



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 2687 Report

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

Pham number 2687 has 34 members, 3 are drafts.

Phages represented in each track:

- Track 1 : KashFlow\_62, Hannaconda\_65, Wanda\_73, Gonephishing\_67, Omega\_73
- Track 2 : MiaZeal\_67, Courthouse\_67, Porcelain\_66, Ariel\_66, Phoebus\_69, Squint\_67
- Track 3 : Dallas\_68, Dove\_64, Odette\_68, JuicyJay\_68, Lucky2013\_67, Klein\_69, ThreeRngTarjay\_67, Hughesyang\_68, Redno2\_66, Schatzie\_64, DmpstrDiver\_68, NihilNomen\_69, Zelink\_67, Superphikiman\_67, Ejimix\_69, Minerva\_75, Halley\_70, HokkenD\_62, Yeet\_67, Kalah2\_64, Bombitas\_66, Beem\_69
- Track 4 : LittleE\_70

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

The start number called the most often in the published annotations is 5, it was called in 31 of the 31 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ariel\_66, Beem\_69, Bombitas\_66, Courthouse\_67, Dallas\_68, DmpstrDiver\_68, Dove\_64, Ejimix\_69, Gonephishing\_67, Halley\_70, Hannaconda\_65, HokkenD\_62, Hughesyang\_68, JuicyJay\_68, Kalah2\_64, KashFlow\_62, Klein\_69, LittleE\_70, Lucky2013\_67, MiaZeal\_67, Minerva\_75, NihilNomen\_69, Odette\_68, Omega\_73, Phoebus\_69, Porcelain\_66, Redno2\_66, Schatzie\_64, Squint\_67, Superphikiman\_67, ThreeRngTarjay\_67, Wanda\_73, Yeet\_67, Zelink\_67,

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 5:

- Found in 34 of 34 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 31 of 31

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ariel\_66 (J), Beem\_69 (J), Bombitas\_66 (J), Courthouse\_67 (J), Dallas\_68 (J), DmpstrDiver\_68 (J), Dove\_64 (J), Ejimix\_69 (J), Gonephishing\_67 (J), Halley\_70 (J), Hannaconda\_65 (J), HokkenD\_62 (J), Hughesyang\_68 (J), JuicyJay\_68 (J), Kalah2\_64 (J), KashFlow\_62 (J), Klein\_69 (J), LittleE\_70 (J), Lucky2013\_67 (J), MiaZeal\_67 (J), Minerva\_75 (J), NihilNomen\_69 (J), Odette\_68 (J), Omega\_73 (J), Phoebus\_69 (J), Porcelain\_66 (J), Redno2\_66 (J), Schatzie\_64 (J), Squint\_67 (J), Superphikiman\_67 (J), ThreeRngTarjay\_67 (J), Wanda\_73 (J), Yeet\_67 (J), Zelink\_67 (J),

### **Summary by clusters:**

There is one cluster represented in this pham: J

Info for manual annotations of cluster J:

- Start number 5 was manually annotated 31 times for cluster J.

### **Gene Information:**

Gene: Ariel\_66 Start: 44737, Stop: 44531, Start Num: 5

Candidate Starts for Ariel\_66:

(2, 44779), (4, 44764), (Start: 5 @44737 has 31 MA's), (6, 44719), (7, 44695), (8, 44602),

Gene: Beem\_69 Start: 49538, Stop: 49332, Start Num: 5

Candidate Starts for Beem\_69:

(1, 49583), (3, 49571), (4, 49565), (Start: 5 @49538 has 31 MA's), (6, 49520), (7, 49496), (8, 49403),

Gene: Bombitas\_66 Start: 49134, Stop: 48928, Start Num: 5

Candidate Starts for Bombitas\_66:

(1, 49179), (3, 49167), (4, 49161), (Start: 5 @49134 has 31 MA's), (6, 49116), (7, 49092), (8, 48999),

Gene: Courthouse\_67 Start: 45598, Stop: 45392, Start Num: 5

Candidate Starts for Courthouse\_67:

(2, 45640), (4, 45625), (Start: 5 @45598 has 31 MA's), (6, 45580), (7, 45556), (8, 45463),

Gene: Dallas\_68 Start: 48459, Stop: 48253, Start Num: 5

Candidate Starts for Dallas\_68:

(1, 48504), (3, 48492), (4, 48486), (Start: 5 @48459 has 31 MA's), (6, 48441), (7, 48417), (8, 48324),

Gene: DmpstrDiver\_68 Start: 48886, Stop: 48680, Start Num: 5

Candidate Starts for DmpstrDiver\_68:

(1, 48931), (3, 48919), (4, 48913), (Start: 5 @48886 has 31 MA's), (6, 48868), (7, 48844), (8, 48751),

Gene: Dove\_64 Start: 47400, Stop: 47194, Start Num: 5

Candidate Starts for Dove\_64:

(1, 47445), (3, 47433), (4, 47427), (Start: 5 @47400 has 31 MA's), (6, 47382), (7, 47358), (8, 47265),

Gene: Ejimix\_69 Start: 50324, Stop: 50118, Start Num: 5

Candidate Starts for Ejimix\_69:

(1, 50369), (3, 50357), (4, 50351), (Start: 5 @50324 has 31 MA's), (6, 50306), (7, 50282), (8, 50189),

Gene: Gonephishing\_67 Start: 46218, Stop: 46012, Start Num: 5  
Candidate Starts for Gonephishing\_67:  
(4, 46245), (Start: 5 @46218 has 31 MA's), (6, 46200), (8, 46083),

Gene: Halley\_70 Start: 49538, Stop: 49332, Start Num: 5  
Candidate Starts for Halley\_70:  
(1, 49583), (3, 49571), (4, 49565), (Start: 5 @49538 has 31 MA's), (6, 49520), (7, 49496), (8, 49403),

Gene: Hannaconda\_65 Start: 44465, Stop: 44259, Start Num: 5  
Candidate Starts for Hannaconda\_65:  
(4, 44492), (Start: 5 @44465 has 31 MA's), (6, 44447), (8, 44330),

Gene: HokkenD\_62 Start: 47807, Stop: 47601, Start Num: 5  
Candidate Starts for HokkenD\_62:  
(1, 47852), (3, 47840), (4, 47834), (Start: 5 @47807 has 31 MA's), (6, 47789), (7, 47765), (8, 47672),

Gene: Hughesyang\_68 Start: 49467, Stop: 49261, Start Num: 5  
Candidate Starts for Hughesyang\_68:  
(1, 49512), (3, 49500), (4, 49494), (Start: 5 @49467 has 31 MA's), (6, 49449), (7, 49425), (8, 49332),

Gene: JuicyJay\_68 Start: 50672, Stop: 50466, Start Num: 5  
Candidate Starts for JuicyJay\_68:  
(1, 50717), (3, 50705), (4, 50699), (Start: 5 @50672 has 31 MA's), (6, 50654), (7, 50630), (8, 50537),

Gene: Kalah2\_64 Start: 48831, Stop: 48625, Start Num: 5  
Candidate Starts for Kalah2\_64:  
(1, 48876), (3, 48864), (4, 48858), (Start: 5 @48831 has 31 MA's), (6, 48813), (7, 48789), (8, 48696),

Gene: KashFlow\_62 Start: 44086, Stop: 43880, Start Num: 5  
Candidate Starts for KashFlow\_62:  
(4, 44113), (Start: 5 @44086 has 31 MA's), (6, 44068), (8, 43951),

Gene: Klein\_69 Start: 48854, Stop: 48648, Start Num: 5  
Candidate Starts for Klein\_69:  
(1, 48899), (3, 48887), (4, 48881), (Start: 5 @48854 has 31 MA's), (6, 48836), (7, 48812), (8, 48719),

Gene: LittleE\_70 Start: 48536, Stop: 48330, Start Num: 5  
Candidate Starts for LittleE\_70:  
(4, 48563), (Start: 5 @48536 has 31 MA's), (6, 48518), (7, 48494), (8, 48401),

Gene: Lucky2013\_67 Start: 45277, Stop: 45071, Start Num: 5  
Candidate Starts for Lucky2013\_67:  
(1, 45322), (3, 45310), (4, 45304), (Start: 5 @45277 has 31 MA's), (6, 45259), (7, 45235), (8, 45142),

Gene: MiaZeal\_67 Start: 45409, Stop: 45203, Start Num: 5  
Candidate Starts for MiaZeal\_67:  
(2, 45451), (4, 45436), (Start: 5 @45409 has 31 MA's), (6, 45391), (7, 45367), (8, 45274),

Gene: Minerva\_75 Start: 50954, Stop: 50748, Start Num: 5  
Candidate Starts for Minerva\_75:  
(1, 50999), (3, 50987), (4, 50981), (Start: 5 @50954 has 31 MA's), (6, 50936), (7, 50912), (8, 50819),

Gene: NihilNomen\_69 Start: 49625, Stop: 49419, Start Num: 5

Candidate Starts for NihilNomen\_69:

(1, 49670), (3, 49658), (4, 49652), (Start: 5 @49625 has 31 MA's), (6, 49607), (7, 49583), (8, 49490),

Gene: Odette\_68 Start: 48668, Stop: 48462, Start Num: 5

Candidate Starts for Odette\_68:

(1, 48713), (3, 48701), (4, 48695), (Start: 5 @48668 has 31 MA's), (6, 48650), (7, 48626), (8, 48533),

Gene: Omega\_73 Start: 50271, Stop: 50065, Start Num: 5

Candidate Starts for Omega\_73:

(4, 50298), (Start: 5 @50271 has 31 MA's), (6, 50253), (8, 50136),

Gene: Phoebus\_69 Start: 50283, Stop: 50077, Start Num: 5

Candidate Starts for Phoebus\_69:

(2, 50325), (4, 50310), (Start: 5 @50283 has 31 MA's), (6, 50265), (7, 50241), (8, 50148),

Gene: Porcelain\_66 Start: 45409, Stop: 45203, Start Num: 5

Candidate Starts for Porcelain\_66:

(2, 45451), (4, 45436), (Start: 5 @45409 has 31 MA's), (6, 45391), (7, 45367), (8, 45274),

Gene: Redno2\_66 Start: 46421, Stop: 46215, Start Num: 5

Candidate Starts for Redno2\_66:

(1, 46466), (3, 46454), (4, 46448), (Start: 5 @46421 has 31 MA's), (6, 46403), (7, 46379), (8, 46286),

Gene: Schatzie\_64 Start: 48415, Stop: 48209, Start Num: 5

Candidate Starts for Schatzie\_64:

(1, 48460), (3, 48448), (4, 48442), (Start: 5 @48415 has 31 MA's), (6, 48397), (7, 48373), (8, 48280),

Gene: Squint\_67 Start: 45528, Stop: 45322, Start Num: 5

Candidate Starts for Squint\_67:

(2, 45570), (4, 45555), (Start: 5 @45528 has 31 MA's), (6, 45510), (7, 45486), (8, 45393),

Gene: Superphikiman\_67 Start: 45143, Stop: 44937, Start Num: 5

Candidate Starts for Superphikiman\_67:

(1, 45188), (3, 45176), (4, 45170), (Start: 5 @45143 has 31 MA's), (6, 45125), (7, 45101), (8, 45008),

Gene: ThreeRngTarjay\_67 Start: 49701, Stop: 49495, Start Num: 5

Candidate Starts for ThreeRngTarjay\_67:

(1, 49746), (3, 49734), (4, 49728), (Start: 5 @49701 has 31 MA's), (6, 49683), (7, 49659), (8, 49566),

Gene: Wanda\_73 Start: 49163, Stop: 48957, Start Num: 5

Candidate Starts for Wanda\_73:

(4, 49190), (Start: 5 @49163 has 31 MA's), (6, 49145), (8, 49028),

Gene: Yeet\_67 Start: 48687, Stop: 48481, Start Num: 5

Candidate Starts for Yeet\_67:

(1, 48732), (3, 48720), (4, 48714), (Start: 5 @48687 has 31 MA's), (6, 48669), (7, 48645), (8, 48552),

Gene: Zelink\_67 Start: 50014, Stop: 49808, Start Num: 5

Candidate Starts for Zelink\_67:

(1, 50059), (3, 50047), (4, 50041), (Start: 5 @50014 has 31 MA's), (6, 49996), (7, 49972), (8, 49879),