



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 291291 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291291 has 45 members, 4 are drafts.

Phages represented in each track:

- Track 1 : MortySmith\_42, Karate\_43, Pharpay\_44, Krampus\_44, OhDear\_44, Aesir\_43, Annapurna\_44, Anakin\_44, Hiddenleaf\_44, Chivey\_44, Potty\_44, CoolCookie\_44, DannyDe\_44, JDawG\_43, FountainFog\_43, Crestdrop\_44, Rachella\_44, Poultruss\_43, FreddieHg\_44, Erudite\_43, Haunter\_44, Dauntless\_43, Neptune\_44, NarutoRun\_44, JingleBells\_44, PhunaPhoke\_44, Tedro\_44, Cybele\_44, OverHedge\_44, Snakehole\_44, Kate\_45, Artiphact\_44, AnnaSerena\_44, SilentWarrior\_44, Gilda\_44
- Track 2 : Hager\_45
- Track 3 : Bramble\_47, TinyMiny\_47, RikSengupta\_47, Sparcetus\_47, Ajin\_47, LordBart\_47, Kors\_47
- Track 4 : Tongui\_44, Rie18\_44

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

The start number called the most often in the published annotations is 4, it was called in 41 of the 41 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aesir\_43, Ajin\_47, Anakin\_44, AnnaSerena\_44, Annapurna\_44, Artiphact\_44, Bramble\_47, Chivey\_44, CoolCookie\_44, Crestdrop\_44, Cybele\_44, DannyDe\_44, Dauntless\_43, Erudite\_43, FountainFog\_43, FreddieHg\_44, Gilda\_44, Hager\_45, Haunter\_44, Hiddenleaf\_44, JDawG\_43, JingleBells\_44, Karate\_43, Kate\_45, Kors\_47, Krampus\_44, LordBart\_47, MortySmith\_42, NarutoRun\_44, Neptune\_44, OhDear\_44, OverHedge\_44, Pharpay\_44, PhunaPhoke\_44, Potty\_44, Poultruss\_43, Rachella\_44, Rie18\_44, RikSengupta\_47, SilentWarrior\_44, Snakehole\_44, Sparcetus\_47, Tedro\_44, TinyMiny\_47, Tongui\_44,

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 4:

- Found in 45 of 45 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 41 of 41
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aesir\_43 (EF), Ajin\_47 (EF), Anakin\_44 (EF), AnnaSerena\_44 (EF), Annapurna\_44 (EF), Artiphact\_44 (EF), Bramble\_47 (EF), Chivey\_44 (EF), CoolCookie\_44 (EF), Crestdrop\_44 (EF), Cybele\_44 (EF), DannyDe\_44 (EF), Dauntless\_43 (EF), Erudite\_43 (EF), FountainFog\_43 (EF), FreddieHg\_44 (EF), Gilda\_44 (EF), Hager\_45 (EF), Haunter\_44 (EF), Hiddenleaf\_44 (EF), JDawG\_43 (EF), JingleBells\_44 (EF), Karate\_43 (EF), Kate\_45 (EF), Kors\_47 (EF), Krampus\_44 (EF), LordBart\_47 (EF), MortySmith\_42 (EF), NarutoRun\_44 (EF), Neptune\_44 (EF), OhDear\_44 (EF), OverHedge\_44 (EF), Pharpay\_44 (EF), PhunaPhoke\_44 (EF), Potty\_44 (EF), Poultruss\_43 (EF), Rachella\_44 (EF), Rie18\_44 (EF), RikSengupta\_47 (EF), SilentWarrior\_44 (EF), Snakehole\_44 (EF), Sparcetus\_47 (EF), Tedro\_44 (EF), TinyMiny\_47 (EF), Tongui\_44 (EF),

### Summary by clusters:

There is one cluster represented in this pham: EF

Info for manual annotations of cluster EF:

- Start number 4 was manually annotated 41 times for cluster EF.

### Gene Information:

Gene: Aesir\_43 Start: 29621, Stop: 29791, Start Num: 4

Candidate Starts for Aesir\_43:

(Start: 4 @29621 has 41 MA's), (5, 29693),

Gene: Ajin\_47 Start: 30803, Stop: 30967, Start Num: 4

Candidate Starts for Ajin\_47:

(Start: 4 @30803 has 41 MA's), (6, 30938),

Gene: Anakin\_44 Start: 29974, Stop: 30144, Start Num: 4

Candidate Starts for Anakin\_44:

(Start: 4 @29974 has 41 MA's), (5, 30046),

Gene: AnnaSerena\_44 Start: 30009, Stop: 30179, Start Num: 4

Candidate Starts for AnnaSerena\_44:

(Start: 4 @30009 has 41 MA's), (5, 30081),

Gene: Annapurna\_44 Start: 29250, Stop: 29420, Start Num: 4

Candidate Starts for Annapurna\_44:

(Start: 4 @29250 has 41 MA's), (5, 29322),

Gene: Artiphact\_44 Start: 29998, Stop: 30168, Start Num: 4

Candidate Starts for Artiphact\_44:

(Start: 4 @29998 has 41 MA's), (5, 30070),

Gene: Bramble\_47 Start: 30852, Stop: 31016, Start Num: 4

Candidate Starts for Bramble\_47:  
(Start: 4 @30852 has 41 MA's), (6, 30987),

Gene: Chivey\_44 Start: 29199, Stop: 29369, Start Num: 4  
Candidate Starts for Chivey\_44:  
(Start: 4 @29199 has 41 MA's), (5, 29271),

Gene: CoolCookie\_44 Start: 30004, Stop: 30174, Start Num: 4  
Candidate Starts for CoolCookie\_44:  
(Start: 4 @30004 has 41 MA's), (5, 30076),

Gene: Crestdrop\_44 Start: 29230, Stop: 29400, Start Num: 4  
Candidate Starts for Crestdrop\_44:  
(Start: 4 @29230 has 41 MA's), (5, 29302),

Gene: Cybele\_44 Start: 29974, Stop: 30144, Start Num: 4  
Candidate Starts for Cybele\_44:  
(Start: 4 @29974 has 41 MA's), (5, 30046),

Gene: DannyDe\_44 Start: 29205, Stop: 29375, Start Num: 4  
Candidate Starts for DannyDe\_44:  
(Start: 4 @29205 has 41 MA's), (5, 29277),

Gene: Dauntless\_43 Start: 29557, Stop: 29727, Start Num: 4  
Candidate Starts for Dauntless\_43:  
(Start: 4 @29557 has 41 MA's), (5, 29629),

Gene: Erudite\_43 Start: 29557, Stop: 29727, Start Num: 4  
Candidate Starts for Erudite\_43:  
(Start: 4 @29557 has 41 MA's), (5, 29629),

Gene: FountainFog\_43 Start: 29241, Stop: 29411, Start Num: 4  
Candidate Starts for FountainFog\_43:  
(Start: 4 @29241 has 41 MA's), (5, 29313),

Gene: FreddieHg\_44 Start: 29215, Stop: 29385, Start Num: 4  
Candidate Starts for FreddieHg\_44:  
(Start: 4 @29215 has 41 MA's), (5, 29287),

Gene: Gilda\_44 Start: 29998, Stop: 30168, Start Num: 4  
Candidate Starts for Gilda\_44:  
(Start: 4 @29998 has 41 MA's), (5, 30070),

Gene: Hager\_45 Start: 29423, Stop: 29593, Start Num: 4  
Candidate Starts for Hager\_45:  
(1, 29297), (2, 29300), (3, 29318), (Start: 4 @29423 has 41 MA's), (5, 29495),

Gene: Haunter\_44 Start: 29381, Stop: 29551, Start Num: 4  
Candidate Starts for Haunter\_44:  
(Start: 4 @29381 has 41 MA's), (5, 29453),

Gene: Hiddenleaf\_44 Start: 29199, Stop: 29369, Start Num: 4  
Candidate Starts for Hiddenleaf\_44:

(Start: 4 @29199 has 41 MA's), (5, 29271),

Gene: JDawG\_43 Start: 29616, Stop: 29786, Start Num: 4

Candidate Starts for JDawG\_43:

(Start: 4 @29616 has 41 MA's), (5, 29688),

Gene: JingleBells\_44 Start: 29350, Stop: 29520, Start Num: 4

Candidate Starts for JingleBells\_44:

(Start: 4 @29350 has 41 MA's), (5, 29422),

Gene: Karate\_43 Start: 29999, Stop: 30169, Start Num: 4

Candidate Starts for Karate\_43:

(Start: 4 @29999 has 41 MA's), (5, 30071),

Gene: Kate\_45 Start: 30006, Stop: 30176, Start Num: 4

Candidate Starts for Kate\_45:

(Start: 4 @30006 has 41 MA's), (5, 30078),

Gene: Kors\_47 Start: 30880, Stop: 31044, Start Num: 4

Candidate Starts for Kors\_47:

(Start: 4 @30880 has 41 MA's), (6, 31015),

Gene: Krampus\_44 Start: 30006, Stop: 30176, Start Num: 4

Candidate Starts for Krampus\_44:

(Start: 4 @30006 has 41 MA's), (5, 30078),

Gene: LordBart\_47 Start: 30789, Stop: 30953, Start Num: 4

Candidate Starts for LordBart\_47:

(Start: 4 @30789 has 41 MA's), (6, 30924),

Gene: MortySmith\_42 Start: 29034, Stop: 29204, Start Num: 4

Candidate Starts for MortySmith\_42:

(Start: 4 @29034 has 41 MA's), (5, 29106),

Gene: NarutoRun\_44 Start: 29974, Stop: 30144, Start Num: 4

Candidate Starts for NarutoRun\_44:

(Start: 4 @29974 has 41 MA's), (5, 30046),

Gene: Neptune\_44 Start: 29974, Stop: 30144, Start Num: 4

Candidate Starts for Neptune\_44:

(Start: 4 @29974 has 41 MA's), (5, 30046),

Gene: OhDear\_44 Start: 29972, Stop: 30142, Start Num: 4

Candidate Starts for OhDear\_44:

(Start: 4 @29972 has 41 MA's), (5, 30044),

Gene: OverHedge\_44 Start: 29964, Stop: 30134, Start Num: 4

Candidate Starts for OverHedge\_44:

(Start: 4 @29964 has 41 MA's), (5, 30036),

Gene: Pharpay\_44 Start: 30019, Stop: 30189, Start Num: 4

Candidate Starts for Pharpay\_44:

(Start: 4 @30019 has 41 MA's), (5, 30091),

Gene: PhunaPhoke\_44 Start: 29992, Stop: 30162, Start Num: 4  
Candidate Starts for PhunaPhoke\_44:  
(Start: 4 @29992 has 41 MA's), (5, 30064),

Gene: Potty\_44 Start: 29997, Stop: 30167, Start Num: 4  
Candidate Starts for Potty\_44:  
(Start: 4 @29997 has 41 MA's), (5, 30069),

Gene: Poultress\_43 Start: 30312, Stop: 30482, Start Num: 4  
Candidate Starts for Poultress\_43:  
(Start: 4 @30312 has 41 MA's), (5, 30384),

Gene: Rachella\_44 Start: 30000, Stop: 30170, Start Num: 4  
Candidate Starts for Rachella\_44:  
(Start: 4 @30000 has 41 MA's), (5, 30072),

Gene: Rie18\_44 Start: 29497, Stop: 29667, Start Num: 4  
Candidate Starts for Rie18\_44:  
(1, 29371), (2, 29374), (3, 29392), (Start: 4 @29497 has 41 MA's), (5, 29569),

Gene: RikSengupta\_47 Start: 30917, Stop: 31081, Start Num: 4  
Candidate Starts for RikSengupta\_47:  
(Start: 4 @30917 has 41 MA's), (6, 31052),

Gene: SilentWarrior\_44 Start: 29212, Stop: 29382, Start Num: 4  
Candidate Starts for SilentWarrior\_44:  
(Start: 4 @29212 has 41 MA's), (5, 29284),

Gene: Snakehole\_44 Start: 29177, Stop: 29347, Start Num: 4  
Candidate Starts for Snakehole\_44:  
(Start: 4 @29177 has 41 MA's), (5, 29249),

Gene: Sparcetus\_47 Start: 30794, Stop: 30958, Start Num: 4  
Candidate Starts for Sparcetus\_47:  
(Start: 4 @30794 has 41 MA's), (6, 30929),

Gene: Tedro\_44 Start: 29431, Stop: 29601, Start Num: 4  
Candidate Starts for Tedro\_44:  
(Start: 4 @29431 has 41 MA's), (5, 29503),

Gene: TinyMiny\_47 Start: 30815, Stop: 30979, Start Num: 4  
Candidate Starts for TinyMiny\_47:  
(Start: 4 @30815 has 41 MA's), (6, 30950),

Gene: Tongui\_44 Start: 29551, Stop: 29721, Start Num: 4  
Candidate Starts for Tongui\_44:  
(1, 29425), (2, 29428), (3, 29446), (Start: 4 @29551 has 41 MA's), (5, 29623),