

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 4831 Report

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

Pham number 4831 has 15 members, 1 are drafts.

Phages represented in each track:

• Track 1 : Paraselene 59

Track 2: CaptainTrips 83, MinionDave 79, Wachhund 80

Track 3 : EleanorGeorge\_81, SG4\_85

Track 4 : MadMen\_83

• Track 5 : Mahavrat 80

Track 6 : Ibhubesi\_82

Track 7: Whatsapiecost 75, Zeuska 62

Track 8 : Juniper1\_81

Track 9 : Yoshi\_98

Track 10 : ThetaBob\_84

• Track 11 : MooMoo\_79

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

The start number called the most often in the published annotations is 9, it was called in 14 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• CaptainTrips\_83, EleanorGeorge\_81, Ibhubesi\_82, MadMen\_83, Mahavrat\_80, MinionDave\_79, MooMoo\_79, Paraselene\_59, SG4\_85, ThetaBob\_84, Wachhund\_80, Whatsapiecost\_75, Yoshi\_98, Zeuska\_62,

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

Juniper1\_81,

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

### Summary by start number:

#### Start 9:

- Found in 15 of 15 (100.0%) of genes in pham
- Manual Annotations of this start: 14 of 14
- Called 93.3% of time when present

Phage (with cluster) where this start called: CaptainTrips\_83 (F1),
 EleanorGeorge\_81 (F1), Ibhubesi\_82 (F1), MadMen\_83 (F1), Mahavrat\_80 (F1),
 MinionDave\_79 (F1), MooMoo\_79 (singleton), Paraselene\_59 (A1), SG4\_85 (F1),
 ThetaBob\_84 (F4), Wachhund\_80 (F1), Whatsapiecost\_75 (F1), Yoshi\_98 (F2),
 Zeuska\_62 (A1),

### Start 10:

- Found in 11 of 15 (73.3%) of genes in pham
- No Manual Annotations of this start.
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Juniper1\_81 (F1),

## **Summary by clusters:**

There are 5 clusters represented in this pham: A1, F1, singleton, F4, F2,

Info for manual annotations of cluster A1:

•Start number 9 was manually annotated 2 times for cluster A1.

Info for manual annotations of cluster F1:

•Start number 9 was manually annotated 9 times for cluster F1.

Info for manual annotations of cluster F2:

•Start number 9 was manually annotated 1 time for cluster F2.

Info for manual annotations of cluster F4:

•Start number 9 was manually annotated 1 time for cluster F4.

#### Gene Information:

```
Gene: CaptainTrips_83 Start: 49097, Stop: 49279, Start Num: 9
Candidate Starts for CaptainTrips_83:
(2, 49025), (Start: 9 @49097 has 14 MA's), (10, 49136), (11, 49160), (13, 49265),
```

```
Gene: EleanorGeorge_81 Start: 49133, Stop: 49315, Start Num: 9
Candidate Starts for EleanorGeorge_81:
(8, 49121), (Start: 9 @49133 has 14 MA's), (11, 49196), (13, 49301),
```

```
Gene: Ibhubesi_82 Start: 47835, Stop: 48017, Start Num: 9
Candidate Starts for Ibhubesi_82:
(Start: 9 @47835 has 14 MA's), (10, 47874), (11, 47898), (13, 48003),
```

```
Gene: Juniper1_81 Start: 48568, Stop: 48711, Start Num: 10 Candidate Starts for Juniper1_81: (3, 48472), (6, 48502), (7, 48505), (Start: 9 @48529 has 14 MA's), (10, 48568), (11, 48592), (13, 48697),
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```
Gene: MadMen_83 Start: 48842, Stop: 49024, Start Num: 9
Candidate Starts for MadMen_83:
(4, 48794), (5, 48800), (Start: 9 @48842 has 14 MA's), (10, 48881), (11, 48905), (13, 49010),
```

Gene: Mahavrat\_80 Start: 47652, Stop: 47834, Start Num: 9

Candidate Starts for Mahavrat\_80:

(3, 47595), (6, 47625), (7, 47628), (Start: 9 @47652 has 14 MA's), (10, 47691), (11, 47715), (13, 47820),

Gene: MinionDave\_79 Start: 49097, Stop: 49279, Start Num: 9

Candidate Starts for MinionDave\_79:

(2, 49025), (Start: 9 @ 49097 has 14 MA's), (10, 49136), (11, 49160), (13, 49265),

Gene: MooMoo\_79 Start: 47928, Stop: 48110, Start Num: 9

Candidate Starts for MooMoo 79:

(Start: 9 @ 47928 has 14 MA's), (10, 47967), (11, 47991), (12, 48024),

Gene: Paraselene\_59 Start: 41074, Stop: 40892, Start Num: 9

Candidate Starts for Paraselene\_59:

(Start: 9 @41074 has 14 MA's), (10, 41035), (11, 41011), (13, 40906),

Gene: SG4\_85 Start: 50695, Stop: 50877, Start Num: 9

Candidate Starts for SG4 85:

(8, 50683), (Start: 9 @ 50695 has 14 MA's), (11, 50758), (13, 50863),

Gene: ThetaBob\_84 Start: 48759, Stop: 48941, Start Num: 9

Candidate Starts for ThetaBob 84:

(1, 48645), (Start: 9 @ 48759 has 14 MA's), (10, 48798), (11, 48822), (12, 48855),

Gene: Wachhund\_80 Start: 46762, Stop: 46944, Start Num: 9

Candidate Starts for Wachhund\_80:

(2, 46690), (Start: 9 @ 46762 has 14 MA's), (10, 46801), (11, 46825), (13, 46930),

Gene: Whatsapiecost\_75 Start: 44610, Stop: 44792, Start Num: 9

Candidate Starts for Whatsapiecost\_75:

(8, 44598), (Start: 9 @ 44610 has 14 MA's), (11, 44673), (13, 44778),

Gene: Yoshi 98 Start: 51196, Stop: 51378, Start Num: 9

Candidate Starts for Yoshi\_98:

(Start: 9 @51196 has 14 MA's), (10, 51235), (11, 51259), (13, 51364),

Gene: Zeuska\_62 Start: 42399, Stop: 42217, Start Num: 9

Candidate Starts for Zeuska\_62:

(8, 42411), (Start: 9 @ 42399 has 14 MA's), (11, 42336), (13, 42231),