



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 296695 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296695 has 45 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Hannaconda\_61, KashFlow\_58
- Track 2 : MiaZeal\_60, Wanda\_69, Dallas\_62, Minerva\_69, Marleymoo\_60, Kalah2\_59, Lucky2013\_61, EricMillard\_63, Halley\_64, Odette\_61, JuicyJay\_62, Xiaokay\_56, HokkenD\_56, BAKA\_67, ThreeRngTarjay\_61, Klein\_64, Redno2\_60, Courthouse\_60, Hughesyang\_62, Ariel\_60, Rearden\_58, Zelink\_61, Ejimix\_63, Bobby\_63, DmpstrDiver\_62, NihilNomen\_63, Superphikiman\_61, Dove\_56, Nekros\_61, Duke13\_66, Thibault\_56, Bagrid\_62, Constella\_51, Pound\_63, Phoebus\_62, Yeet\_61, Squint\_60, Hidrated\_61, Bombitas\_60, Beem\_63, Optimus\_68, Schatzie\_58, Porcelain\_59

### ***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 38 of the 38 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ariel\_60, BAKA\_67, Bagrid\_62, Beem\_63, Bobby\_63, Bombitas\_60, Constella\_51, Courthouse\_60, Dallas\_62, DmpstrDiver\_62, Dove\_56, Duke13\_66, Ejimix\_63, EricMillard\_63, Halley\_64, Hannaconda\_61, Hidrated\_61, HokkenD\_56, Hughesyang\_62, JuicyJay\_62, Kalah2\_59, KashFlow\_58, Klein\_64, Lucky2013\_61, Marleymoo\_60, MiaZeal\_60, Minerva\_69, Nekros\_61, NihilNomen\_63, Odette\_61, Optimus\_68, Phoebus\_62, Porcelain\_59, Pound\_63, Rearden\_58, Redno2\_60, Schatzie\_58, Squint\_60, Superphikiman\_61, Thibault\_56, ThreeRngTarjay\_61, Wanda\_69, Xiaokay\_56, Yeet\_61, Zelink\_61,

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 45 of 45 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 38 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ariel\_60 (J), BAKA\_67 (J), Bagrid\_62 (J), Beem\_63 (J), Bobby\_63 (J), Bombitas\_60 (J), Constella\_51 (J), Courthouse\_60 (J), Dallas\_62 (J), DmpstrDiver\_62 (J), Dove\_56 (J), Duke13\_66 (J), Ejimix\_63 (J), EricMillard\_63 (J), Halley\_64 (J), Hannaconda\_61 (J), Hidrated\_61 (J), HokkenD\_56 (J), Hughesyang\_62 (J), JuicyJay\_62 (J), Kalah2\_59 (J), KashFlow\_58 (J), Klein\_64 (J), Lucky2013\_61 (J), Marleymoo\_60 (J), MiaZeal\_60 (J), Minerva\_69 (J), Nekros\_61 (J), NihilNomen\_63 (J), Odette\_61 (J), Optimus\_68 (J), Phoebus\_62 (J), Porcelain\_59 (J), Pound\_63 (J), Rearden\_58 (J), Redno2\_60 (J), Schatzie\_58 (J), Squint\_60 (J), Superphikiman\_61 (J), Thibault\_56 (J), ThreeRngTarjay\_61 (J), Wanda\_69 (J), Xiaokay\_56 (J), Yeet\_61 (J), Zelink\_61 (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 38 times for cluster J.

### Gene Information:

Gene: Ariel\_60 Start: 43241, Stop: 43068, Start Num: 1

Candidate Starts for Ariel\_60:

(Start: 1 @43241 has 38 MA's), (2, 43184), (3, 43106), (4, 43082),

Gene: BAKA\_67 Start: 48144, Stop: 47971, Start Num: 1

Candidate Starts for BAKA\_67:

(Start: 1 @48144 has 38 MA's), (2, 48087), (3, 48009), (4, 47985),

Gene: Bagrid\_62 Start: 47476, Stop: 47303, Start Num: 1

Candidate Starts for Bagrid\_62:

(Start: 1 @47476 has 38 MA's), (2, 47419), (3, 47341), (4, 47317),

Gene: Beem\_63 Start: 48042, Stop: 47869, Start Num: 1

Candidate Starts for Beem\_63:

(Start: 1 @48042 has 38 MA's), (2, 47985), (3, 47907), (4, 47883),

Gene: Bobby\_63 Start: 47403, Stop: 47230, Start Num: 1

Candidate Starts for Bobby\_63:

(Start: 1 @47403 has 38 MA's), (2, 47346), (3, 47268), (4, 47244),

Gene: Bombitas\_60 Start: 47638, Stop: 47465, Start Num: 1

Candidate Starts for Bombitas\_60:

(Start: 1 @47638 has 38 MA's), (2, 47581), (3, 47503), (4, 47479),

Gene: Constella\_51 Start: 42980, Stop: 42807, Start Num: 1

Candidate Starts for Constella\_51:

(Start: 1 @42980 has 38 MA's), (2, 42923), (3, 42845), (4, 42821),

Gene: Courthouse\_60 Start: 43645, Stop: 43472, Start Num: 1  
Candidate Starts for Courthouse\_60:  
(Start: 1 @43645 has 38 MA's), (2, 43588), (3, 43510), (4, 43486),

Gene: Dallas\_62 Start: 46963, Stop: 46790, Start Num: 1  
Candidate Starts for Dallas\_62:  
(Start: 1 @46963 has 38 MA's), (2, 46906), (3, 46828), (4, 46804),

Gene: DmpstrDiver\_62 Start: 47390, Stop: 47217, Start Num: 1  
Candidate Starts for DmpstrDiver\_62:  
(Start: 1 @47390 has 38 MA's), (2, 47333), (3, 47255), (4, 47231),

Gene: Dove\_56 Start: 45904, Stop: 45731, Start Num: 1  
Candidate Starts for Dove\_56:  
(Start: 1 @45904 has 38 MA's), (2, 45847), (3, 45769), (4, 45745),

Gene: Duke13\_66 Start: 47910, Stop: 47737, Start Num: 1  
Candidate Starts for Duke13\_66:  
(Start: 1 @47910 has 38 MA's), (2, 47853), (3, 47775), (4, 47751),

Gene: Ejimix\_63 Start: 48828, Stop: 48655, Start Num: 1  
Candidate Starts for Ejimix\_63:  
(Start: 1 @48828 has 38 MA's), (2, 48771), (3, 48693), (4, 48669),

Gene: EricMillard\_63 Start: 48329, Stop: 48156, Start Num: 1  
Candidate Starts for EricMillard\_63:  
(Start: 1 @48329 has 38 MA's), (2, 48272), (3, 48194), (4, 48170),

Gene: Halley\_64 Start: 48042, Stop: 47869, Start Num: 1  
Candidate Starts for Halley\_64:  
(Start: 1 @48042 has 38 MA's), (2, 47985), (3, 47907), (4, 47883),

Gene: Hannaconda\_61 Start: 43234, Stop: 43049, Start Num: 1  
Candidate Starts for Hannaconda\_61:  
(Start: 1 @43234 has 38 MA's), (2, 43177), (3, 43099), (4, 43075), (5, 43060),

Gene: Hidrated\_61 Start: 47727, Stop: 47554, Start Num: 1  
Candidate Starts for Hidrated\_61:  
(Start: 1 @47727 has 38 MA's), (2, 47670), (3, 47592), (4, 47568),

Gene: HokkenD\_56 Start: 46311, Stop: 46138, Start Num: 1  
Candidate Starts for HokkenD\_56:  
(Start: 1 @46311 has 38 MA's), (2, 46254), (3, 46176), (4, 46152),

Gene: Hughesyang\_62 Start: 47971, Stop: 47798, Start Num: 1  
Candidate Starts for Hughesyang\_62:  
(Start: 1 @47971 has 38 MA's), (2, 47914), (3, 47836), (4, 47812),

Gene: JuicyJay\_62 Start: 49176, Stop: 49003, Start Num: 1  
Candidate Starts for JuicyJay\_62:  
(Start: 1 @49176 has 38 MA's), (2, 49119), (3, 49041), (4, 49017),

Gene: Kalah2\_59 Start: 47585, Stop: 47412, Start Num: 1

Candidate Starts for Kalah2\_59:

(Start: 1 @47585 has 38 MA's), (2, 47528), (3, 47450), (4, 47426),

Gene: KashFlow\_58 Start: 42855, Stop: 42670, Start Num: 1

Candidate Starts for KashFlow\_58:

(Start: 1 @42855 has 38 MA's), (2, 42798), (3, 42720), (4, 42696), (5, 42681),

Gene: Klein\_64 Start: 47608, Stop: 47435, Start Num: 1

Candidate Starts for Klein\_64:

(Start: 1 @47608 has 38 MA's), (2, 47551), (3, 47473), (4, 47449),

Gene: Lucky2013\_61 Start: 43781, Stop: 43608, Start Num: 1

Candidate Starts for Lucky2013\_61:

(Start: 1 @43781 has 38 MA's), (2, 43724), (3, 43646), (4, 43622),

Gene: Marleymoo\_60 Start: 46525, Stop: 46352, Start Num: 1

Candidate Starts for Marleymoo\_60:

(Start: 1 @46525 has 38 MA's), (2, 46468), (3, 46390), (4, 46366),

Gene: MiaZeal\_60 Start: 43456, Stop: 43283, Start Num: 1

Candidate Starts for MiaZeal\_60:

(Start: 1 @43456 has 38 MA's), (2, 43399), (3, 43321), (4, 43297),

Gene: Minerva\_69 Start: 49458, Stop: 49285, Start Num: 1

Candidate Starts for Minerva\_69:

(Start: 1 @49458 has 38 MA's), (2, 49401), (3, 49323), (4, 49299),

Gene: Nekros\_61 Start: 46282, Stop: 46109, Start Num: 1

Candidate Starts for Nekros\_61:

(Start: 1 @46282 has 38 MA's), (2, 46225), (3, 46147), (4, 46123),

Gene: NihilNomen\_63 Start: 48129, Stop: 47956, Start Num: 1

Candidate Starts for NihilNomen\_63:

(Start: 1 @48129 has 38 MA's), (2, 48072), (3, 47994), (4, 47970),

Gene: Odette\_61 Start: 47172, Stop: 46999, Start Num: 1

Candidate Starts for Odette\_61:

(Start: 1 @47172 has 38 MA's), (2, 47115), (3, 47037), (4, 47013),

Gene: Optimus\_68 Start: 49044, Stop: 48871, Start Num: 1

Candidate Starts for Optimus\_68:

(Start: 1 @49044 has 38 MA's), (2, 48987), (3, 48909), (4, 48885),

Gene: Phoebus\_62 Start: 48330, Stop: 48157, Start Num: 1

Candidate Starts for Phoebus\_62:

(Start: 1 @48330 has 38 MA's), (2, 48273), (3, 48195), (4, 48171),

Gene: Porcelain\_59 Start: 43456, Stop: 43283, Start Num: 1

Candidate Starts for Porcelain\_59:

(Start: 1 @43456 has 38 MA's), (2, 43399), (3, 43321), (4, 43297),

Gene: Pound\_63 Start: 49463, Stop: 49290, Start Num: 1

Candidate Starts for Pound\_63:

(Start: 1 @49463 has 38 MA's), (2, 49406), (3, 49328), (4, 49304),

Gene: Rearden\_58 Start: 43787, Stop: 43614, Start Num: 1

Candidate Starts for Rearden\_58:

(Start: 1 @43787 has 38 MA's), (2, 43730), (3, 43652), (4, 43628),

Gene: Redno2\_60 Start: 44925, Stop: 44752, Start Num: 1

Candidate Starts for Redno2\_60:

(Start: 1 @44925 has 38 MA's), (2, 44868), (3, 44790), (4, 44766),

Gene: Schatzie\_58 Start: 46919, Stop: 46746, Start Num: 1

Candidate Starts for Schatzie\_58:

(Start: 1 @46919 has 38 MA's), (2, 46862), (3, 46784), (4, 46760),

Gene: Squint\_60 Start: 43575, Stop: 43402, Start Num: 1

Candidate Starts for Squint\_60:

(Start: 1 @43575 has 38 MA's), (2, 43518), (3, 43440), (4, 43416),

Gene: Superphikiman\_61 Start: 43647, Stop: 43474, Start Num: 1

Candidate Starts for Superphikiman\_61:

(Start: 1 @43647 has 38 MA's), (2, 43590), (3, 43512), (4, 43488),

Gene: Thibault\_56 Start: 44634, Stop: 44461, Start Num: 1

Candidate Starts for Thibault\_56:

(Start: 1 @44634 has 38 MA's), (2, 44577), (3, 44499), (4, 44475),

Gene: ThreeRngTarjay\_61 Start: 48205, Stop: 48032, Start Num: 1

Candidate Starts for ThreeRngTarjay\_61:

(Start: 1 @48205 has 38 MA's), (2, 48148), (3, 48070), (4, 48046),

Gene: Wanda\_69 Start: 47917, Stop: 47744, Start Num: 1

Candidate Starts for Wanda\_69:

(Start: 1 @47917 has 38 MA's), (2, 47860), (3, 47782), (4, 47758),

Gene: Xiaokay\_56 Start: 44841, Stop: 44668, Start Num: 1

Candidate Starts for Xiaokay\_56:

(Start: 1 @44841 has 38 MA's), (2, 44784), (3, 44706), (4, 44682),

Gene: Yeet\_61 Start: 47030, Stop: 46857, Start Num: 1

Candidate Starts for Yeet\_61:

(Start: 1 @47030 has 38 MA's), (2, 46973), (3, 46895), (4, 46871),

Gene: Zelink\_61 Start: 48518, Stop: 48345, Start Num: 1

Candidate Starts for Zelink\_61:

(Start: 1 @48518 has 38 MA's), (2, 48461), (3, 48383), (4, 48359),