



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 2916 Report

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

Pham number 2916 has 30 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Wanda\_67, Dallas\_60, EricMillard\_61, Halley\_62, JuicyJay\_60, HokkenD\_54, Yeet\_59, BAKA\_65, Klein\_61, Minerva\_67, Beem\_61, Odette\_59, Hughesyang\_60, Ejimix\_61, NihilNomen\_61, Duke13\_64, Bagrid\_60, Pound\_61, Phoebus\_60, Bombitas\_58, Redno2\_58, ThreeRngTarjay\_59, Schatzie\_56, Optimus\_66, Zelink\_59
- Track 2 : Kalah2\_57, DmpstrDiver\_60, KashFlow\_54, Hannaconda\_57
- Track 3 : Bobby\_60

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

The start number called the most often in the published annotations is 1, it was called in 28 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BAKA\_65, Bagrid\_60, Beem\_61, Bobby\_60, Bombitas\_58, Dallas\_60, DmpstrDiver\_60, Duke13\_64, Ejimix\_61, EricMillard\_61, Halley\_62, Hannaconda\_57, HokkenD\_54, Hughesyang\_60, JuicyJay\_60, Kalah2\_57, KashFlow\_54, Klein\_61, Minerva\_67, NihilNomen\_61, Odette\_59, Optimus\_66, Phoebus\_60, Pound\_61, Redno2\_58, Schatzie\_56, ThreeRngTarjay\_59, Wanda\_67, Yeet\_59, Zelink\_59,

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 1:

- Found in 30 of 30 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 28 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BAKA\_65 (J), Bagrid\_60 (J), Beem\_61 (J), Bobby\_60 (J), Bombitas\_58 (J), Dallas\_60 (J), DmpstrDiver\_60 (J), Duke13\_64

(J), Ejimix\_61 (J), EricMillard\_61 (J), Halley\_62 (J), Hannaconda\_57 (J), HokkenD\_54 (J), Hughesyang\_60 (J), JuicyJay\_60 (J), Kalah2\_57 (J), KashFlow\_54 (J), Klein\_61 (J), Minerva\_67 (J), NihilNomen\_61 (J), Odette\_59 (J), Optimus\_66 (J), Phoebus\_60 (J), Pound\_61 (J), Redno2\_58 (J), Schatzie\_56 (J), ThreeRngTarjay\_59 (J), Wanda\_67 (J), Yeet\_59 (J), Zelink\_59 (J),

### **Summary by clusters:**

There is one cluster represented in this pham: J

Info for manual annotations of cluster J:

- Start number 1 was manually annotated 28 times for cluster J.

### **Gene Information:**

Gene: BAKA\_65 Start: 47703, Stop: 47230, Start Num: 1

Candidate Starts for BAKA\_65:

(Start: 1 @47703 has 28 MA's), (2, 47661), (3, 47565), (4, 47562), (5, 47535), (6, 47400), (7, 47322), (8, 47292), (9, 47259), (10, 47256), (11, 47247),

Gene: Bagrid\_60 Start: 47035, Stop: 46562, Start Num: 1

Candidate Starts for Bagrid\_60:

(Start: 1 @47035 has 28 MA's), (2, 46993), (3, 46897), (4, 46894), (5, 46867), (6, 46732), (7, 46654), (8, 46624), (9, 46591), (10, 46588), (11, 46579),

Gene: Beem\_61 Start: 47601, Stop: 47128, Start Num: 1

Candidate Starts for Beem\_61:

(Start: 1 @47601 has 28 MA's), (2, 47559), (3, 47463), (4, 47460), (5, 47433), (6, 47298), (7, 47220), (8, 47190), (9, 47157), (10, 47154), (11, 47145),

Gene: Bobby\_60 Start: 46547, Stop: 46074, Start Num: 1

Candidate Starts for Bobby\_60:

(Start: 1 @46547 has 28 MA's), (3, 46409), (4, 46406), (5, 46379), (6, 46244), (7, 46166), (8, 46136), (9, 46103), (10, 46100),

Gene: Bombitas\_58 Start: 47197, Stop: 46724, Start Num: 1

Candidate Starts for Bombitas\_58:

(Start: 1 @47197 has 28 MA's), (2, 47155), (3, 47059), (4, 47056), (5, 47029), (6, 46894), (7, 46816), (8, 46786), (9, 46753), (10, 46750), (11, 46741),

Gene: Dallas\_60 Start: 46522, Stop: 46049, Start Num: 1

Candidate Starts for Dallas\_60:

(Start: 1 @46522 has 28 MA's), (2, 46480), (3, 46384), (4, 46381), (5, 46354), (6, 46219), (7, 46141), (8, 46111), (9, 46078), (10, 46075), (11, 46066),

Gene: DmpstrDiver\_60 Start: 46949, Stop: 46476, Start Num: 1

Candidate Starts for DmpstrDiver\_60:

(Start: 1 @46949 has 28 MA's), (2, 46907), (3, 46811), (4, 46808), (5, 46781), (6, 46646), (7, 46568), (8, 46538), (9, 46505), (10, 46502),

Gene: Duke13\_64 Start: 47469, Stop: 46996, Start Num: 1

Candidate Starts for Duke13\_64:

(Start: 1 @47469 has 28 MA's), (2, 47427), (3, 47331), (4, 47328), (5, 47301), (6, 47166), (7, 47088), (8, 47058), (9, 47025), (10, 47022), (11, 47013),

Gene: Ejimix\_61 Start: 48387, Stop: 47914, Start Num: 1

Candidate Starts for Ejimix\_61:

(Start: 1 @48387 has 28 MA's), (2, 48345), (3, 48249), (4, 48246), (5, 48219), (6, 48084), (7, 48006), (8, 47976), (9, 47943), (10, 47940), (11, 47931),

Gene: EricMillard\_61 Start: 47888, Stop: 47415, Start Num: 1

Candidate Starts for EricMillard\_61:

(Start: 1 @47888 has 28 MA's), (2, 47846), (3, 47750), (4, 47747), (5, 47720), (6, 47585), (7, 47507), (8, 47477), (9, 47444), (10, 47441), (11, 47432),

Gene: Halley\_62 Start: 47601, Stop: 47128, Start Num: 1

Candidate Starts for Halley\_62:

(Start: 1 @47601 has 28 MA's), (2, 47559), (3, 47463), (4, 47460), (5, 47433), (6, 47298), (7, 47220), (8, 47190), (9, 47157), (10, 47154), (11, 47145),

Gene: Hannaconda\_57 Start: 42089, Stop: 41616, Start Num: 1

Candidate Starts for Hannaconda\_57:

(Start: 1 @42089 has 28 MA's), (2, 42047), (3, 41951), (4, 41948), (5, 41921), (6, 41786), (7, 41708), (8, 41678), (9, 41645), (10, 41642),

Gene: HokkenD\_54 Start: 45870, Stop: 45397, Start Num: 1

Candidate Starts for HokkenD\_54:

(Start: 1 @45870 has 28 MA's), (2, 45828), (3, 45732), (4, 45729), (5, 45702), (6, 45567), (7, 45489), (8, 45459), (9, 45426), (10, 45423), (11, 45414),

Gene: Hughesyang\_60 Start: 47530, Stop: 47057, Start Num: 1

Candidate Starts for Hughesyang\_60:

(Start: 1 @47530 has 28 MA's), (2, 47488), (3, 47392), (4, 47389), (5, 47362), (6, 47227), (7, 47149), (8, 47119), (9, 47086), (10, 47083), (11, 47074),

Gene: JuicyJay\_60 Start: 48735, Stop: 48262, Start Num: 1

Candidate Starts for JuicyJay\_60:

(Start: 1 @48735 has 28 MA's), (2, 48693), (3, 48597), (4, 48594), (5, 48567), (6, 48432), (7, 48354), (8, 48324), (9, 48291), (10, 48288), (11, 48279),

Gene: Kalah2\_57 Start: 47144, Stop: 46671, Start Num: 1

Candidate Starts for Kalah2\_57:

(Start: 1 @47144 has 28 MA's), (2, 47102), (3, 47006), (4, 47003), (5, 46976), (6, 46841), (7, 46763), (8, 46733), (9, 46700), (10, 46697),

Gene: KashFlow\_54 Start: 41710, Stop: 41237, Start Num: 1

Candidate Starts for KashFlow\_54:

(Start: 1 @41710 has 28 MA's), (2, 41668), (3, 41572), (4, 41569), (5, 41542), (6, 41407), (7, 41329), (8, 41299), (9, 41266), (10, 41263),

Gene: Klein\_61 Start: 47167, Stop: 46694, Start Num: 1

Candidate Starts for Klein\_61:

(Start: 1 @47167 has 28 MA's), (2, 47125), (3, 47029), (4, 47026), (5, 46999), (6, 46864), (7, 46786), (8, 46756), (9, 46723), (10, 46720), (11, 46711),

Gene: Minerva\_67 Start: 49017, Stop: 48544, Start Num: 1

Candidate Starts for Minerva\_67:

(Start: 1 @49017 has 28 MA's), (2, 48975), (3, 48879), (4, 48876), (5, 48849), (6, 48714), (7, 48636), (8, 48606), (9, 48573), (10, 48570), (11, 48561),

Gene: NihilNomen\_61 Start: 47688, Stop: 47215, Start Num: 1

Candidate Starts for NihilNomen\_61:

(Start: 1 @47688 has 28 MA's), (2, 47646), (3, 47550), (4, 47547), (5, 47520), (6, 47385), (7, 47307), (8, 47277), (9, 47244), (10, 47241), (11, 47232),

Gene: Odette\_59 Start: 46731, Stop: 46258, Start Num: 1

Candidate Starts for Odette\_59:

(Start: 1 @46731 has 28 MA's), (2, 46689), (3, 46593), (4, 46590), (5, 46563), (6, 46428), (7, 46350), (8, 46320), (9, 46287), (10, 46284), (11, 46275),

Gene: Optimus\_66 Start: 48603, Stop: 48130, Start Num: 1

Candidate Starts for Optimus\_66:

(Start: 1 @48603 has 28 MA's), (2, 48561), (3, 48465), (4, 48462), (5, 48435), (6, 48300), (7, 48222), (8, 48192), (9, 48159), (10, 48156), (11, 48147),

Gene: Phoebus\_60 Start: 47889, Stop: 47416, Start Num: 1

Candidate Starts for Phoebus\_60:

(Start: 1 @47889 has 28 MA's), (2, 47847), (3, 47751), (4, 47748), (5, 47721), (6, 47586), (7, 47508), (8, 47478), (9, 47445), (10, 47442), (11, 47433),

Gene: Pound\_61 Start: 49022, Stop: 48549, Start Num: 1

Candidate Starts for Pound\_61:

(Start: 1 @49022 has 28 MA's), (2, 48980), (3, 48884), (4, 48881), (5, 48854), (6, 48719), (7, 48641), (8, 48611), (9, 48578), (10, 48575), (11, 48566),

Gene: Redno2\_58 Start: 44484, Stop: 44011, Start Num: 1

Candidate Starts for Redno2\_58:

(Start: 1 @44484 has 28 MA's), (2, 44442), (3, 44346), (4, 44343), (5, 44316), (6, 44181), (7, 44103), (8, 44073), (9, 44040), (10, 44037), (11, 44028),

Gene: Schatzie\_56 Start: 46478, Stop: 46005, Start Num: 1

Candidate Starts for Schatzie\_56:

(Start: 1 @46478 has 28 MA's), (2, 46436), (3, 46340), (4, 46337), (5, 46310), (6, 46175), (7, 46097), (8, 46067), (9, 46034), (10, 46031), (11, 46022),

Gene: ThreeRngTarjay\_59 Start: 47764, Stop: 47291, Start Num: 1

Candidate Starts for ThreeRngTarjay\_59:

(Start: 1 @47764 has 28 MA's), (2, 47722), (3, 47626), (4, 47623), (5, 47596), (6, 47461), (7, 47383), (8, 47353), (9, 47320), (10, 47317), (11, 47308),

Gene: Wanda\_67 Start: 47476, Stop: 47003, Start Num: 1

Candidate Starts for Wanda\_67:

(Start: 1 @47476 has 28 MA's), (2, 47434), (3, 47338), (4, 47335), (5, 47308), (6, 47173), (7, 47095), (8, 47065), (9, 47032), (10, 47029), (11, 47020),

Gene: Yeet\_59 Start: 46589, Stop: 46116, Start Num: 1

Candidate Starts for Yeet\_59:

(Start: 1 @46589 has 28 MA's), (2, 46547), (3, 46451), (4, 46448), (5, 46421), (6, 46286), (7, 46208), (8, 46178), (9, 46145), (10, 46142), (11, 46133),

Gene: Zelink\_59 Start: 48077, Stop: 47604, Start Num: 1

Candidate Starts for Zelink\_59:

(Start: 1 @48077 has 28 MA's), (2, 48035), (3, 47939), (4, 47936), (5, 47909), (6, 47774), (7, 47696), (8, 47666), (9, 47633), (10, 47630), (11, 47621),