



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 163971 Report

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

Pham number 163971 has 17 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Ajin\_15, Sparcetus\_14, RikSengupta\_14
- Track 2 : Haunter\_14, Tedro\_14
- Track 3 : DannyDe\_13, Snakehole\_15
- Track 4 : Crestdrop\_14
- Track 5 : Chivey\_13, Hiddenleaf\_13
- Track 6 : Hager\_14, Rie18\_14
- Track 7 : Karate\_13
- Track 8 : JingleBells\_13
- Track 9 : FreddieHg\_13
- Track 10 : TinyMiny\_14
- Track 11 : Kors\_15

### ***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 7 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Crestdrop\_14, DannyDe\_13, FreddieHg\_13, Hager\_14, Haunter\_14, JingleBells\_13, Karate\_13, Rie18\_14, Snakehole\_15, Tedro\_14,

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

- Chivey\_13, Hiddenleaf\_13,

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

- Ajin\_15, Kors\_15, RikSengupta\_14, Sparcetus\_14, TinyMiny\_14,

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

Start 1:

- Found in 5 of 17 ( 29.4% ) of genes in pham
- Manual Annotations of this start: 2 of 12
- Called 80.0% of time when present

- Phage (with cluster) where this start called: Ajin\_15 (EF), Kors\_15 (EF), RikSengupta\_14 (EF), Sparcetus\_14 (EF),

Start 2:

- Found in 12 of 17 ( 70.6% ) of genes in pham
- Manual Annotations of this start: 7 of 12
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Crestdrop\_14 (EF), DannyDe\_13 (EF), FreddieHg\_13 (EF), Hager\_14 (EF), Haunter\_14 (EF), JingleBells\_13 (EF), Karate\_13 (EF), Rie18\_14 (EF), Snakehole\_15 (EF), Tedro\_14 (EF),

Start 4:

- Found in 17 of 17 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 3 of 12
- Called 17.6% of time when present
- Phage (with cluster) where this start called: Chivey\_13 (EF), Hiddenleaf\_13 (EF), TinyMiny\_14 (EF),

### Summary by clusters:

There is one cluster represented in this pham: EF

Info for manual annotations of cluster EF:

- Start number 1 was manually annotated 2 times for cluster EF.
- Start number 2 was manually annotated 7 times for cluster EF.
- Start number 4 was manually annotated 3 times for cluster EF.

### Gene Information:

Gene: Ajin\_15 Start: 6294, Stop: 7199, Start Num: 1

Candidate Starts for Ajin\_15:

(Start: 1 @6294 has 2 MA's), (Start: 4 @6330 has 3 MA's), (5, 6351), (8, 6414), (9, 6438), (10, 6441), (11, 6468), (13, 6501), (14, 6510), (15, 6525), (17, 6558), (20, 6606), (22, 6711), (26, 6843), (28, 6918), (29, 6933), (31, 6942), (33, 7026), (34, 7071), (36, 7188),

Gene: Chivey\_13 Start: 6218, Stop: 7066, Start Num: 4

Candidate Starts for Chivey\_13:

(Start: 2 @6182 has 7 MA's), (Start: 4 @6218 has 3 MA's), (6, 6248), (10, 6332), (12, 6368), (17, 6449), (21, 6536), (23, 6635), (24, 6662), (25, 6701), (26, 6734), (27, 6806), (29, 6824), (33, 6917),

Gene: Crestdrop\_14 Start: 6055, Stop: 6939, Start Num: 2

Candidate Starts for Crestdrop\_14:

(Start: 2 @6055 has 7 MA's), (Start: 4 @6091 has 3 MA's), (6, 6121), (10, 6205), (12, 6241), (17, 6322), (21, 6409), (23, 6508), (24, 6535), (25, 6574), (26, 6607), (27, 6679), (33, 6790), (35, 6925),

Gene: DannyDe\_13 Start: 6173, Stop: 7057, Start Num: 2

Candidate Starts for DannyDe\_13:

(Start: 2 @6173 has 7 MA's), (Start: 4 @6209 has 3 MA's), (6, 6239), (10, 6323), (12, 6359), (17, 6440), (18, 6473), (21, 6527), (23, 6626), (24, 6653), (25, 6692), (26, 6725), (27, 6797), (29, 6815), (33, 6908),

Gene: FreddieHg\_13 Start: 6195, Stop: 7079, Start Num: 2

Candidate Starts for FreddieHg\_13:

(Start: 2 @6195 has 7 MA's), (Start: 4 @6231 has 3 MA's), (6, 6261), (10, 6345), (12, 6381), (17, 6462), (21, 6549), (23, 6648), (24, 6675), (25, 6714), (26, 6747), (27, 6819), (33, 6930),

Gene: Hager\_14 Start: 6443, Stop: 7327, Start Num: 2

Candidate Starts for Hager\_14:

(Start: 2 @6443 has 7 MA's), (3, 6473), (Start: 4 @6479 has 3 MA's), (6, 6509), (10, 6593), (12, 6629), (16, 6707), (18, 6743), (19, 6746), (21, 6797), (23, 6896), (25, 6962), (26, 6995), (27, 7067), (28, 7070), (30, 7091), (31, 7094), (35, 7313),

Gene: Haunter\_14 Start: 6398, Stop: 7282, Start Num: 2

Candidate Starts for Haunter\_14:

(Start: 2 @6398 has 7 MA's), (Start: 4 @6434 has 3 MA's), (6, 6464), (10, 6548), (12, 6584), (17, 6665), (18, 6698), (21, 6752), (23, 6851), (24, 6878), (25, 6917), (26, 6950), (27, 7022), (29, 7040), (32, 7088), (33, 7133),

Gene: Hiddenleaf\_13 Start: 6218, Stop: 7066, Start Num: 4

Candidate Starts for Hiddenleaf\_13:

(Start: 2 @6182 has 7 MA's), (Start: 4 @6218 has 3 MA's), (6, 6248), (10, 6332), (12, 6368), (17, 6449), (21, 6536), (23, 6635), (24, 6662), (25, 6701), (26, 6734), (27, 6806), (29, 6824), (33, 6917),

Gene: JingleBells\_13 Start: 6251, Stop: 7135, Start Num: 2

Candidate Starts for JingleBells\_13:

(Start: 2 @6251 has 7 MA's), (Start: 4 @6287 has 3 MA's), (6, 6317), (10, 6401), (12, 6437), (17, 6518), (21, 6605), (23, 6704), (24, 6731), (25, 6770), (26, 6803), (27, 6875), (29, 6893), (33, 6986),

Gene: Karate\_13 Start: 6403, Stop: 7287, Start Num: 2

Candidate Starts for Karate\_13:

(Start: 2 @6403 has 7 MA's), (Start: 4 @6439 has 3 MA's), (6, 6469), (7, 6481), (10, 6553), (12, 6589), (16, 6667), (17, 6670), (18, 6703), (19, 6706), (21, 6757), (23, 6856), (24, 6883), (25, 6922), (26, 6955), (27, 7027), (33, 7138), (35, 7273),

Gene: Kors\_15 Start: 6327, Stop: 7232, Start Num: 1

Candidate Starts for Kors\_15:

(Start: 1 @6327 has 2 MA's), (Start: 4 @6363 has 3 MA's), (5, 6384), (8, 6447), (10, 6474), (11, 6501), (13, 6534), (14, 6543), (15, 6558), (17, 6591), (20, 6639), (22, 6744), (26, 6876), (28, 6951), (29, 6966), (31, 6975), (33, 7059), (34, 7104), (36, 7221),

Gene: Rie18\_14 Start: 6338, Stop: 7222, Start Num: 2

Candidate Starts for Rie18\_14:

(Start: 2 @6338 has 7 MA's), (3, 6368), (Start: 4 @6374 has 3 MA's), (6, 6404), (10, 6488), (12, 6524), (16, 6602), (18, 6638), (19, 6641), (21, 6692), (23, 6791), (25, 6857), (26, 6890), (27, 6962), (28, 6965), (30, 6986), (31, 6989), (35, 7208),

Gene: RikSengupta\_14 Start: 6397, Stop: 7302, Start Num: 1

Candidate Starts for RikSengupta\_14:

(Start: 1 @6397 has 2 MA's), (Start: 4 @6433 has 3 MA's), (5, 6454), (8, 6517), (9, 6541), (10, 6544), (11, 6571), (13, 6604), (14, 6613), (15, 6628), (17, 6661), (20, 6709), (22, 6814), (26, 6946), (28, 7021), (29, 7036), (31, 7045), (33, 7129), (34, 7174), (36, 7291),

Gene: Snakehole\_15 Start: 6277, Stop: 7161, Start Num: 2

Candidate Starts for Snakehole\_15:

(Start: 2 @6277 has 7 MA's), (Start: 4 @6313 has 3 MA's), (6, 6343), (10, 6427), (12, 6463), (17, 6544), (18, 6577), (21, 6631), (23, 6730), (24, 6757), (25, 6796), (26, 6829), (27, 6901), (29, 6919), (33, 7012),

Gene: Sparcetus\_14 Start: 6276, Stop: 7181, Start Num: 1

Candidate Starts for Sparcetus\_14:

(Start: 1 @6276 has 2 MA's), (Start: 4 @6312 has 3 MA's), (5, 6333), (8, 6396), (9, 6420), (10, 6423), (11, 6450), (13, 6483), (14, 6492), (15, 6507), (17, 6540), (20, 6588), (22, 6693), (26, 6825), (28, 6900), (29, 6915), (31, 6924), (33, 7008), (34, 7053), (36, 7170),

Gene: Tedro\_14 Start: 6454, Stop: 7338, Start Num: 2

Candidate Starts for Tedro\_14:

(Start: 2 @6454 has 7 MA's), (Start: 4 @6490 has 3 MA's), (6, 6520), (10, 6604), (12, 6640), (17, 6721), (18, 6754), (21, 6808), (23, 6907), (24, 6934), (25, 6973), (26, 7006), (27, 7078), (29, 7096), (32, 7144), (33, 7189),

Gene: TinyMiny\_14 Start: 6310, Stop: 7179, Start Num: 4

Candidate Starts for TinyMiny\_14:

(Start: 1 @6274 has 2 MA's), (Start: 4 @6310 has 3 MA's), (5, 6331), (8, 6394), (9, 6418), (10, 6421), (11, 6448), (13, 6481), (14, 6490), (15, 6505), (17, 6538), (20, 6586), (22, 6691), (26, 6823), (28, 6898), (29, 6913), (31, 6922), (34, 7051), (36, 7168),