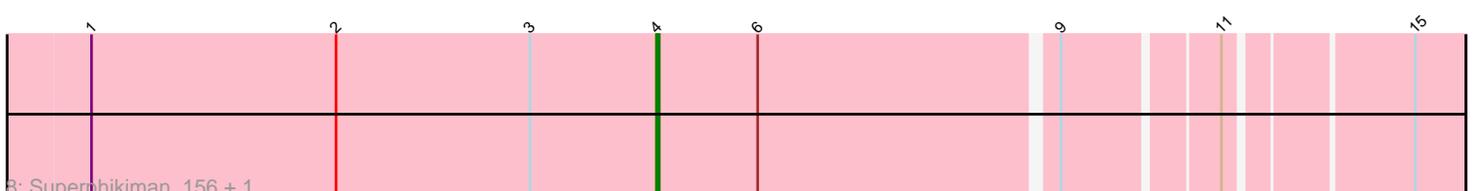
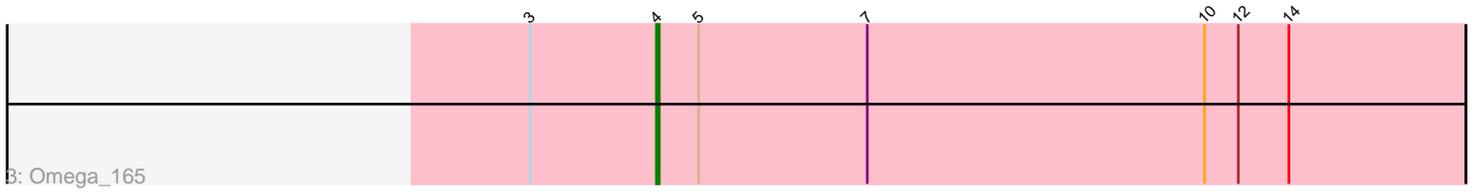
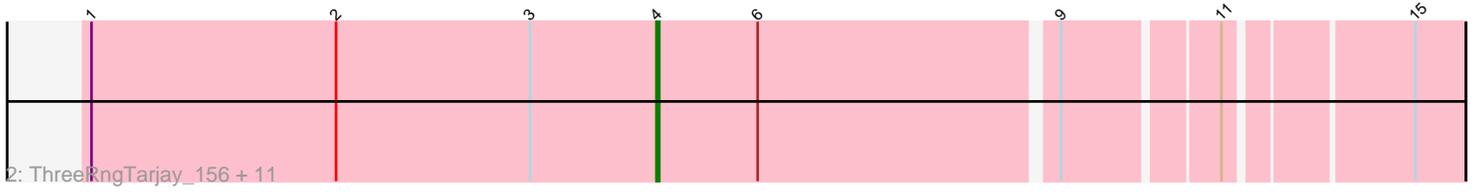
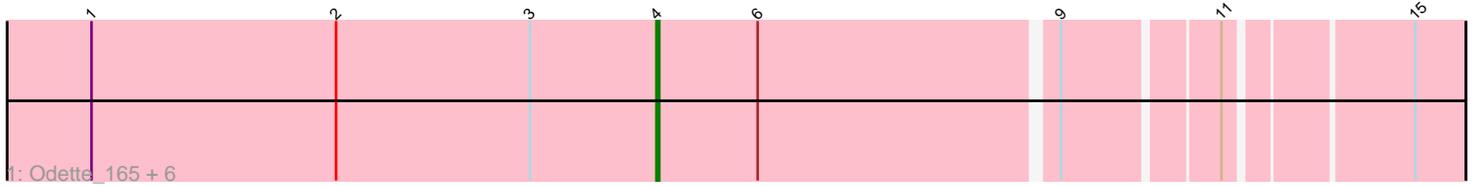


Pham 288064



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 288064 Report

This analysis was run 03/28/26 on database version 641.

Pham number 288064 has 37 members, 9 are drafts.

Phages represented in each track:

- Track 1 : Odette\_165, Lucky2013\_151, Courthouse\_155, Squint\_152, Schatzie\_156, MiaZeal\_158, Porcelain\_155
- Track 2 : ThreeRngTarjay\_156, HokkenD\_155, JuicyJay\_155, Dove\_147, Rearden\_153, Gonephishing\_153, Bombitas\_147, Redno2\_154, LittleE\_161, Nekros\_157, NihilNomen\_162, Phoebus\_161
- Track 3 : Omega\_165
- Track 4 : BronnyJames\_153, Hannaconda\_153, Nibley\_152, Shaboozey\_156, KashFlow\_158
- Track 5 : EricMillard\_154, Kalah2\_152, Bagrid\_164, Constella\_152, Duke13\_158, Optimus\_152, Hidrated\_149
- Track 6 : BAKA\_161, Klein\_159
- Track 7 : Hughesyang\_160
- Track 8 : Superphikiman\_156, Ariel\_158

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

The start number called the most often in the published annotations is 4, it was called in 28 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ariel\_158, BAKA\_161, Bagrid\_164, Bombitas\_147, BronnyJames\_153, Constella\_152, Courthouse\_155, Dove\_147, Duke13\_158, EricMillard\_154, Gonephishing\_153, Hannaconda\_153, Hidrated\_149, HokkenD\_155, Hughesyang\_160, JuicyJay\_155, Kalah2\_152, KashFlow\_158, Klein\_159, LittleE\_161, Lucky2013\_151, MiaZeal\_158, Nekros\_157, Nibley\_152, NihilNomen\_162, Odette\_165, Omega\_165, Optimus\_152, Phoebus\_161, Porcelain\_155, Rearden\_153, Redno2\_154, Schatzie\_156, Shaboozey\_156, Squint\_152, Superphikiman\_156, ThreeRngTarjay\_156,

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 4:

- Found in 37 of 37 ( 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: Ariel\_158 (J), BAKA\_161 (J), Bagrid\_164 (J), Bombitas\_147 (J), BronnyJames\_153 (J), Constella\_152 (J), Courthouse\_155 (J), Dove\_147 (J), Duke13\_158 (J), EricMillard\_154 (J), Gonephishing\_153 (J), Hannaconda\_153 (J), Hidrated\_149 (J), HokkenD\_155 (J), Hughesyang\_160 (J), JuicyJay\_155 (J), Kalah2\_152 (J), KashFlow\_158 (J), Klein\_159 (J), LittleE\_161 (J), Lucky2013\_151 (J), MiaZeal\_158 (J), Nekros\_157 (J), Nibley\_152 (J), NihilNomen\_162 (J), Odette\_165 (J), Omega\_165 (J), Optimus\_152 (J), Phoebus\_161 (J), Porcelain\_155 (J), Rearden\_153 (J), Redno2\_154 (J), Schatzie\_156 (J), Shaboozey\_156 (J), Squint\_152 (J), Superphikiman\_156 (J), ThreeRngTarjay\_156 (J),

## Summary by clusters:

There is one cluster represented in this pham: J

Info for manual annotations of cluster J:

- Start number 4 was manually annotated 28 times for cluster J.

### **Gene Information:**

Gene: Ariel\_158 Start: 81691, Stop: 81957, Start Num: 4

Candidate Starts for Ariel\_158:

(1, 81490), (2, 81577), (3, 81646), (Start: 4 @81691 has 28 MA's), (6, 81727), (9, 81829), (11, 81880), (15, 81940),

Gene: BAKA\_161 Start: 85520, Stop: 85807, Start Num: 4

Candidate Starts for BAKA\_161:

(Start: 4 @85520 has 28 MA's), (5, 85535), (7, 85595), (8, 85607), (10, 85715), (12, 85727), (13, 85736), (14, 85745),

Gene: Bagrid\_164 Start: 86749, Stop: 87036, Start Num: 4

Candidate Starts for Bagrid\_164:

(Start: 4 @86749 has 28 MA's), (7, 86824), (10, 86944), (12, 86956), (13, 86965), (14, 86974),

Gene: Bombitas\_147 Start: 82786, Stop: 83052, Start Num: 4

Candidate Starts for Bombitas\_147:

(1, 82585), (2, 82672), (3, 82741), (Start: 4 @82786 has 28 MA's), (6, 82822), (9, 82924), (11, 82975), (15, 83035),

Gene: BronnyJames\_153 Start: 81952, Stop: 82218, Start Num: 4

Candidate Starts for BronnyJames\_153:

(1, 81751), (2, 81838), (3, 81907), (Start: 4 @81952 has 28 MA's), (6, 81988), (9, 82090), (11, 82141), (15, 82201),

Gene: Constella\_152 Start: 83751, Stop: 84038, Start Num: 4  
Candidate Starts for Constella\_152:  
(Start: 4 @83751 has 28 MA's), (7, 83826), (10, 83946), (12, 83958), (13, 83967), (14, 83976),

Gene: Courthouse\_155 Start: 82135, Stop: 82401, Start Num: 4  
Candidate Starts for Courthouse\_155:  
(1, 81934), (2, 82021), (3, 82090), (Start: 4 @82135 has 28 MA's), (6, 82171), (9, 82273), (11, 82324),  
(15, 82384),

Gene: Dove\_147 Start: 81142, Stop: 81408, Start Num: 4  
Candidate Starts for Dove\_147:  
(1, 80941), (2, 81028), (3, 81097), (Start: 4 @81142 has 28 MA's), (6, 81178), (9, 81280), (11, 81331),  
(15, 81391),

Gene: Duke13\_158 Start: 84016, Stop: 84303, Start Num: 4  
Candidate Starts for Duke13\_158:  
(Start: 4 @84016 has 28 MA's), (7, 84091), (10, 84211), (12, 84223), (13, 84232), (14, 84241),

Gene: EricMillard\_154 Start: 85359, Stop: 85646, Start Num: 4  
Candidate Starts for EricMillard\_154:  
(Start: 4 @85359 has 28 MA's), (7, 85434), (10, 85554), (12, 85566), (13, 85575), (14, 85584),

Gene: Gonephishing\_153 Start: 83595, Stop: 83861, Start Num: 4  
Candidate Starts for Gonephishing\_153:  
(1, 83394), (2, 83481), (3, 83550), (Start: 4 @83595 has 28 MA's), (6, 83631), (9, 83733), (11, 83784),  
(15, 83844),

Gene: Hannaconda\_153 Start: 85650, Stop: 85916, Start Num: 4  
Candidate Starts for Hannaconda\_153:  
(1, 85449), (2, 85536), (3, 85605), (Start: 4 @85650 has 28 MA's), (6, 85686), (9, 85788), (11, 85839),  
(15, 85899),

Gene: Hidrated\_149 Start: 85246, Stop: 85533, Start Num: 4  
Candidate Starts for Hidrated\_149:  
(Start: 4 @85246 has 28 MA's), (7, 85321), (10, 85441), (12, 85453), (13, 85462), (14, 85471),

Gene: HokkenD\_155 Start: 86864, Stop: 87130, Start Num: 4  
Candidate Starts for HokkenD\_155:  
(1, 86663), (2, 86750), (3, 86819), (Start: 4 @86864 has 28 MA's), (6, 86900), (9, 87002), (11, 87053),  
(15, 87113),

Gene: Hughesyang\_160 Start: 85817, Stop: 86083, Start Num: 4  
Candidate Starts for Hughesyang\_160:  
(Start: 4 @85817 has 28 MA's), (6, 85853), (9, 85955), (11, 86006), (15, 86066),

Gene: JuicyJay\_155 Start: 86511, Stop: 86777, Start Num: 4  
Candidate Starts for JuicyJay\_155:  
(1, 86310), (2, 86397), (3, 86466), (Start: 4 @86511 has 28 MA's), (6, 86547), (9, 86649), (11, 86700),  
(15, 86760),

Gene: Kalah2\_152 Start: 84947, Stop: 85234, Start Num: 4  
Candidate Starts for Kalah2\_152:  
(Start: 4 @84947 has 28 MA's), (7, 85022), (10, 85142), (12, 85154), (13, 85163), (14, 85172),

Gene: KashFlow\_158 Start: 85463, Stop: 85729, Start Num: 4

Candidate Starts for KashFlow\_158:

(1, 85262), (2, 85349), (3, 85418), (Start: 4 @85463 has 28 MA's), (6, 85499), (9, 85601), (11, 85652), (15, 85712),

Gene: Klein\_159 Start: 83307, Stop: 83594, Start Num: 4

Candidate Starts for Klein\_159:

(Start: 4 @83307 has 28 MA's), (5, 83322), (7, 83382), (8, 83394), (10, 83502), (12, 83514), (13, 83523), (14, 83532),

Gene: LittleE\_161 Start: 85235, Stop: 85501, Start Num: 4

Candidate Starts for LittleE\_161:

(1, 85034), (2, 85121), (3, 85190), (Start: 4 @85235 has 28 MA's), (6, 85271), (9, 85373), (11, 85424), (15, 85484),

Gene: Lucky2013\_151 Start: 80304, Stop: 80570, Start Num: 4

Candidate Starts for Lucky2013\_151:

(1, 80103), (2, 80190), (3, 80259), (Start: 4 @80304 has 28 MA's), (6, 80340), (9, 80442), (11, 80493), (15, 80553),

Gene: MiaZeal\_158 Start: 81451, Stop: 81717, Start Num: 4

Candidate Starts for MiaZeal\_158:

(1, 81250), (2, 81337), (3, 81406), (Start: 4 @81451 has 28 MA's), (6, 81487), (9, 81589), (11, 81640), (15, 81700),

Gene: Nekros\_157 Start: 84912, Stop: 85178, Start Num: 4

Candidate Starts for Nekros\_157:

(1, 84711), (2, 84798), (3, 84867), (Start: 4 @84912 has 28 MA's), (6, 84948), (9, 85050), (11, 85101), (15, 85161),

Gene: Nibley\_152 Start: 81529, Stop: 81795, Start Num: 4

Candidate Starts for Nibley\_152:

(1, 81328), (2, 81415), (3, 81484), (Start: 4 @81529 has 28 MA's), (6, 81565), (9, 81667), (11, 81718), (15, 81778),

Gene: NihilNomen\_162 Start: 84637, Stop: 84903, Start Num: 4

Candidate Starts for NihilNomen\_162:

(1, 84436), (2, 84523), (3, 84592), (Start: 4 @84637 has 28 MA's), (6, 84673), (9, 84775), (11, 84826), (15, 84886),

Gene: Odette\_165 Start: 87570, Stop: 87836, Start Num: 4

Candidate Starts for Odette\_165:

(1, 87369), (2, 87456), (3, 87525), (Start: 4 @87570 has 28 MA's), (6, 87606), (9, 87708), (11, 87759), (15, 87819),

Gene: Omega\_165 Start: 86340, Stop: 86627, Start Num: 4

Candidate Starts for Omega\_165:

(3, 86295), (Start: 4 @86340 has 28 MA's), (5, 86355), (7, 86415), (10, 86535), (12, 86547), (14, 86565),

Gene: Optimus\_152 Start: 83836, Stop: 84123, Start Num: 4

Candidate Starts for Optimus\_152:

(Start: 4 @83836 has 28 MA's), (7, 83911), (10, 84031), (12, 84043), (13, 84052), (14, 84061),

Gene: Phoebus\_161 Start: 88324, Stop: 88590, Start Num: 4

Candidate Starts for Phoebus\_161:

(1, 88123), (2, 88210), (3, 88279), (Start: 4 @88324 has 28 MA's), (6, 88360), (9, 88462), (11, 88513), (15, 88573),

Gene: Porcelain\_155 Start: 81250, Stop: 81516, Start Num: 4

Candidate Starts for Porcelain\_155:

(1, 81049), (2, 81136), (3, 81205), (Start: 4 @81250 has 28 MA's), (6, 81286), (9, 81388), (11, 81439), (15, 81499),

Gene: Rearden\_153 Start: 82148, Stop: 82414, Start Num: 4

Candidate Starts for Rearden\_153:

(1, 81947), (2, 82034), (3, 82103), (Start: 4 @82148 has 28 MA's), (6, 82184), (9, 82286), (11, 82337), (15, 82397),

Gene: Redno2\_154 Start: 82437, Stop: 82703, Start Num: 4

Candidate Starts for Redno2\_154:

(1, 82236), (2, 82323), (3, 82392), (Start: 4 @82437 has 28 MA's), (6, 82473), (9, 82575), (11, 82626), (15, 82686),

Gene: Schatzie\_156 Start: 85624, Stop: 85890, Start Num: 4

Candidate Starts for Schatzie\_156:

(1, 85423), (2, 85510), (3, 85579), (Start: 4 @85624 has 28 MA's), (6, 85660), (9, 85762), (11, 85813), (15, 85873),

Gene: Shaboozey\_156 Start: 81973, Stop: 82239, Start Num: 4

Candidate Starts for Shaboozey\_156:

(1, 81772), (2, 81859), (3, 81928), (Start: 4 @81973 has 28 MA's), (6, 82009), (9, 82111), (11, 82162), (15, 82222),

Gene: Squint\_152 Start: 81944, Stop: 82210, Start Num: 4

Candidate Starts for Squint\_152:

(1, 81743), (2, 81830), (3, 81899), (Start: 4 @81944 has 28 MA's), (6, 81980), (9, 82082), (11, 82133), (15, 82193),

Gene: Superphikiman\_156 Start: 81831, Stop: 82097, Start Num: 4

Candidate Starts for Superphikiman\_156:

(1, 81630), (2, 81717), (3, 81786), (Start: 4 @81831 has 28 MA's), (6, 81867), (9, 81969), (11, 82020), (15, 82080),

Gene: ThreeRngTarjay\_156 Start: 85845, Stop: 86111, Start Num: 4

Candidate Starts for ThreeRngTarjay\_156:

(1, 85644), (2, 85731), (3, 85800), (Start: 4 @85845 has 28 MA's), (6, 85881), (9, 85983), (11, 86034), (15, 86094),