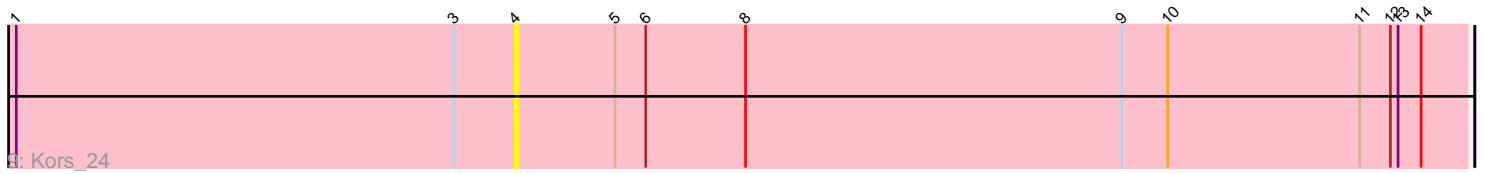
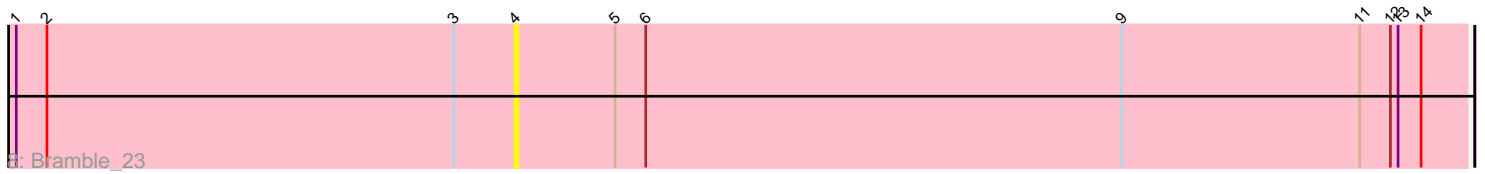
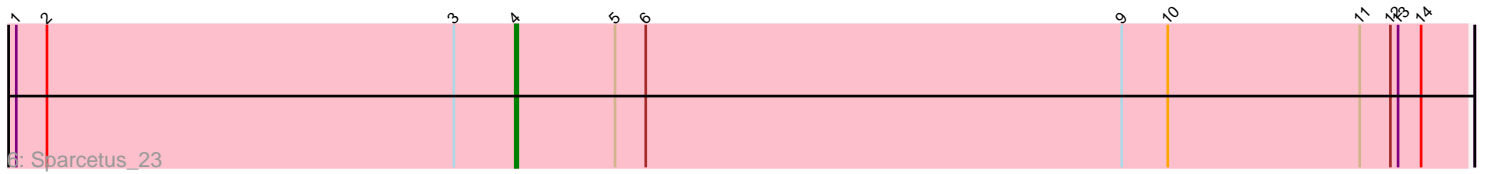
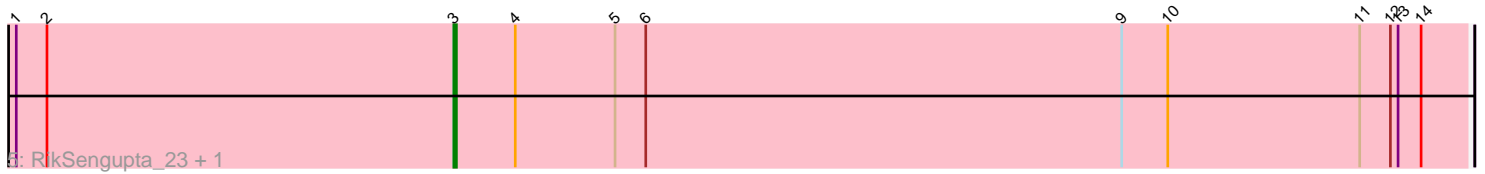
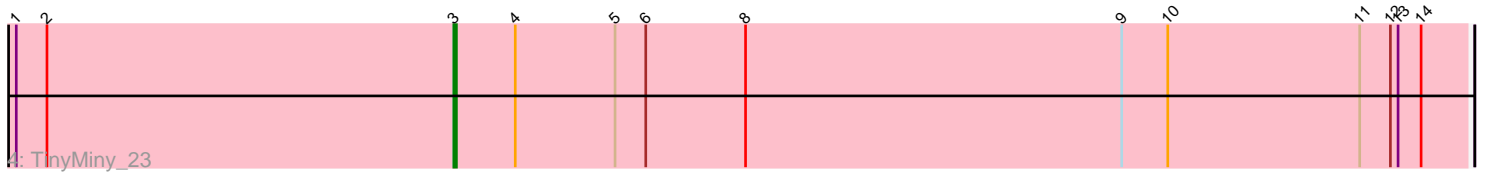
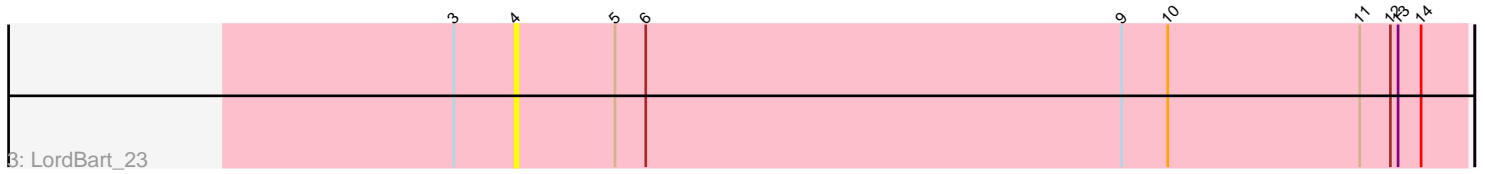
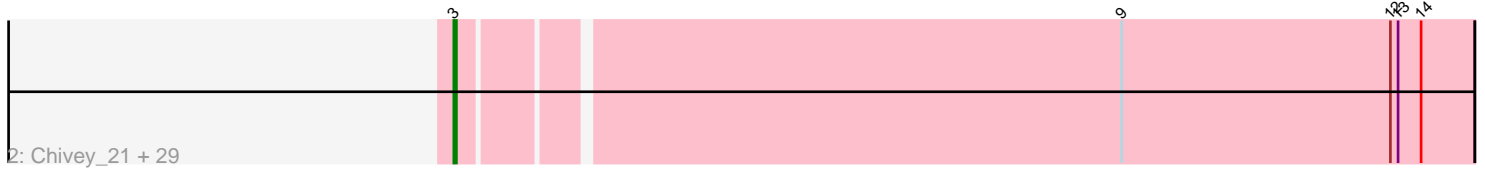
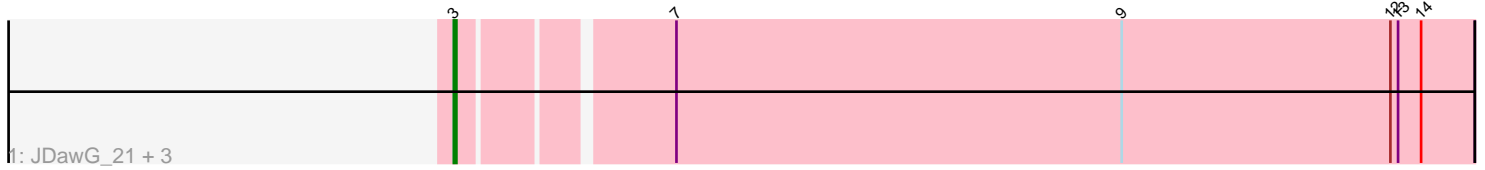


Pham 216311



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 216311 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216311 has 43 members, 8 are drafts.

Phages represented in each track:

- Track 1 : JDawG\_21, Crestdrop\_21, Rie18\_22, Hager\_23
- Track 2 : Chivey\_21, MortySmith\_20, Anakin\_22, Karate\_21, SilentWarrior\_21, Aesir\_21, Hiddenleaf\_21, Potty\_22, Rachella\_22, Dauntless\_21, DannyDe\_21, Poultruss\_21, Haunter\_22, Artiphact\_22, Krampus\_22, Tedro\_22, JingleBells\_21, Neptune\_22, PhunaPhoke\_22, Cybele\_22, Kate\_22, AnnaSerena\_22, OverHedge\_22, CoolCookie\_22, Erudite\_21, Snakehole\_23, Pharpay\_22, NarutoRun\_22, FreddieHg\_21, Gilda\_22
- Track 3 : LordBart\_23
- Track 4 : TinyMiny\_23
- Track 5 : RikSengupta\_23, Ajin\_23
- Track 6 : Sparcetus\_23
- Track 7 : Tongui\_22, Annapurna\_22
- Track 8 : Bramble\_23
- Track 9 : Kors\_24

### ***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 34 of the 35 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aesir\_21, Ajin\_23, Anakin\_22, AnnaSerena\_22, Artiphact\_22, Chivey\_21, CoolCookie\_22, Crestdrop\_21, Cybele\_22, DannyDe\_21, Dauntless\_21, Erudite\_21, FreddieHg\_21, Gilda\_22, Hager\_23, Haunter\_22, Hiddenleaf\_21, JDawG\_21, JingleBells\_21, Karate\_21, Kate\_22, Krampus\_22, MortySmith\_20, NarutoRun\_22, Neptune\_22, OverHedge\_22, Pharpay\_22, PhunaPhoke\_22, Potty\_22, Poultruss\_21, Rachella\_22, Rie18\_22, RikSengupta\_23, SilentWarrior\_21, Snakehole\_23, Tedro\_22, TinyMiny\_23,

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

- Annapurna\_22, Bramble\_23, Kors\_24, LordBart\_23, Sparcetus\_23, Tongui\_22,

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

-

## Summary by start number:

### Start 3:

- Found in 43 of 43 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 34 of 35
- Called 86.0% of time when present
- Phage (with cluster) where this start called: Aesir\_21 (EF), Ajin\_23 (EF), Anakin\_22 (EF), AnnaSerena\_22 (EF), Artiphact\_22 (EF), Chivey\_21 (EF), CoolCookie\_22 (EF), Crestdrop\_21 (EF), Cybele\_22 (EF), DannyDe\_21 (EF), Dauntless\_21 (EF), Erudite\_21 (EF), FreddieHg\_21 (EF), Gilda\_22 (EF), Hager\_23 (EF), Haunter\_22 (EF), Hiddenleaf\_21 (EF), JDawG\_21 (EF), JingleBells\_21 (EF), Karate\_21 (EF), Kate\_22 (EF), Krampus\_22 (EF), MortySmith\_20 (EF), NarutoRun\_22 (EF), Neptune\_22 (EF), OverHedge\_22 (EF), Pharpay\_22 (EF), PhunaPhoke\_22 (EF), Potty\_22 (EF), Poultruss\_21 (EF), Rachella\_22 (EF), Rie18\_22 (EF), RikSengupta\_23 (EF), SilentWarrior\_21 (EF), Snakehole\_23 (EF), Tedro\_22 (EF), TinyMiny\_23 (EF),

### Start 4:

- Found in 7 of 43 ( 16.3% ) of genes in pham
- Manual Annotations of this start: 1 of 35
- Called 57.1% of time when present
- Phage (with cluster) where this start called: Bramble\_23 (EF), Kors\_24 (EF), LordBart\_23 (EF), Sparcetus\_23 (EF),

### Start 7:

- Found in 6 of 43 ( 14.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Annapurna\_22 (EF), Tongui\_22 (EF),

## Summary by clusters:

There is one cluster represented in this pham: EF

### Info for manual annotations of cluster EF:

- Start number 3 was manually annotated 34 times for cluster EF.
- Start number 4 was manually annotated 1 time for cluster EF.

### **Gene Information:**

Gene: Aesir\_21 Start: 11798, Stop: 12184, Start Num: 3

Candidate Starts for Aesir\_21:

(Start: 3 @11798 has 34 MA's), (9, 12047), (12, 12152), (13, 12155), (14, 12164),

Gene: Ajin\_23 Start: 11984, Stop: 12379, Start Num: 3

Candidate Starts for Ajin\_23:

(1, 11813), (2, 11825), (Start: 3 @11984 has 34 MA's), (Start: 4 @12008 has 1 MA's), (5, 12047), (6, 12059), (9, 12245), (10, 12263), (11, 12338), (12, 12350), (13, 12353), (14, 12362),

Gene: Anakin\_22 Start: 12008, Stop: 12394, Start Num: 3

Candidate Starts for Anakin\_22:

(Start: 3 @12008 has 34 MA's), (9, 12257), (12, 12362), (13, 12365), (14, 12374),

Gene: AnnaSerena\_22 Start: 12017, Stop: 12403, Start Num: 3

Candidate Starts for AnnaSerena\_22:

(Start: 3 @12017 has 34 MA's), (9, 12266), (12, 12371), (13, 12374), (14, 12383),

Gene: Annapurna\_22 Start: 11292, Stop: 11603, Start Num: 7

Candidate Starts for Annapurna\_22:

(Start: 3 @11217 has 34 MA's), (7, 11292), (9, 11466), (12, 11571), (13, 11574), (14, 11583),

Gene: Artiphact\_22 Start: 12009, Stop: 12395, Start Num: 3

Candidate Starts for Artiphact\_22:

(Start: 3 @12009 has 34 MA's), (9, 12258), (12, 12363), (13, 12366), (14, 12375),

Gene: Bramble\_23 Start: 11973, Stop: 12344, Start Num: 4

Candidate Starts for Bramble\_23:

(1, 11778), (2, 11790), (Start: 3 @11949 has 34 MA's), (Start: 4 @11973 has 1 MA's), (5, 12012), (6, 12024), (9, 12210), (11, 12303), (12, 12315), (13, 12318), (14, 12327),

Gene: Chivey\_21 Start: 11210, Stop: 11596, Start Num: 3

Candidate Starts for Chivey\_21:

(Start: 3 @11210 has 34 MA's), (9, 11459), (12, 11564), (13, 11567), (14, 11576),

Gene: CoolCookie\_22 Start: 12015, Stop: 12401, Start Num: 3

Candidate Starts for CoolCookie\_22:

(Start: 3 @12015 has 34 MA's), (9, 12264), (12, 12369), (13, 12372), (14, 12381),

Gene: Crestdrop\_21 Start: 11084, Stop: 11470, Start Num: 3

Candidate Starts for Crestdrop\_21:

(Start: 3 @11084 has 34 MA's), (7, 11159), (9, 11333), (12, 11438), (13, 11441), (14, 11450),

Gene: Cybele\_22 Start: 11985, Stop: 12371, Start Num: 3

Candidate Starts for Cybele\_22:

(Start: 3 @11985 has 34 MA's), (9, 12234), (12, 12339), (13, 12342), (14, 12351),

Gene: DannyDe\_21 Start: 11202, Stop: 11588, Start Num: 3

Candidate Starts for DannyDe\_21:

(Start: 3 @11202 has 34 MA's), (9, 11451), (12, 11556), (13, 11559), (14, 11568),

Gene: Dauntless\_21 Start: 11727, Stop: 12113, Start Num: 3

Candidate Starts for Dauntless\_21:

(Start: 3 @11727 has 34 MA's), (9, 11976), (12, 12081), (13, 12084), (14, 12093),

Gene: Erudite\_21 Start: 11727, Stop: 12113, Start Num: 3

Candidate Starts for Erudite\_21:

(Start: 3 @11727 has 34 MA's), (9, 11976), (12, 12081), (13, 12084), (14, 12093),

Gene: FreddieHg\_21 Start: 11226, Stop: 11612, Start Num: 3

Candidate Starts for FreddieHg\_21:

(Start: 3 @11226 has 34 MA's), (9, 11475), (12, 11580), (13, 11583), (14, 11592),

Gene: Gilda\_22 Start: 12009, Stop: 12395, Start Num: 3

Candidate Starts for Gilda\_22:

(Start: 3 @12009 has 34 MA's), (9, 12258), (12, 12363), (13, 12366), (14, 12375),

Gene: Hager\_23 Start: 11580, Stop: 11966, Start Num: 3

Candidate Starts for Hager\_23:

(Start: 3 @11580 has 34 MA's), (7, 11655), (9, 11829), (12, 11934), (13, 11937), (14, 11946),

Gene: Haunter\_22 Start: 11422, Stop: 11808, Start Num: 3

Candidate Starts for Haunter\_22:

(Start: 3 @11422 has 34 MA's), (9, 11671), (12, 11776), (13, 11779), (14, 11788),

Gene: Hiddenleaf\_21 Start: 11210, Stop: 11596, Start Num: 3

Candidate Starts for Hiddenleaf\_21:

(Start: 3 @11210 has 34 MA's), (9, 11459), (12, 11564), (13, 11567), (14, 11576),

Gene: JDawG\_21 Start: 11792, Stop: 12178, Start Num: 3

Candidate Starts for JDawG\_21:

(Start: 3 @11792 has 34 MA's), (7, 11867), (9, 12041), (12, 12146), (13, 12149), (14, 12158),

Gene: JingleBells\_21 Start: 11291, Stop: 11677, Start Num: 3

Candidate Starts for JingleBells\_21:

(Start: 3 @11291 has 34 MA's), (9, 11540), (12, 11645), (13, 11648), (14, 11657),

Gene: Karate\_21 Start: 11430, Stop: 11816, Start Num: 3

Candidate Starts for Karate\_21:

(Start: 3 @11430 has 34 MA's), (9, 11679), (12, 11784), (13, 11787), (14, 11796),

Gene: Kate\_22 Start: 12017, Stop: 12403, Start Num: 3

Candidate Starts for Kate\_22:

(Start: 3 @12017 has 34 MA's), (9, 12266), (12, 12371), (13, 12374), (14, 12383),

Gene: Kors\_24 Start: 12054, Stop: 12425, Start Num: 4

Candidate Starts for Kors\_24:

(1, 11859), (Start: 3 @12030 has 34 MA's), (Start: 4 @12054 has 1 MA's), (5, 12093), (6, 12105), (8, 12144), (9, 12291), (10, 12309), (11, 12384), (12, 12396), (13, 12399), (14, 12408),

Gene: Krampus\_22 Start: 12015, Stop: 12401, Start Num: 3

Candidate Starts for Krampus\_22:

(Start: 3 @12015 has 34 MA's), (9, 12264), (12, 12369), (13, 12372), (14, 12381),

Gene: LordBart\_23 Start: 11970, Stop: 12341, Start Num: 4

Candidate Starts for LordBart\_23:

(Start: 3 @11946 has 34 MA's), (Start: 4 @11970 has 1 MA's), (5, 12009), (6, 12021), (9, 12207), (10, 12225), (11, 12300), (12, 12312), (13, 12315), (14, 12324),

Gene: MortySmith\_20 Start: 11189, Stop: 11575, Start Num: 3

Candidate Starts for MortySmith\_20:

(Start: 3 @11189 has 34 MA's), (9, 11438), (12, 11543), (13, 11546), (14, 11555),

Gene: NarutoRun\_22 Start: 12008, Stop: 12394, Start Num: 3

Candidate Starts for NarutoRun\_22:

(Start: 3 @12008 has 34 MA's), (9, 12257), (12, 12362), (13, 12365), (14, 12374),

Gene: Neptune\_22 Start: 11985, Stop: 12371, Start Num: 3  
Candidate Starts for Neptune\_22:  
(Start: 3 @11985 has 34 MA's), (9, 12234), (12, 12339), (13, 12342), (14, 12351),

Gene: OverHedge\_22 Start: 11982, Stop: 12368, Start Num: 3  
Candidate Starts for OverHedge\_22:  
(Start: 3 @11982 has 34 MA's), (9, 12231), (12, 12336), (13, 12339), (14, 12348),

Gene: Pharpay\_22 Start: 12030, Stop: 12416, Start Num: 3  
Candidate Starts for Pharpay\_22:  
(Start: 3 @12030 has 34 MA's), (9, 12279), (12, 12384), (13, 12387), (14, 12396),

Gene: PhunaPhoke\_22 Start: 12003, Stop: 12389, Start Num: 3  
Candidate Starts for PhunaPhoke\_22:  
(Start: 3 @12003 has 34 MA's), (9, 12252), (12, 12357), (13, 12360), (14, 12369),

Gene: Potty\_22 Start: 12008, Stop: 12394, Start Num: 3  
Candidate Starts for Potty\_22:  
(Start: 3 @12008 has 34 MA's), (9, 12257), (12, 12362), (13, 12365), (14, 12374),

Gene: Poultruss\_21 Start: 11781, Stop: 12167, Start Num: 3  
Candidate Starts for Poultruss\_21:  
(Start: 3 @11781 has 34 MA's), (9, 12030), (12, 12135), (13, 12138), (14, 12147),

Gene: Rachella\_22 Start: 12011, Stop: 12397, Start Num: 3  
Candidate Starts for Rachella\_22:  
(Start: 3 @12011 has 34 MA's), (9, 12260), (12, 12365), (13, 12368), (14, 12377),

Gene: Rie18\_22 Start: 11362, Stop: 11748, Start Num: 3  
Candidate Starts for Rie18\_22:  
(Start: 3 @11362 has 34 MA's), (7, 11437), (9, 11611), (12, 11716), (13, 11719), (14, 11728),

Gene: RikSengupta\_23 Start: 12067, Stop: 12462, Start Num: 3  
Candidate Starts for RikSengupta\_23:  
(1, 11896), (2, 11908), (Start: 3 @12067 has 34 MA's), (Start: 4 @12091 has 1 MA's), (5, 12130), (6, 12142), (9, 12328), (10, 12346), (11, 12421), (12, 12433), (13, 12436), (14, 12445),

Gene: SilentWarrior\_21 Start: 11218, Stop: 11604, Start Num: 3  
Candidate Starts for SilentWarrior\_21:  
(Start: 3 @11218 has 34 MA's), (9, 11467), (12, 11572), (13, 11575), (14, 11584),

Gene: Snakehole\_23 Start: 11307, Stop: 11693, Start Num: 3  
Candidate Starts for Snakehole\_23:  
(Start: 3 @11307 has 34 MA's), (9, 11556), (12, 11661), (13, 11664), (14, 11673),

Gene: Sparcetus\_23 Start: 11970, Stop: 12341, Start Num: 4  
Candidate Starts for Sparcetus\_23:  
(1, 11775), (2, 11787), (Start: 3 @11946 has 34 MA's), (Start: 4 @11970 has 1 MA's), (5, 12009), (6, 12021), (9, 12207), (10, 12225), (11, 12300), (12, 12312), (13, 12315), (14, 12324),

Gene: Tedro\_22 Start: 11481, Stop: 11867, Start Num: 3  
Candidate Starts for Tedro\_22:  
(Start: 3 @11481 has 34 MA's), (9, 11730), (12, 11835), (13, 11838), (14, 11847),

Gene: TinyMiny\_23 Start: 11965, Stop: 12360, Start Num: 3

Candidate Starts for TinyMiny\_23:

(1, 11794), (2, 11806), (Start: 3 @11965 has 34 MA's), (Start: 4 @11989 has 1 MA's), (5, 12028), (6, 12040), (8, 12079), (9, 12226), (10, 12244), (11, 12319), (12, 12331), (13, 12334), (14, 12343),

Gene: Tongui\_22 Start: 11429, Stop: 11740, Start Num: 7

Candidate Starts for Tongui\_22:

(Start: 3 @11354 has 34 MA's), (7, 11429), (9, 11603), (12, 11708), (13, 11711), (14, 11720),