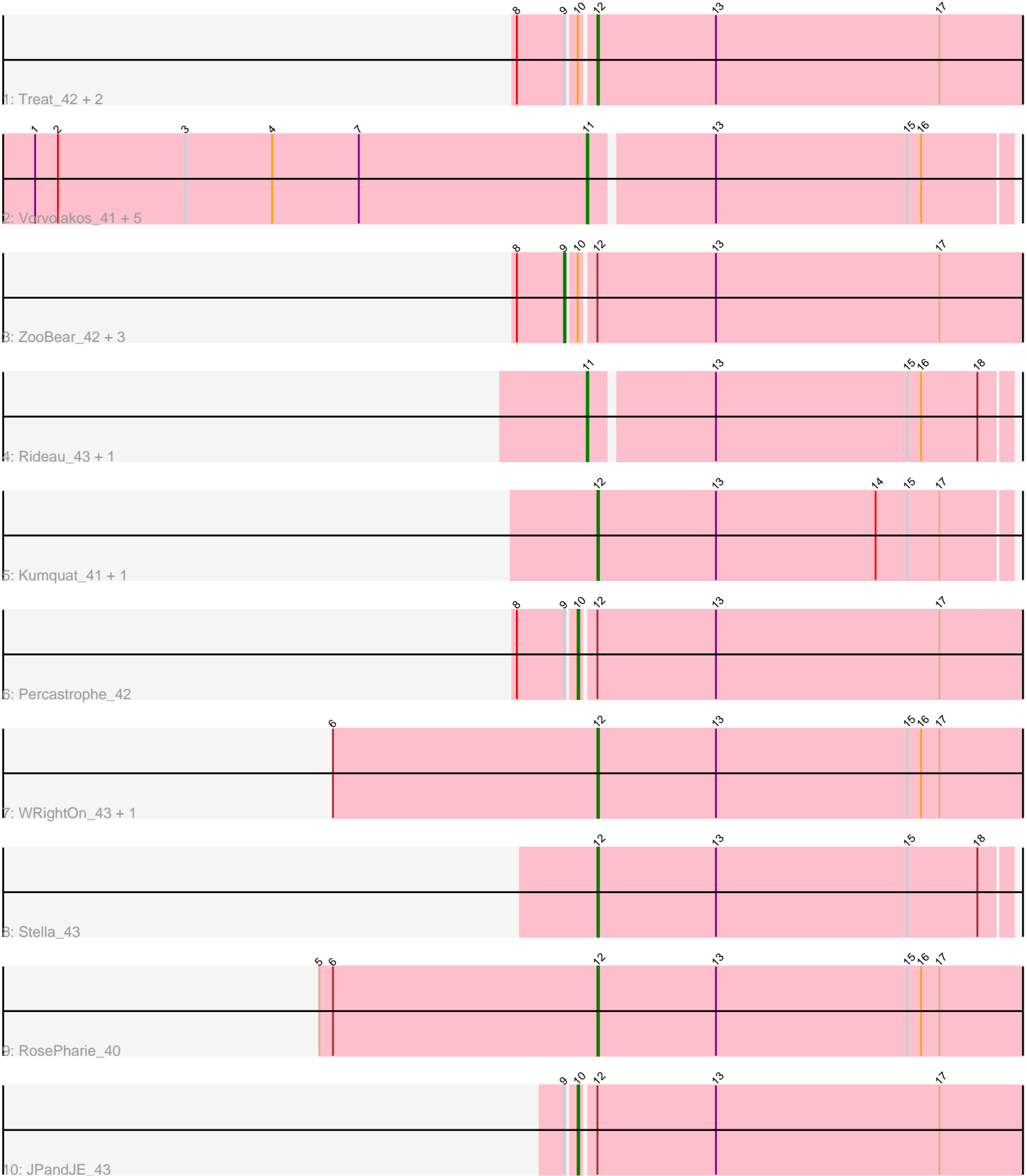


Pham 4057



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 4057 Report

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

Pham number 4057 has 23 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Treat\_42, Olicious\_42, ToriToki\_42
- Track 2 : Vorvolakos\_41, Geostin\_36, Fabian\_38, Gremlin23\_41, FlowerPower\_41, RetrieverFever\_41
- Track 3 : ZooBear\_42, Romero\_42, Immanuel3\_42, HaugeAnator\_42
- Track 4 : Rideau\_43, Dennebes\_42
- Track 5 : Kumquat\_41, Zeigle\_41
- Track 6 : Percastrophe\_42
- Track 7 : WRightOn\_43, Manuel\_39
- Track 8 : Stella\_43
- Track 9 : RosePharie\_40
- Track 10 : JPandJE\_43

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

The start number called the most often in the published annotations is 12, it was called in 9 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Kumquat\_41, Manuel\_39, Olicious\_42, RosePharie\_40, Stella\_43, ToriToki\_42, Treat\_42, WRightOn\_43, Zeigle\_41,

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

- HaugeAnator\_42, Immanuel3\_42, JPandJE\_43, Percastrophe\_42, Romero\_42, ZooBear\_42,

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

- Dennebes\_42, Fabian\_38, FlowerPower\_41, Geostin\_36, Gremlin23\_41, RetrieverFever\_41, Rideau\_43, Vorvolakos\_41,

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

Start 9:

- Found in 9 of 23 ( 39.1% ) of genes in pham
- Manual Annotations of this start: 4 of 21

- Called 44.4% of time when present
- Phage (with cluster) where this start called: HaugeAnator\_42 (BF), Immanuel3\_42 (BF), Romero\_42 (BF), ZooBear\_42 (BF),

Start 10:

- Found in 9 of 23 ( 39.1% ) of genes in pham
- Manual Annotations of this start: 2 of 21
- Called 22.2% of time when present
- Phage (with cluster) where this start called: JPandJE\_43 (BF), Percastrophe\_42 (BF),

Start 11:

- Found in 8 of 23 ( 34.8% ) of genes in pham
- Manual Annotations of this start: 6 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dennebes\_42 (BF), Fabian\_38 (BF), FlowerPower\_41 (BF), Geostin\_36 (BF), Gremlin23\_41 (BF), RetrieverFever\_41 (BF), Rideau\_43 (BF), Vorvolakos\_41 (BF),

Start 12:

- Found in 15 of 23 ( 65.2% ) of genes in pham
- Manual Annotations of this start: 9 of 21
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Kumquat\_41 (BF), Manuel\_39 (BF), Olicious\_42 (BF), RosePharie\_40 (BF), Stella\_43 (BF), ToriToki\_42 (BF), Treat\_42 (BF), WRightOn\_43 (BF), Zeigle\_41 (BF),

### **Summary by clusters:**

There is one cluster represented in this pham: BF

Info for manual annotations of cluster BF:

- Start number 9 was manually annotated 4 times for cluster BF.
- Start number 10 was manually annotated 2 times for cluster BF.
- Start number 11 was manually annotated 6 times for cluster BF.
- Start number 12 was manually annotated 9 times for cluster BF.

### **Gene Information:**

Gene: Dennebes\_42 Start: 21845, Stop: 22114, Start Num: 11

Candidate Starts for Dennebes\_42:

(Start: 11 @21845 has 6 MA's), (13, 21923), (15, 22049), (16, 22058), (18, 22094),

Gene: Fabian\_38 Start: 21692, Stop: 21961, Start Num: 11

Candidate Starts for Fabian\_38:

(1, 21329), (2, 21344), (3, 21428), (4, 21485), (7, 21542), (Start: 11 @21692 has 6 MA's), (13, 21770), (15, 21896), (16, 21905),

Gene: FlowerPower\_41 Start: 21692, Stop: 21961, Start Num: 11

Candidate Starts for FlowerPower\_41:

(1, 21329), (2, 21344), (3, 21428), (4, 21485), (7, 21542), (Start: 11 @21692 has 6 MA's), (13, 21770), (15, 21896), (16, 21905),

Gene: Geostin\_36 Start: 21692, Stop: 21961, Start Num: 11

Candidate Starts for Geostin\_36:

(1, 21329), (2, 21344), (3, 21428), (4, 21485), (7, 21542), (Start: 11 @21692 has 6 MA's), (13, 21770), (15, 21896), (16, 21905),

Gene: Gremlin23\_41 Start: 21692, Stop: 21961, Start Num: 11

Candidate Starts for Gremlin23\_41:

(1, 21329), (2, 21344), (3, 21428), (4, 21485), (7, 21542), (Start: 11 @21692 has 6 MA's), (13, 21770), (15, 21896), (16, 21905),

Gene: HaugeAnator\_42 Start: 22293, Stop: 22589, Start Num: 9

Candidate Starts for HaugeAnator\_42:

(8, 22263), (Start: 9 @22293 has 4 MA's), (Start: 10 @22299 has 2 MA's), (Start: 12 @22308 has 9 MA's), (13, 22386), (17, 22533),

Gene: Immanuel3\_42 Start: 22297, Stop: 22593, Start Num: 9

Candidate Starts for Immanuel3\_42:

(8, 22267), (Start: 9 @22297 has 4 MA's), (Start: 10 @22303 has 2 MA's), (Start: 12 @22312 has 9 MA's), (13, 22390), (17, 22537),

Gene: JPandJE\_43 Start: 22770, Stop: 23060, Start Num: 10

Candidate Starts for JPandJE\_43:

(Start: 9 @22764 has 4 MA's), (Start: 10 @22770 has 2 MA's), (Start: 12 @22779 has 9 MA's), (13, 22857), (17, 23004),

Gene: Kumquat\_41 Start: 22267, Stop: 22536, Start Num: 12

Candidate Starts for Kumquat\_41:

(Start: 12 @22267 has 9 MA's), (13, 22345), (14, 22450), (15, 22471), (17, 22492),

Gene: Manuel\_39 Start: 21891, Stop: 22172, Start Num: 12

Candidate Starts for Manuel\_39:

(6, 21717), (Start: 12 @21891 has 9 MA's), (13, 21969), (15, 22095), (16, 22104), (17, 22116),

Gene: Olicious\_42 Start: 22308, Stop: 22589, Start Num: 12

Candidate Starts for Olicious\_42:

(8, 22263), (Start: 9 @22293 has 4 MA's), (Start: 10 @22299 has 2 MA's), (Start: 12 @22308 has 9 MA's), (13, 22386), (17, 22533),

Gene: Percastrophe\_42 Start: 22233, Stop: 22523, Start Num: 10

Candidate Starts for Percastrophe\_42:

(8, 22197), (Start: 9 @22227 has 4 MA's), (Start: 10 @22233 has 2 MA's), (Start: 12 @22242 has 9 MA's), (13, 22320), (17, 22467),

Gene: RetrieverFever\_41 Start: 21692, Stop: 21961, Start Num: 11

Candidate Starts for RetrieverFever\_41:

(1, 21329), (2, 21344), (3, 21428), (4, 21485), (7, 21542), (Start: 11 @21692 has 6 MA's), (13, 21770), (15, 21896), (16, 21905),

Gene: Rideau\_43 Start: 21845, Stop: 22114, Start Num: 11

Candidate Starts for Rideau\_43:

(Start: 11 @21845 has 6 MA's), (13, 21923), (15, 22049), (16, 22058), (18, 22094),

Gene: Romero\_42 Start: 22286, Stop: 22582, Start Num: 9

Candidate Starts for Romero\_42:

(8, 22256), (Start: 9 @22286 has 4 MA's), (Start: 10 @22292 has 2 MA's), (Start: 12 @22301 has 9 MA's), (13, 22379), (17, 22526),

Gene: RosePharie\_40 Start: 21910, Stop: 22191, Start Num: 12

Candidate Starts for RosePharie\_40:

(5, 21727), (6, 21736), (Start: 12 @21910 has 9 MA's), (13, 21988), (15, 22114), (16, 22123), (17, 22135),

Gene: Stella\_43 Start: 22352, Stop: 22621, Start Num: 12

Candidate Starts for Stella\_43:

(Start: 12 @22352 has 9 MA's), (13, 22430), (15, 22556), (18, 22601),

Gene: ToriToki\_42 Start: 22301, Stop: 22582, Start Num: 12

Candidate Starts for ToriToki\_42:

(8, 22256), (Start: 9 @22286 has 4 MA's), (Start: 10 @22292 has 2 MA's), (Start: 12 @22301 has 9 MA's), (13, 22379), (17, 22526),

Gene: Treat\_42 Start: 22245, Stop: 22526, Start Num: 12

Candidate Starts for Treat\_42:

(8, 22200), (Start: 9 @22230 has 4 MA's), (Start: 10 @22236 has 2 MA's), (Start: 12 @22245 has 9 MA's), (13, 22323), (17, 22470),

Gene: Vorvolakos\_41 Start: 21691, Stop: 21960, Start Num: 11

Candidate Starts for Vorvolakos\_41:

(1, 21328), (2, 21343), (3, 21427), (4, 21484), (7, 21541), (Start: 11 @21691 has 6 MA's), (13, 21769), (15, 21895), (16, 21904),

Gene: WRightOn\_43 Start: 21969, Stop: 22250, Start Num: 12

Candidate Starts for WRightOn\_43:

(6, 21795), (Start: 12 @21969 has 9 MA's), (13, 22047), (15, 22173), (16, 22182), (17, 22194),

Gene: Zeigle\_41 Start: 22267, Stop: 22536, Start Num: 12

Candidate Starts for Zeigle\_41:

(Start: 12 @22267 has 9 MA's), (13, 22345), (14, 22450), (15, 22471), (17, 22492),

Gene: ZooBear\_42 Start: 22293, Stop: 22589, Start Num: 9

Candidate Starts for ZooBear\_42:

(8, 22263), (Start: 9 @22293 has 4 MA's), (Start: 10 @22299 has 2 MA's), (Start: 12 @22308 has 9 MA's), (13, 22386), (17, 22533),