

Pham 291276



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 291276 Report

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

Pham number 291276 has 47 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Myrna\_9
- Track 2 : Phabba\_9
- Track 3 : Greely\_9
- Track 4 : OhDear\_61, Pharpay\_60, Potty\_60, Anakin\_61, Rachella\_61, Haunter\_61, NarutoRun\_61, Krampus\_61, Cybele\_61, PhunaPhoke\_61, Kate\_61, AnnaSerena\_61, OverHedge\_60, Gilda\_61, Artiphact\_60, Neptune\_61
- Track 5 : Karate\_60, DannyDe\_62
- Track 6 : Sparcetus\_15, RikSengupta\_15
- Track 7 : Aesir\_60, Annapurna\_62, JDawG\_60, SilentWarrior\_62, Chivey\_62, Crestdrop\_61, Dauntless\_60, JingleBells\_61, FreddieHg\_62, Erudite\_60, Tedro\_61, Snakehole\_62, Hiddenleaf\_62, MortySmith\_59, Hager\_62
- Track 8 : Ajin\_15
- Track 9 : Poultruss\_60
- Track 10 : TinyMiny\_15
- Track 11 : LordBart\_15
- Track 12 : Bramble\_15
- Track 13 : FountainFog\_60
- Track 14 : CoolCookie\_60
- Track 15 : Tongui\_61
- Track 16 : Rie18\_61

### ***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 32 of the 42 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aesir\_60, Anakin\_61, AnnaSerena\_61, Annapurna\_62, Artiphact\_60, Chivey\_62, CoolCookie\_60, Crestdrop\_61, Cybele\_61, Dauntless\_60, Erudite\_60, FountainFog\_60, FreddieHg\_62, Gilda\_61, Hager\_62, Haunter\_61, Hiddenleaf\_62, JDawG\_60, JingleBells\_61, Kate\_61, Krampus\_61, MortySmith\_59, NarutoRun\_61, Neptune\_61, OhDear\_61, OverHedge\_60, Pharpay\_60, PhunaPhoke\_61, Potty\_60, Poultruss\_60, Rachella\_61, Rie18\_61, SilentWarrior\_62, Snakehole\_62, Tedro\_61, Tongui\_61,

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

- DannyDe\_62, Karate\_60,

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

- Ajin\_15, Bramble\_15, Greely\_9, LordBart\_15, Myrna\_9, Phabba\_9, RikSengupta\_15, Sparcetus\_15, TinyMiny\_15,

### Summary by start number:

Start 1:

- Found in 38 of 47 ( 80.9% ) of genes in pham
- Manual Annotations of this start: 2 of 42
- Called 5.3% of time when present
- Phage (with cluster) where this start called: DannyDe\_62 (EF), Karate\_60 (EF),

Start 2:

- Found in 6 of 47 ( 12.8% ) of genes in pham
- Manual Annotations of this start: 1 of 42
- Called 16.7% of time when present
- Phage (with cluster) where this start called: TinyMiny\_15 (EF),

Start 3:

- Found in 3 of 47 ( 6.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Greely\_9 (C2),

Start 4:

- Found in 38 of 47 ( 80.9% ) of genes in pham
- Manual Annotations of this start: 32 of 42
- Called 94.7% of time when present
- Phage (with cluster) where this start called: Aesir\_60 (EF), Anakin\_61 (EF), AnnaSerena\_61 (EF), Annapurna\_62 (EF), Artiphact\_60 (EF), Chivey\_62 (EF), CoolCookie\_60 (EF), Crestdrop\_61 (EF), Cybele\_61 (EF), Dauntless\_60 (EF), Erudite\_60 (EF), FountainFog\_60 (EF), FreddieHg\_62 (EF), Gilda\_61 (EF), Hager\_62 (EF), Haunter\_61 (EF), Hiddenleaf\_62 (EF), JDawG\_60 (EF), JingleBells\_61 (EF), Kate\_61 (EF), Krampus\_61 (EF), MortySmith\_59 (EF), NarutoRun\_61 (EF), Neptune\_61 (EF), OhDear\_61 (EF), OverHedge\_60 (EF), Pharpay\_60 (EF), PhunaPhoke\_61 (EF), Potty\_60 (EF), Poultruss\_60 (EF), Rachella\_61 (EF), Rie18\_61 (EF), SilentWarrior\_62 (EF), Snakehole\_62 (EF), Tedro\_61 (EF), Tongui\_61 (EF),

Start 5:

- Found in 6 of 47 ( 12.8% ) of genes in pham
- Manual Annotations of this start: 5 of 42
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Ajin\_15 (EF), Bramble\_15 (EF), LordBart\_15 (EF), RikSengupta\_15 (EF), Sparcetus\_15 (EF),

Start 6:

- Found in 3 of 47 ( 6.4% ) of genes in pham
- Manual Annotations of this start: 2 of 42

- Called 66.7% of time when present
- Phage (with cluster) where this start called: Myrna\_9 (C2), Phabba\_9 (C2),

### **Summary by clusters:**

There are 2 clusters represented in this pham: C2, EF,

Info for manual annotations of cluster C2:

- Start number 6 was manually annotated 2 times for cluster C2.

Info for manual annotations of cluster EF:

- Start number 1 was manually annotated 2 times for cluster EF.
- Start number 2 was manually annotated 1 time for cluster EF.
- Start number 4 was manually annotated 32 times for cluster EF.
- Start number 5 was manually annotated 5 times for cluster EF.

### **Gene Information:**

Gene: Aesir\_60 Start: 46858, Stop: 47505, Start Num: 4

Candidate Starts for Aesir\_60:

(Start: 1 @46816 has 2 MA's), (Start: 4 @46858 has 32 MA's), (7, 46996),

Gene: Ajin\_15 Start: 7272, Stop: 7913, Start Num: 5

Candidate Starts for Ajin\_15:

(Start: 2 @7224 has 1 MA's), (Start: 5 @7272 has 5 MA's), (7, 7404), (12, 7572), (14, 7596), (18, 7647), (21, 7860),

Gene: Anakin\_61 Start: 47166, Stop: 47813, Start Num: 4

Candidate Starts for Anakin\_61:

(Start: 1 @47124 has 2 MA's), (Start: 4 @47166 has 32 MA's), (7, 47304), (18, 47547),

Gene: AnnaSerena\_61 Start: 47200, Stop: 47847, Start Num: 4

Candidate Starts for AnnaSerena\_61:

(Start: 1 @47158 has 2 MA's), (Start: 4 @47200 has 32 MA's), (7, 47338), (18, 47581),

Gene: Annapurna\_62 Start: 46707, Stop: 47354, Start Num: 4

Candidate Starts for Annapurna\_62:

(Start: 1 @46665 has 2 MA's), (Start: 4 @46707 has 32 MA's), (7, 46845),

Gene: Artiphact\_60 Start: 47190, Stop: 47837, Start Num: 4

Candidate Starts for Artiphact\_60:

(Start: 1 @47148 has 2 MA's), (Start: 4 @47190 has 32 MA's), (7, 47328), (18, 47571),

Gene: Bramble\_15 Start: 7239, Stop: 7880, Start Num: 5

Candidate Starts for Bramble\_15:

(Start: 2 @7191 has 1 MA's), (Start: 5 @7239 has 5 MA's), (12, 7539), (14, 7563), (18, 7614), (21, 7827),

Gene: Chivey\_62 Start: 46661, Stop: 47308, Start Num: 4

Candidate Starts for Chivey\_62:

(Start: 1 @46619 has 2 MA's), (Start: 4 @46661 has 32 MA's), (7, 46799),

Gene: CoolCookie\_60 Start: 47242, Stop: 47889, Start Num: 4  
Candidate Starts for CoolCookie\_60:  
(Start: 1 @47200 has 2 MA's), (Start: 4 @47242 has 32 MA's), (7, 47380), (22, 47842),

Gene: Crestdrop\_61 Start: 46885, Stop: 47532, Start Num: 4  
Candidate Starts for Crestdrop\_61:  
(Start: 1 @46843 has 2 MA's), (Start: 4 @46885 has 32 MA's), (7, 47023),

Gene: Cybele\_61 Start: 47196, Stop: 47843, Start Num: 4  
Candidate Starts for Cybele\_61:  
(Start: 1 @47154 has 2 MA's), (Start: 4 @47196 has 32 MA's), (7, 47334), (18, 47577),

Gene: DannyDe\_62 Start: 46620, Stop: 47309, Start Num: 1  
Candidate Starts for DannyDe\_62:  
(Start: 1 @46620 has 2 MA's), (Start: 4 @46662 has 32 MA's), (7, 46800),

Gene: Dauntless\_60 Start: 46793, Stop: 47440, Start Num: 4  
Candidate Starts for Dauntless\_60:  
(Start: 1 @46751 has 2 MA's), (Start: 4 @46793 has 32 MA's), (7, 46931),

Gene: Erudite\_60 Start: 46793, Stop: 47440, Start Num: 4  
Candidate Starts for Erudite\_60:  
(Start: 1 @46751 has 2 MA's), (Start: 4 @46793 has 32 MA's), (7, 46931),

Gene: FountainFog\_60 Start: 46425, Stop: 47069, Start Num: 4  
Candidate Starts for FountainFog\_60:  
(Start: 1 @46383 has 2 MA's), (Start: 4 @46425 has 32 MA's), (8, 46581), (13, 46734),

Gene: FreddieHg\_62 Start: 46678, Stop: 47325, Start Num: 4  
Candidate Starts for FreddieHg\_62:  
(Start: 1 @46636 has 2 MA's), (Start: 4 @46678 has 32 MA's), (7, 46816),

Gene: Gilda\_61 Start: 47188, Stop: 47835, Start Num: 4  
Candidate Starts for Gilda\_61:  
(Start: 1 @47146 has 2 MA's), (Start: 4 @47188 has 32 MA's), (7, 47326), (18, 47569),

Gene: Greely\_9 Start: 3736, Stop: 4431, Start Num: 3  
Candidate Starts for Greely\_9:  
(3, 3736), (Start: 6 @3772 has 2 MA's), (9, 3958), (16, 4105), (17, 4114), (19, 4177),

Gene: Hager\_62 Start: 46579, Stop: 47226, Start Num: 4  
Candidate Starts for Hager\_62:  
(Start: 1 @46537 has 2 MA's), (Start: 4 @46579 has 32 MA's), (7, 46717),

Gene: Haunter\_61 Start: 46430, Stop: 47077, Start Num: 4  
Candidate Starts for Haunter\_61:  
(Start: 1 @46388 has 2 MA's), (Start: 4 @46430 has 32 MA's), (7, 46568), (18, 46811),

Gene: Hiddenleaf\_62 Start: 46661, Stop: 47308, Start Num: 4  
Candidate Starts for Hiddenleaf\_62:  
(Start: 1 @46619 has 2 MA's), (Start: 4 @46661 has 32 MA's), (7, 46799),

Gene: JDawG\_60 Start: 46853, Stop: 47500, Start Num: 4  
Candidate Starts for JDawG\_60:  
(Start: 1 @46811 has 2 MA's), (Start: 4 @46853 has 32 MA's), (7, 46991),

Gene: JingleBells\_61 Start: 46766, Stop: 47413, Start Num: 4  
Candidate Starts for JingleBells\_61:  
(Start: 1 @46724 has 2 MA's), (Start: 4 @46766 has 32 MA's), (7, 46904),

Gene: Karate\_60 Start: 46963, Stop: 47652, Start Num: 1  
Candidate Starts for Karate\_60:  
(Start: 1 @46963 has 2 MA's), (Start: 4 @47005 has 32 MA's), (7, 47143),

Gene: Kate\_61 Start: 47105, Stop: 47752, Start Num: 4  
Candidate Starts for Kate\_61:  
(Start: 1 @47063 has 2 MA's), (Start: 4 @47105 has 32 MA's), (7, 47243), (18, 47486),

Gene: Krampus\_61 Start: 47201, Stop: 47848, Start Num: 4  
Candidate Starts for Krampus\_61:  
(Start: 1 @47159 has 2 MA's), (Start: 4 @47201 has 32 MA's), (7, 47339), (18, 47582),

Gene: LordBart\_15 Start: 7278, Stop: 7916, Start Num: 5  
Candidate Starts for LordBart\_15:  
(Start: 2 @7230 has 1 MA's), (Start: 5 @7278 has 5 MA's), (11, 7500), (12, 7575), (14, 7599), (18, 7650), (21, 7863),

Gene: MortySmith\_59 Start: 46267, Stop: 46914, Start Num: 4  
Candidate Starts for MortySmith\_59:  
(Start: 1 @46225 has 2 MA's), (Start: 4 @46267 has 32 MA's), (7, 46405),

Gene: Myrna\_9 Start: 3884, Stop: 4543, Start Num: 6  
Candidate Starts for Myrna\_9:  
(3, 3851), (Start: 6 @3884 has 2 MA's), (9, 4070), (16, 4217), (19, 4289), (20, 4418), (23, 4472),

Gene: NarutoRun\_61 Start: 47166, Stop: 47813, Start Num: 4  
Candidate Starts for NarutoRun\_61:  
(Start: 1 @47124 has 2 MA's), (Start: 4 @47166 has 32 MA's), (7, 47304), (18, 47547),

Gene: Neptune\_61 Start: 47196, Stop: 47843, Start Num: 4  
Candidate Starts for Neptune\_61:  
(Start: 1 @47154 has 2 MA's), (Start: 4 @47196 has 32 MA's), (7, 47334), (18, 47577),

Gene: OhDear\_61 Start: 47164, Stop: 47811, Start Num: 4  
Candidate Starts for OhDear\_61:  
(Start: 1 @47122 has 2 MA's), (Start: 4 @47164 has 32 MA's), (7, 47302), (18, 47545),

Gene: OverHedge\_60 Start: 47062, Stop: 47709, Start Num: 4  
Candidate Starts for OverHedge\_60:  
(Start: 1 @47020 has 2 MA's), (Start: 4 @47062 has 32 MA's), (7, 47200), (18, 47443),

Gene: Phabba\_9 Start: 3508, Stop: 4167, Start Num: 6  
Candidate Starts for Phabba\_9:  
(3, 3472), (Start: 6 @3508 has 2 MA's), (9, 3694), (16, 3841), (19, 3913),

Gene: Pharpay\_60 Start: 47211, Stop: 47858, Start Num: 4  
Candidate Starts for Pharpay\_60:  
(Start: 1 @47169 has 2 MA's), (Start: 4 @47211 has 32 MA's), (7, 47349), (18, 47592),

Gene: PhunaPhoke\_61 Start: 47181, Stop: 47828, Start Num: 4  
Candidate Starts for PhunaPhoke\_61:  
(Start: 1 @47139 has 2 MA's), (Start: 4 @47181 has 32 MA's), (7, 47319), (18, 47562),

Gene: Potty\_60 Start: 47111, Stop: 47758, Start Num: 4  
Candidate Starts for Potty\_60:  
(Start: 1 @47069 has 2 MA's), (Start: 4 @47111 has 32 MA's), (7, 47249), (18, 47492),

Gene: Poultress\_60 Start: 47408, Stop: 48055, Start Num: 4  
Candidate Starts for Poultress\_60:  
(Start: 1 @47366 has 2 MA's), (Start: 4 @47408 has 32 MA's), (7, 47546), (10, 47630), (18, 47789),  
(22, 48008),

Gene: Rachella\_61 Start: 47192, Stop: 47839, Start Num: 4  
Candidate Starts for Rachella\_61:  
(Start: 1 @47150 has 2 MA's), (Start: 4 @47192 has 32 MA's), (7, 47330), (18, 47573),

Gene: Rie18\_61 Start: 46994, Stop: 47638, Start Num: 4  
Candidate Starts for Rie18\_61:  
(Start: 1 @46952 has 2 MA's), (Start: 4 @46994 has 32 MA's), (8, 47150),

Gene: RikSengupta\_15 Start: 7375, Stop: 7995, Start Num: 5  
Candidate Starts for RikSengupta\_15:  
(Start: 2 @7327 has 1 MA's), (Start: 5 @7375 has 5 MA's), (12, 7675), (14, 7699), (18, 7750), (24,  
7972),

Gene: SilentWarrior\_62 Start: 46627, Stop: 47274, Start Num: 4  
Candidate Starts for SilentWarrior\_62:  
(Start: 1 @46585 has 2 MA's), (Start: 4 @46627 has 32 MA's), (7, 46765),

Gene: Snakehole\_62 Start: 46608, Stop: 47255, Start Num: 4  
Candidate Starts for Snakehole\_62:  
(Start: 1 @46566 has 2 MA's), (Start: 4 @46608 has 32 MA's), (7, 46746),

Gene: Sparcetus\_15 Start: 7254, Stop: 7874, Start Num: 5  
Candidate Starts for Sparcetus\_15:  
(Start: 2 @7206 has 1 MA's), (Start: 5 @7254 has 5 MA's), (12, 7554), (14, 7578), (18, 7629), (24,  
7851),

Gene: Tedro\_61 Start: 46648, Stop: 47295, Start Num: 4  
Candidate Starts for Tedro\_61:  
(Start: 1 @46606 has 2 MA's), (Start: 4 @46648 has 32 MA's), (7, 46786),

Gene: TinyMiny\_15 Start: 7204, Stop: 7893, Start Num: 2  
Candidate Starts for TinyMiny\_15:  
(Start: 2 @7204 has 1 MA's), (Start: 5 @7252 has 5 MA's), (12, 7552), (14, 7576), (15, 7609), (18,  
7627), (21, 7840),

Gene: Tongui\_61 Start: 46861, Stop: 47508, Start Num: 4

Candidate Starts for Tongui\_61:

(Start: 1 @46819 has 2 MA's), (Start: 4 @46861 has 32 MA's),