



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 294811 Report

This analysis was run 04/18/26 on database version 643.

Pham number 294811 has 51 members, 11 are drafts.

Phages represented in each track:

- Track 1 : LittleE\_132, Shaboozey\_130, Ariel\_129, Omega\_139, Superphikiman\_126, Courthouse\_124, Porcelain\_127, Lucky2013\_124, Rearden\_127, Gonephishing\_123, Nibley\_126, Nekros\_132, KashFlow\_127, Squint\_127, BronnyJames\_127
- Track 2 : Schatzie\_127, Pound\_120, Kalah2\_122, DmpstrDiver\_131, Optimus\_122, Bagrid\_131
- Track 3 : Bobby\_123, Redno2\_123, Marleymoo\_116, Phoebus\_132, Ejimix\_125, Dallas\_132, Wanda\_130, Constella\_121, Zelink\_126, Yeet\_123, Odette\_133, Halley\_133, Xiaokay\_125, HokkenD\_121, Klein\_128, Minerva\_130, Dove\_117, ThreeRngTarjay\_127, EricMillard\_123, Thibault\_113, Hidrated\_116, Duke13\_126, Hughesyang\_131, BAKA\_131
- Track 4 : Hannaconda\_122, MiaZeal\_129
- Track 5 : NihilNomen\_133, Beem\_133, JuicyJay\_128, Bombitas\_119

### ***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 29 of the 40 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BAKA\_131, Bagrid\_131, Beem\_133, Bobby\_123, Bombitas\_119, Constella\_121, Dallas\_132, DmpstrDiver\_131, Dove\_117, Duke13\_126, Ejimix\_125, EricMillard\_123, Halley\_133, Hidrated\_116, HokkenD\_121, Hughesyang\_131, JuicyJay\_128, Kalah2\_122, Klein\_128, Marleymoo\_116, Minerva\_130, NihilNomen\_133, Odette\_133, Optimus\_122, Phoebus\_132, Pound\_120, Redno2\_123, Schatzie\_127, Thibault\_113, ThreeRngTarjay\_127, Wanda\_130, Xiaokay\_125, Yeet\_123, Zelink\_126,

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

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

- Ariel\_129, BronnyJames\_127, Courthouse\_124, Gonephishing\_123, Hannaconda\_122, KashFlow\_127, LittleE\_132, Lucky2013\_124, MiaZeal\_129,

Nekros\_132, Nibley\_126, Omega\_139, Porcelain\_127, Rearden\_127, Shaboozey\_130, Squint\_127, Superphikiman\_126,

### Summary by start number:

#### Start 2:

- Found in 17 of 51 ( 33.3% ) of genes in pham
- Manual Annotations of this start: 11 of 40
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ariel\_129 (J), BronnyJames\_127 (J), Courthouse\_124 (J), Gonephishing\_123 (J), Hannaconda\_122 (J), KashFlow\_127 (J), LittleE\_132 (J), Lucky2013\_124 (J), MiaZeal\_129 (J), Nekros\_132 (J), Nibley\_126 (J), Omega\_139 (J), Porcelain\_127 (J), Rearden\_127 (J), Shaboozey\_130 (J), Squint\_127 (J), Superphikiman\_126 (J),

#### Start 3:

- Found in 34 of 51 ( 66.7% ) of genes in pham
- Manual Annotations of this start: 29 of 40
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BAKA\_131 (J), Bagrid\_131 (J), Beem\_133 (J), Bobby\_123 (J), Bombitas\_119 (J), Constella\_121 (J), Dallas\_132 (J), DmpstrDiver\_131 (J), Dove\_117 (J), Duke13\_126 (J), Ejimix\_125 (J), EricMillard\_123 (J), Halley\_133 (J), Hidrated\_116 (J), HokkenD\_121 (J), Hughesyang\_131 (J), JuicyJay\_128 (J), Kalah2\_122 (J), Klein\_128 (J), Marleymoo\_116 (J), Minerva\_130 (J), NihilNomen\_133 (J), Odette\_133 (J), Optimus\_122 (J), Phoebus\_132 (J), Pound\_120 (J), Redno2\_123 (J), Schatzie\_127 (J), Thibault\_113 (J), ThreeRngTarjay\_127 (J), Wanda\_130 (J), Xiaokay\_125 (J), Yeet\_123 (J), Zelink\_126 (J),

### Summary by clusters:

There is one cluster represented in this pham: J

#### Info for manual annotations of cluster J:

- Start number 2 was manually annotated 11 times for cluster J.
- Start number 3 was manually annotated 29 times for cluster J.

### Gene Information:

Gene: Ariel\_129 Start: 68157, Stop: 68387, Start Num: 2

Candidate Starts for Ariel\_129:

(Start: 2 @68157 has 11 MA's), (6, 68292), (7, 68316), (8, 68328),

Gene: BAKA\_131 Start: 71128, Stop: 71352, Start Num: 3

Candidate Starts for BAKA\_131:

(Start: 3 @71128 has 29 MA's), (4, 71230), (5, 71245), (8, 71293),

Gene: Bagrid\_131 Start: 71206, Stop: 71430, Start Num: 3

Candidate Starts for Bagrid\_131:

(Start: 3 @71206 has 29 MA's), (4, 71308), (5, 71323), (8, 71371), (9, 71383),

Gene: Beem\_133 Start: 72681, Stop: 72905, Start Num: 3  
Candidate Starts for Beem\_133:  
(1, 72654), (Start: 3 @72681 has 29 MA's), (4, 72783), (5, 72798), (8, 72846),

Gene: Bobby\_123 Start: 72782, Stop: 73006, Start Num: 3  
Candidate Starts for Bobby\_123:  
(Start: 3 @72782 has 29 MA's), (4, 72884), (5, 72899), (8, 72947),

Gene: Bombitas\_119 Start: 70092, Stop: 70316, Start Num: 3  
Candidate Starts for Bombitas\_119:  
(1, 70065), (Start: 3 @70092 has 29 MA's), (4, 70194), (5, 70209), (8, 70257),

Gene: BronnyJames\_127 Start: 69316, Stop: 69543, Start Num: 2  
Candidate Starts for BronnyJames\_127:  
(Start: 2 @69316 has 11 MA's), (6, 69451), (7, 69475), (8, 69487),

Gene: Constella\_121 Start: 68215, Stop: 68439, Start Num: 3  
Candidate Starts for Constella\_121:  
(Start: 3 @68215 has 29 MA's), (4, 68317), (5, 68332), (8, 68380),

Gene: Courthouse\_124 Start: 67757, Stop: 67984, Start Num: 2  
Candidate Starts for Courthouse\_124:  
(Start: 2 @67757 has 11 MA's), (6, 67892), (7, 67916), (8, 67928),

Gene: Dallas\_132 Start: 72193, Stop: 72417, Start Num: 3  
Candidate Starts for Dallas\_132:  
(Start: 3 @72193 has 29 MA's), (4, 72295), (5, 72310), (8, 72358),

Gene: DmpstrDiver\_131 Start: 71495, Stop: 71719, Start Num: 3  
Candidate Starts for DmpstrDiver\_131:  
(Start: 3 @71495 has 29 MA's), (4, 71597), (5, 71612), (8, 71660), (9, 71672),

Gene: Dove\_117 Start: 67139, Stop: 67363, Start Num: 3  
Candidate Starts for Dove\_117:  
(Start: 3 @67139 has 29 MA's), (4, 67241), (5, 67256), (8, 67304),

Gene: Duke13\_126 Start: 68796, Stop: 69020, Start Num: 3  
Candidate Starts for Duke13\_126:  
(Start: 3 @68796 has 29 MA's), (4, 68898), (5, 68913), (8, 68961),

Gene: Ejimix\_125 Start: 72261, Stop: 72485, Start Num: 3  
Candidate Starts for Ejimix\_125:  
(Start: 3 @72261 has 29 MA's), (4, 72363), (5, 72378), (8, 72426),

Gene: EricMillard\_123 Start: 70765, Stop: 70989, Start Num: 3  
Candidate Starts for EricMillard\_123:  
(Start: 3 @70765 has 29 MA's), (4, 70867), (5, 70882), (8, 70930),

Gene: Gonephishing\_123 Start: 67355, Stop: 67585, Start Num: 2  
Candidate Starts for Gonephishing\_123:  
(Start: 2 @67355 has 11 MA's), (6, 67490), (7, 67514), (8, 67526),

Gene: Halley\_133 Start: 72577, Stop: 72801, Start Num: 3

Candidate Starts for Halley\_133:  
(Start: 3 @72577 has 29 MA's), (4, 72679), (5, 72694), (8, 72742),

Gene: Hannaconda\_122 Start: 68008, Stop: 68238, Start Num: 2  
Candidate Starts for Hannaconda\_122:  
(Start: 2 @68008 has 11 MA's), (7, 68167), (8, 68179),

Gene: Hidrated\_116 Start: 68846, Stop: 69070, Start Num: 3  
Candidate Starts for Hidrated\_116:  
(Start: 3 @68846 has 29 MA's), (4, 68948), (5, 68963), (8, 69011),

Gene: HokkenD\_121 Start: 70940, Stop: 71164, Start Num: 3  
Candidate Starts for HokkenD\_121:  
(Start: 3 @70940 has 29 MA's), (4, 71042), (5, 71057), (8, 71105),

Gene: Hughesyang\_131 Start: 72302, Stop: 72526, Start Num: 3  
Candidate Starts for Hughesyang\_131:  
(Start: 3 @72302 has 29 MA's), (4, 72404), (5, 72419), (8, 72467),

Gene: JuicyJay\_128 Start: 73817, Stop: 74041, Start Num: 3  
Candidate Starts for JuicyJay\_128:  
(1, 73790), (Start: 3 @73817 has 29 MA's), (4, 73919), (5, 73934), (8, 73982),

Gene: Kalah2\_122 Start: 71108, Stop: 71332, Start Num: 3  
Candidate Starts for Kalah2\_122:  
(Start: 3 @71108 has 29 MA's), (4, 71210), (5, 71225), (8, 71273), (9, 71285),

Gene: KashFlow\_127 Start: 69790, Stop: 70017, Start Num: 2  
Candidate Starts for KashFlow\_127:  
(Start: 2 @69790 has 11 MA's), (6, 69925), (7, 69949), (8, 69961),

Gene: Klein\_128 Start: 69498, Stop: 69722, Start Num: 3  
Candidate Starts for Klein\_128:  
(Start: 3 @69498 has 29 MA's), (4, 69600), (5, 69615), (8, 69663),

Gene: LittleE\_132 Start: 70999, Stop: 71229, Start Num: 2  
Candidate Starts for LittleE\_132:  
(Start: 2 @70999 has 11 MA's), (6, 71134), (7, 71158), (8, 71170),

Gene: Lucky2013\_124 Start: 67876, Stop: 68106, Start Num: 2  
Candidate Starts for Lucky2013\_124:  
(Start: 2 @67876 has 11 MA's), (6, 68011), (7, 68035), (8, 68047),

Gene: Marleymoo\_116 Start: 68528, Stop: 68752, Start Num: 3  
Candidate Starts for Marleymoo\_116:  
(Start: 3 @68528 has 29 MA's), (4, 68630), (5, 68645), (8, 68693),

Gene: MiaZeal\_129 Start: 69014, Stop: 69244, Start Num: 2  
Candidate Starts for MiaZeal\_129:  
(Start: 2 @69014 has 11 MA's), (7, 69173), (8, 69185),

Gene: Minerva\_130 Start: 70903, Stop: 71127, Start Num: 3  
Candidate Starts for Minerva\_130:

(Start: 3 @70903 has 29 MA's), (4, 71005), (5, 71020), (8, 71068),

Gene: Nekros\_132 Start: 72510, Stop: 72737, Start Num: 2

Candidate Starts for Nekros\_132:

(Start: 2 @72510 has 11 MA's), (6, 72645), (7, 72669), (8, 72681),

Gene: Nibley\_126 Start: 68893, Stop: 69120, Start Num: 2

Candidate Starts for Nibley\_126:

(Start: 2 @68893 has 11 MA's), (6, 69028), (7, 69052), (8, 69064),

Gene: NihilNomen\_133 Start: 71762, Stop: 71986, Start Num: 3

Candidate Starts for NihilNomen\_133:

(1, 71735), (Start: 3 @71762 has 29 MA's), (4, 71864), (5, 71879), (8, 71927),

Gene: Odette\_133 Start: 72857, Stop: 73081, Start Num: 3

Candidate Starts for Odette\_133:

(Start: 3 @72857 has 29 MA's), (4, 72959), (5, 72974), (8, 73022),

Gene: Omega\_139 Start: 72680, Stop: 72910, Start Num: 2

Candidate Starts for Omega\_139:

(Start: 2 @72680 has 11 MA's), (6, 72815), (7, 72839), (8, 72851),

Gene: Optimus\_122 Start: 69299, Stop: 69523, Start Num: 3

Candidate Starts for Optimus\_122:

(Start: 3 @69299 has 29 MA's), (4, 69401), (5, 69416), (8, 69464), (9, 69476),

Gene: Phoebus\_132 Start: 73656, Stop: 73880, Start Num: 3

Candidate Starts for Phoebus\_132:

(Start: 3 @73656 has 29 MA's), (4, 73758), (5, 73773), (8, 73821),

Gene: Porcelain\_127 Start: 68822, Stop: 69052, Start Num: 2

Candidate Starts for Porcelain\_127:

(Start: 2 @68822 has 11 MA's), (6, 68957), (7, 68981), (8, 68993),

Gene: Pound\_120 Start: 70039, Stop: 70263, Start Num: 3

Candidate Starts for Pound\_120:

(Start: 3 @70039 has 29 MA's), (4, 70141), (5, 70156), (8, 70204), (9, 70216),

Gene: Rearden\_127 Start: 68913, Stop: 69143, Start Num: 2

Candidate Starts for Rearden\_127:

(Start: 2 @68913 has 11 MA's), (6, 69048), (7, 69072), (8, 69084),

Gene: Redno2\_123 Start: 69089, Stop: 69313, Start Num: 3

Candidate Starts for Redno2\_123:

(Start: 3 @69089 has 29 MA's), (4, 69191), (5, 69206), (8, 69254),

Gene: Schatzie\_127 Start: 71752, Stop: 71976, Start Num: 3

Candidate Starts for Schatzie\_127:

(Start: 3 @71752 has 29 MA's), (4, 71854), (5, 71869), (8, 71917), (9, 71929),

Gene: Shaboozey\_130 Start: 69337, Stop: 69564, Start Num: 2

Candidate Starts for Shaboozey\_130:

(Start: 2 @69337 has 11 MA's), (6, 69472), (7, 69496), (8, 69508),

Gene: Squint\_127 Start: 69127, Stop: 69354, Start Num: 2  
Candidate Starts for Squint\_127:  
(Start: 2 @69127 has 11 MA's), (6, 69262), (7, 69286), (8, 69298),

Gene: Superphikiman\_126 Start: 68039, Stop: 68266, Start Num: 2  
Candidate Starts for Superphikiman\_126:  
(Start: 2 @68039 has 11 MA's), (6, 68174), (7, 68198), (8, 68210),

Gene: Thibault\_113 Start: 66424, Stop: 66648, Start Num: 3  
Candidate Starts for Thibault\_113:  
(Start: 3 @66424 has 29 MA's), (4, 66526), (5, 66541), (8, 66589),

Gene: ThreeRngTarjay\_127 Start: 72247, Stop: 72471, Start Num: 3  
Candidate Starts for ThreeRngTarjay\_127:  
(Start: 3 @72247 has 29 MA's), (4, 72349), (5, 72364), (8, 72412),

Gene: Wanda\_130 Start: 69382, Stop: 69606, Start Num: 3  
Candidate Starts for Wanda\_130:  
(Start: 3 @69382 has 29 MA's), (4, 69484), (5, 69499), (8, 69547),

Gene: Xiaokay\_125 Start: 69320, Stop: 69544, Start Num: 3  
Candidate Starts for Xiaokay\_125:  
(Start: 3 @69320 has 29 MA's), (4, 69422), (5, 69437), (8, 69485),

Gene: Yeet\_123 Start: 70969, Stop: 71193, Start Num: 3  
Candidate Starts for Yeet\_123:  
(Start: 3 @70969 has 29 MA's), (4, 71071), (5, 71086), (8, 71134),

Gene: Zelink\_126 Start: 72194, Stop: 72418, Start Num: 3  
Candidate Starts for Zelink\_126:  
(Start: 3 @72194 has 29 MA's), (4, 72296), (5, 72311), (8, 72359),