



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 296821 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296821 has 29 members, 10 are drafts.

Phages represented in each track:

- Track 1 : Phantastic\_43, MK4\_43, B1\_40, JF4\_43, JF2\_43
- Track 2 : Isca\_42, Rockstar\_43
- Track 3 : SaturnRing\_43, Puppy\_44, Bugatti\_43, TNguyen7\_43, BlueBird\_44, BabyRay\_43, Clammy\_43, Idleandcovert\_43, Giroux\_44, Pistachio\_44
- Track 4 : Chiqui\_41, MA5\_43, BabyJohn\_41
- Track 5 : Scout\_43, DropBear\_43, HelDan\_43, Kachowdy\_43, Marchesa\_43, Roimos\_43, Zarafa\_43, Heathen\_43, Fred313\_43

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

Genes that call this "Most Annotated" start:

- B1\_40, BabyJohn\_41, BabyRay\_43, BlueBird\_44, Bugatti\_43, Chiqui\_41, Clammy\_43, DropBear\_43, Fred313\_43, Giroux\_44, Heathen\_43, HelDan\_43, Idleandcovert\_43, Isca\_42, JF2\_43, JF4\_43, Kachowdy\_43, MA5\_43, MK4\_43, Marchesa\_43, Phantastic\_43, Pistachio\_44, Puppy\_44, Rockstar\_43, Roimos\_43, SaturnRing\_43, Scout\_43, TNguyen7\_43, Zarafa\_43,

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

- 

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

- 

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

Start 2:

- Found in 29 of 29 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 19 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: B1\_40 (A3), BabyJohn\_41 (A3), BabyRay\_43 (A3), BlueBird\_44 (A3), Bugatti\_43 (A3), Chiqui\_41 (A3), Clammy\_43

(A3), DropBear\_43 (A3), Fred313\_43 (A3), Giroux\_44 (A3), Heathen\_43 (A3), HelDan\_43 (A3), Idleandcovert\_43 (A3), Isca\_42 (A3), JF2\_43 (A3), JF4\_43 (A3), Kachowdy\_43 (A3), MA5\_43 (A3), MK4\_43 (A3), Marchesa\_43 (A3), Phantastic\_43 (A3), Pistachio\_44 (A3), Puppy\_44 (A3), Rockstar\_43 (A3), Roimos\_43 (A3), SaturnRing\_43 (A3), Scout\_43 (A3), TNguyen7\_43 (A3), Zarafa\_43 (A3),

### **Summary by clusters:**

There is one cluster represented in this pham: A3

Info for manual annotations of cluster A3:

•Start number 2 was manually annotated 19 times for cluster A3.

### **Gene Information:**

Gene: B1\_40 Start: 28679, Stop: 28518, Start Num: 2

Candidate Starts for B1\_40:

(1, 28769), (Start: 2 @28679 has 19 MA's), (6, 28553),

Gene: BabyJohn\_41 Start: 29470, Stop: 29309, Start Num: 2

Candidate Starts for BabyJohn\_41:

(Start: 2 @29470 has 19 MA's), (3, 29446), (6, 29344),

Gene: BabyRay\_43 Start: 29415, Stop: 29254, Start Num: 2

Candidate Starts for BabyRay\_43:

(1, 29505), (Start: 2 @29415 has 19 MA's), (3, 29391), (6, 29289),

Gene: BlueBird\_44 Start: 29325, Stop: 29164, Start Num: 2

Candidate Starts for BlueBird\_44:

(1, 29415), (Start: 2 @29325 has 19 MA's), (3, 29301), (6, 29199),

Gene: Bugatti\_43 Start: 29325, Stop: 29164, Start Num: 2

Candidate Starts for Bugatti\_43:

(1, 29415), (Start: 2 @29325 has 19 MA's), (3, 29301), (6, 29199),

Gene: Chiqui\_41 Start: 29479, Stop: 29318, Start Num: 2

Candidate Starts for Chiqui\_41:

(Start: 2 @29479 has 19 MA's), (3, 29455), (6, 29353),

Gene: Clammy\_43 Start: 29325, Stop: 29164, Start Num: 2

Candidate Starts for Clammy\_43:

(1, 29415), (Start: 2 @29325 has 19 MA's), (3, 29301), (6, 29199),

Gene: DropBear\_43 Start: 29392, Stop: 29231, Start Num: 2

Candidate Starts for DropBear\_43:

(1, 29482), (Start: 2 @29392 has 19 MA's), (3, 29368), (4, 29347), (6, 29266),

Gene: Fred313\_43 Start: 29077, Stop: 28916, Start Num: 2

Candidate Starts for Fred313\_43:

(1, 29167), (Start: 2 @29077 has 19 MA's), (3, 29053), (4, 29032), (6, 28951),

Gene: Giroux\_44 Start: 29324, Stop: 29163, Start Num: 2  
Candidate Starts for Giroux\_44:  
(1, 29414), (Start: 2 @29324 has 19 MA's), (3, 29300), (6, 29198),

Gene: Heathen\_43 Start: 29133, Stop: 28972, Start Num: 2  
Candidate Starts for Heathen\_43:  
(1, 29223), (Start: 2 @29133 has 19 MA's), (3, 29109), (4, 29088), (6, 29007),

Gene: HelDan\_43 Start: 29385, Stop: 29224, Start Num: 2  
Candidate Starts for HelDan\_43:  
(1, 29475), (Start: 2 @29385 has 19 MA's), (3, 29361), (4, 29340), (6, 29259),

Gene: Idleandcovert\_43 Start: 29325, Stop: 29164, Start Num: 2  
Candidate Starts for Idleandcovert\_43:  
(1, 29415), (Start: 2 @29325 has 19 MA's), (3, 29301), (6, 29199),

Gene: Isca\_42 Start: 28928, Stop: 28767, Start Num: 2  
Candidate Starts for Isca\_42:  
(1, 29018), (Start: 2 @28928 has 19 MA's), (5, 28826), (6, 28802),

Gene: JF2\_43 Start: 28679, Stop: 28518, Start Num: 2  
Candidate Starts for JF2\_43:  
(1, 28769), (Start: 2 @28679 has 19 MA's), (6, 28553),

Gene: JF4\_43 Start: 28679, Stop: 28518, Start Num: 2  
Candidate Starts for JF4\_43:  
(1, 28769), (Start: 2 @28679 has 19 MA's), (6, 28553),

Gene: Kachowdy\_43 Start: 29385, Stop: 29224, Start Num: 2  
Candidate Starts for Kachowdy\_43:  
(1, 29475), (Start: 2 @29385 has 19 MA's), (3, 29361), (4, 29340), (6, 29259),

Gene: MA5\_43 Start: 28829, Stop: 28668, Start Num: 2  
Candidate Starts for MA5\_43:  
(Start: 2 @28829 has 19 MA's), (3, 28805), (6, 28703),

Gene: MK4\_43 Start: 28913, Stop: 28752, Start Num: 2  
Candidate Starts for MK4\_43:  
(1, 29003), (Start: 2 @28913 has 19 MA's), (6, 28787),

Gene: Marchesa\_43 Start: 29383, Stop: 29222, Start Num: 2  
Candidate Starts for Marchesa\_43:  
(1, 29473), (Start: 2 @29383 has 19 MA's), (3, 29359), (4, 29338), (6, 29257),

Gene: Phantastic\_43 Start: 28944, Stop: 28783, Start Num: 2  
Candidate Starts for Phantastic\_43:  
(1, 29034), (Start: 2 @28944 has 19 MA's), (6, 28818),

Gene: Pistachio\_44 Start: 28872, Stop: 28711, Start Num: 2  
Candidate Starts for Pistachio\_44:  
(1, 28962), (Start: 2 @28872 has 19 MA's), (3, 28848), (6, 28746),

Gene: Puppy\_44 Start: 28945, Stop: 28784, Start Num: 2

Candidate Starts for Puppy\_44:

(1, 29035), (Start: 2 @28945 has 19 MA's), (3, 28921), (6, 28819),

Gene: Rockstar\_43 Start: 28920, Stop: 28759, Start Num: 2

Candidate Starts for Rockstar\_43:

(1, 29010), (Start: 2 @28920 has 19 MA's), (5, 28818), (6, 28794),

Gene: Roimos\_43 Start: 29301, Stop: 29140, Start Num: 2

Candidate Starts for Roimos\_43:

(1, 29391), (Start: 2 @29301 has 19 MA's), (3, 29277), (4, 29256), (6, 29175),

Gene: SaturnRing\_43 Start: 29325, Stop: 29164, Start Num: 2

Candidate Starts for SaturnRing\_43:

(1, 29415), (Start: 2 @29325 has 19 MA's), (3, 29301), (6, 29199),

Gene: Scout\_43 Start: 28632, Stop: 28471, Start Num: 2

Candidate Starts for Scout\_43:

(1, 28722), (Start: 2 @28632 has 19 MA's), (3, 28608), (4, 28587), (6, 28506),

Gene: TNguyen7\_43 Start: 29292, Stop: 29131, Start Num: 2

Candidate Starts for TNguyen7\_43:

(1, 29382), (Start: 2 @29292 has 19 MA's), (3, 29268), (6, 29166),

Gene: Zarafa\_43 Start: 29394, Stop: 29233, Start Num: 2

Candidate Starts for Zarafa\_43:

(1, 29484), (Start: 2 @29394 has 19 MA's), (3, 29370), (4, 29349), (6, 29268),