_3:

(Start: 1 @857 has 2 MA's), (Start: 4 @869 has 2 MA's), (5, 1007), (6, 1031),

Gene: Lumos\_3 Start: 860, Stop: 1048, Start Num: 2

Candidate Starts for Lumos\_3:

(Start: 2 @860 has 13 MA's), (Start: 3 @869 has 2 MA's), (Start: 4 @872 has 2 MA's), (5, 1007), (6, 1031),

Gene: MiniLon\_3 Start: 869, Stop: 1045, Start Num: 4

Candidate Starts for MiniLon\_3:

(Start: 1 @857 has 2 MA's), (Start: 4 @869 has 2 MA's), (5, 1007), (6, 1031),

Gene: MiniMac\_3 Start: 857, Stop: 1045, Start Num: 1

Candidate Starts for MiniMac\_3:

(Start: 1 @857 has 2 MA's), (Start: 4 @869 has 2 MA's), (5, 1007), (6, 1031),

Gene: Moostard\_3 Start: 859, Stop: 1035, Start Num: 3

Candidate Starts for Moostard\_3:

(Start: 2 @850 has 13 MA's), (Start: 3 @859 has 2 MA's), (Start: 4 @862 has 2 MA's), (5, 997), (6, 1021),

Gene: MsGreen\_3 Start: 860, Stop: 1048, Start Num: 2

Candidate Starts for MsGreen\_3:

(Start: 2 @860 has 13 MA's), (Start: 3 @869 has 2 MA's), (Start: 4 @872 has 2 MA's), (5, 1007), (6, 1031),

Gene: Nicholas\_3 Start: 860, Stop: 1048, Start Num: 2

Candidate Starts for Nicholas\_3:

(Start: 2 @860 has 13 MA's), (Start: 3 @869 has 2 MA's), (Start: 4 @872 has 2 MA's), (5, 1007), (6, 1031),

Gene: Red305\_3 Start: 860, Stop: 1048, Start Num: 2

Candidate Starts for Red305\_3:

(Start: 2 @860 has 13 MA's), (Start: 3 @869 has 2 MA's), (Start: 4 @872 has 2 MA's), (5, 1007), (6, 1031),

Gene: Samty\_3 Start: 862, Stop: 1035, Start Num: 4

Candidate Starts for Samty\_3:

(Start: 2 @850 has 13 MA's), (Start: 3 @859 has 2 MA's), (Start: 4 @862 has 2 MA's), (5, 997), (6, 1021),

Gene: Snenia\_3 Start: 860, Stop: 1048, Start Num: 2

Candidate Starts for Snenia\_3:

(Start: 2 @860 has 13 MA's), (Start: 3 @869 has 2 MA's), (Start: 4 @872 has 2 MA's), (5, 1007), (6, 1031),

Gene: TriFive\_3 Start: 860, Stop: 1048, Start Num: 2

Candidate Starts for TriFive\_3:

(Start: 2 @860 has 13 MA's), (Start: 3 @869 has 2 MA's), (Start: 4 @872 has 2 MA's), (5, 1007), (6, 1031),

Gene: Whirlwind\_4 Start: 858, Stop: 1034, Start Num: 3

Candidate Starts for Whirlwind\_4:

(Start: 2 @849 has 13 MA's), (Start: 3 @858 has 2 MA's), (Start: 4 @861 has 2 MA's), (5, 996), (6, 1020),