

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 4641 Report

This analysis was run 07/09/24 on database version 566.

Pham number 4641 has 17 members, 2 are drafts.

Phages represented in each track:

Track 1: Immanuel3\_84, HaugeAnator\_86, Olicious\_86, ZooBear\_86

• Track 2: Vorvolakos\_88, Gremlin23\_87, Fabian\_86, FlowerPower\_87, Geostin\_82, RetrieverFever 87

• Track 3 : Treat 86

Track 4 : JPandJE 85

• Track 5 : Romero\_86

Track 6 : Manuel\_83

Track 7 : ToriToki\_86

Track 8 : Dennebes\_91, Rideau\_92

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

The start number called the most often in the published annotations is 3, it was called in 14 of the 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Dennebes\_91, Fabian\_86, FlowerPower\_87, Geostin\_82, Gremlin23\_87, HaugeAnator\_86, Immanuel3\_84, JPandJE\_85, Olicious\_86, RetrieverFever\_87, Rideau\_92, Romero\_86, ToriToki\_86, Treat\_86, Vorvolakos\_88, ZooBear\_86,

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:

Manuel\_83,

## Summary by start number:

#### Start 2:

- Found in 1 of 17 (5.9%) of genes in pham
- Manual Annotations of this start: 1 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Manuel 83 (BF).

#### Start 3:

- Found in 16 of 17 (94.1%) of genes in pham
- Manual Annotations of this start: 14 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dennebes\_91 (BF), Fabian\_86 (BF), FlowerPower\_87 (BF), Geostin\_82 (BF), Gremlin23\_87 (BF), HaugeAnator\_86 (BF), Immanuel3\_84 (BF), JPandJE\_85 (BF), Olicious\_86 (BF), RetrieverFever\_87 (BF), Rideau\_92 (BF), Romero\_86 (BF), ToriToki\_86 (BF), Treat\_86 (BF), Vorvolakos\_88 (BF), ZooBear\_86 (BF),

### **Summary by clusters:**

There is one cluster represented in this pham: BF

Info for manual annotations of cluster BF:

- •Start number 2 was manually annotated 1 time for cluster BF.
- •Start number 3 was manually annotated 14 times for cluster BF.

### Gene Information:

Gene: Dennebes\_91 Start: 44731, Stop: 44477, Start Num: 3

Candidate Starts for Dennebes 91:

(Start: 3 @44731 has 14 MA's), (7, 44638), (8, 44587), (9, 44575), (10, 44566), (15, 44488),

Gene: Fabian 86 Start: 45118, Stop: 44864, Start Num: 3

Candidate Starts for Fabian\_86:

(Start: 3 @ 45118 has 14 MA's), (6, 45046), (8, 44974), (9, 44962), (10, 44953), (15, 44875),

Gene: FlowerPower\_87 Start: 44746, Stop: 44492, Start Num: 3

Candidate Starts for FlowerPower 87:

(Start: 3 @ 44746 has 14 MA's), (6, 44674), (8, 44602), (9, 44590), (10, 44581), (15, 44503),

Gene: Geostin 82 Start: 44788, Stop: 44534, Start Num: 3

Candidate Starts for Geostin\_82:

(Start: 3 @44788 has 14 MA's), (6, 44716), (8, 44644), (9, 44632), (10, 44623), (15, 44545),

Gene: Gremlin23 87 Start: 44788, Stop: 44534, Start Num: 3

Candidate Starts for Gremlin23 87:

(Start: 3 @ 44788 has 14 MA's), (6, 44716), (8, 44644), (9, 44632), (10, 44623), (15, 44545),

Gene: HaugeAnator 86 Start: 44656, Stop: 44396, Start Num: 3

Candidate Starts for HaugeAnator\_86:

(1, 44662), (Start: 3 @ 44656 has 14 MA's), (4, 44635), (13, 44449), (14, 44431),

Gene: Immanuel3\_84 Start: 44614, Stop: 44354, Start Num: 3

Candidate Starts for Immanuel3 84:

(1, 44620), (Start: 3 @ 44614 has 14 MA's), (4, 44593), (13, 44407), (14, 44389),

Gene: JPandJE\_85 Start: 44959, Stop: 44699, Start Num: 3

Candidate Starts for JPandJE 85:

(1, 44965), (Start: 3 @44959 has 14 MA's), (4, 44938), (11, 44767), (12, 44755), (13, 44752), (14, 44734),

Gene: Manuel\_83 Start: 43627, Stop: 43376, Start Num: 2

Candidate Starts for Manuel\_83:

(Start: 2 @ 43627 has 1 MA's), (5, 43561), (8, 43483), (9, 43471), (10, 43462), (15, 43384),

Gene: Olicious 86 Start: 44660, Stop: 44400, Start Num: 3

Candidate Starts for Olicious\_86:

(1, 44666), (Start: 3 @ 44660 has 14 MA's), (4, 44639), (13, 44453), (14, 44435),

Gene: RetrieverFever 87 Start: 44788, Stop: 44534, Start Num: 3

Candidate Starts for RetrieverFever\_87:

(Start: 3 @44788 has 14 MA's), (6, 44716), (8, 44644), (9, 44632), (10, 44623), (15, 44545),

Gene: Rideau\_92 Start: 44622, Stop: 44368, Start Num: 3

Candidate Starts for Rideau 92:

(Start: 3 @ 44622 has 14 MA's), (7, 44529), (8, 44478), (9, 44466), (10, 44457), (15, 44379),

Gene: Romero\_86 Start: 44610, Stop: 44350, Start Num: 3

Candidate Starts for Romero 86:

(1, 44616), (Start: 3 @ 44610 has 14 MA's), (4, 44589), (12, 44406), (13, 44403), (14, 44385),

Gene: ToriToki\_86 Start: 44608, Stop: 44348, Start Num: 3

Candidate Starts for ToriToki\_86:

(1, 44614), (Start: 3 @ 44608 has 14 MA's), (4, 44587), (11, 44416), (13, 44401), (14, 44383),

Gene: Treat 86 Start: 44483, Stop: 44223, Start Num: 3

Candidate Starts for Treat\_86:

(1, 44489), (Start: 3 @ 44483 has 14 MA's), (13, 44276), (14, 44258),

Gene: Vorvolakos\_88 Start: 44787, Stop: 44533, Start Num: 3

Candidate Starts for Vorvolakos 88:

(Start: 3 @ 44787 has 14 MA's), (6, 44715), (8, 44643), (9, 44631), (10, 44622), (15, 44544),

Gene: ZooBear\_86 Start: 44656, Stop: 44396, Start Num: 3

Candidate Starts for ZooBear\_86:

(1, 44662), (Start: 3 @ 44656 has 14 MA's), (4, 44635), (13, 44449), (14, 44431),