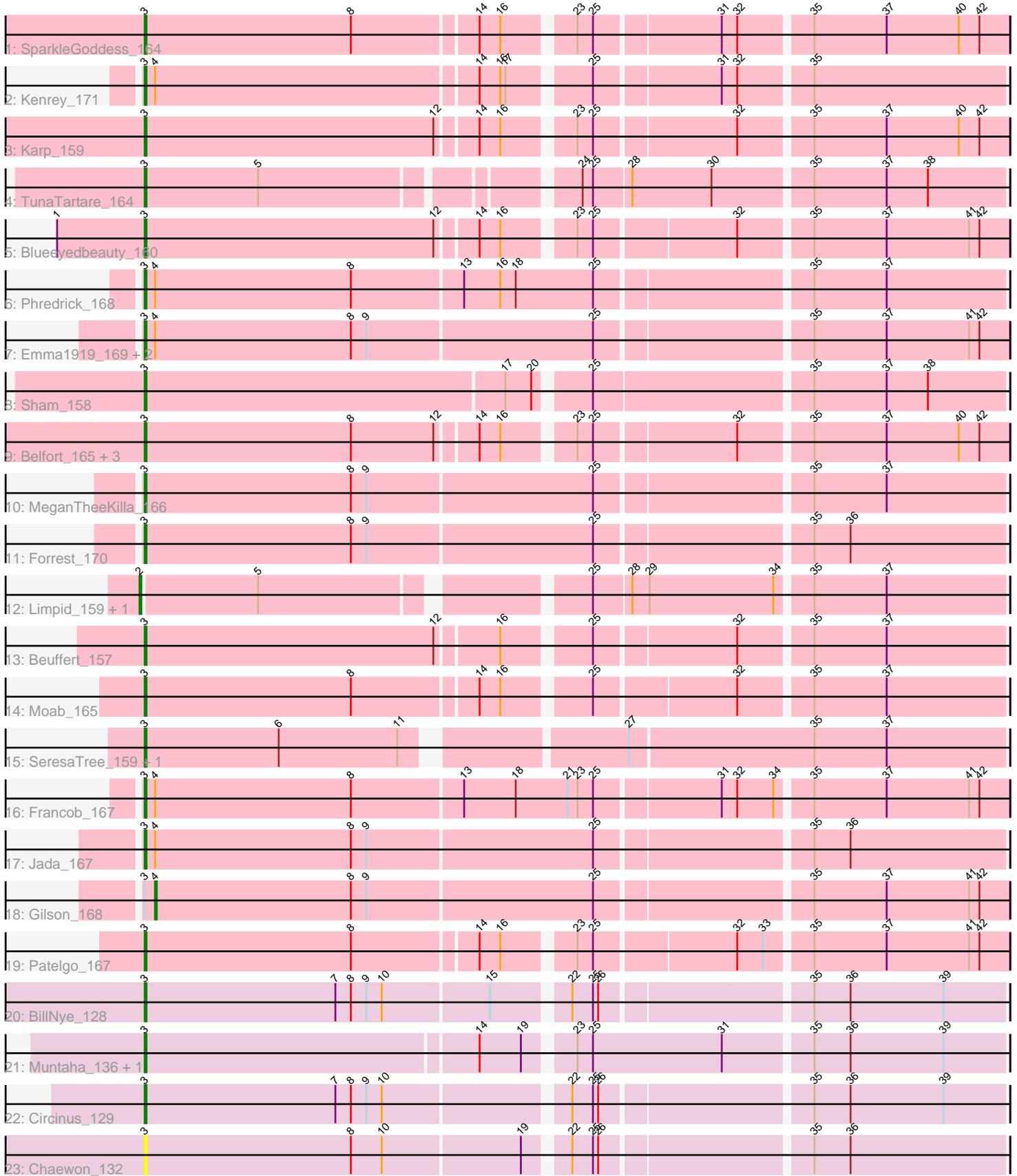


Pham 291400



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 291400 Report

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

Pham number 291400 has 31 members, 3 are drafts.

Phages represented in each track:

- Track 1 : SparkleGoddess\_164
- Track 2 : Kenrey\_171
- Track 3 : Karp\_159
- Track 4 : TunaTartare\_164
- Track 5 : Blueeyedbeauty\_160
- Track 6 : Phredrick\_168
- Track 7 : Emma1919\_169, Maupel\_169, DeluluLabubu\_172
- Track 8 : Sham\_158
- Track 9 : Belfort\_165, Comrade\_162, Stigma\_163, Westy\_167
- Track 10 : MeganTheeKilla\_166
- Track 11 : Forrest\_170
- Track 12 : Limpid\_159, Annadreamy\_152
- Track 13 : Beuffert\_157
- Track 14 : Moab\_165
- Track 15 : SeresaTree\_159, Faust\_157
- Track 16 : Francob\_167
- Track 17 : Jada\_167
- Track 18 : Gilson\_168
- Track 19 : Patelgo\_167
- Track 20 : BillNye\_128
- Track 21 : Muntaha\_136, Wakanda\_135
- Track 22 : Circinus\_129
- Track 23 : Chaewon\_132

### ***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 25 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Belfort\_165, Beuffert\_157, BillNye\_128, Blueeyedbeauty\_160, Chaewon\_132, Circinus\_129, Comrade\_162, DeluluLabubu\_172, Emma1919\_169, Faust\_157, Forrest\_170, Francob\_167, Jada\_167, Karp\_159, Kenrey\_171, Maupel\_169, MeganTheeKilla\_166, Moab\_165, Muntaha\_136, Patelgo\_167, Phredrick\_168,

SeresaTree\_159, Sham\_158, SparkleGoddess\_164, Stigma\_163, TunaTartare\_164, Wakanda\_135, Westy\_167,

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

- Gilson\_168,

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

- Annadreamy\_152, Limpid\_159,

### **Summary by start number:**

Start 2:

- Found in 2 of 31 ( 6.5% ) of genes in pham
- Manual Annotations of this start: 2 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Annadreamy\_152 (BK1), Limpid\_159 (BK1),

Start 3:

- Found in 29 of 31 ( 93.5% ) of genes in pham
- Manual Annotations of this start: 25 of 28
- Called 96.6% of time when present
- Phage (with cluster) where this start called: Belfort\_165 (BK1), Beuffert\_157 (BK1), BillNye\_128 (BK2), Blueeyedbeauty\_160 (BK1), Chaewon\_132 (BK2), Circinus\_129 (BK2), Comrade\_162 (BK1), DeluluLabubu\_172 (BK1), Emma1919\_169 (BK1), Faust\_157 (BK1), Forrest\_170 (BK1), Francob\_167 (BK1), Jada\_167 (BK1), Karp\_159 (BK1), Kenrey\_171 (BK1), Maupel\_169 (BK1), MeganTheeKilla\_166 (BK1), Moab\_165 (BK1), Muntaha\_136 (BK2), Patelgo\_167 (BK1), Phredrick\_168 (BK1), SeresaTree\_159 (BK1), Sham\_158 (BK1), SparkleGoddess\_164 (BK1), Stigma\_163 (BK1), TunaTartare\_164 (BK1), Wakanda\_135 (BK2), Westy\_167 (BK1),

Start 4:

- Found in 8 of 31 ( 25.8% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Gilson\_168 (BK1),

### **Summary by clusters:**

There are 2 clusters represented in this pham: BK1, BK2,

Info for manual annotations of cluster BK1:

- Start number 2 was manually annotated 2 times for cluster BK1.
- Start number 3 was manually annotated 21 times for cluster BK1.
- Start number 4 was manually annotated 1 time for cluster BK1.

Info for manual annotations of cluster BK2:

- Start number 3 was manually annotated 4 times for cluster BK2.

### **Gene Information:**

Gene: Annadreamy\_152 Start: 82558, Stop: 83025, Start Num: 2  
Candidate Starts for Annadreamy\_152:  
(Start: 2 @82558 has 2 MA's), (5, 82624), (25, 82795), (28, 82816), (29, 82825), (34, 82897), (35, 82915), (37, 82957),

Gene: Belfort\_165 Start: 88488, Stop: 88964, Start Num: 3  
Candidate Starts for Belfort\_165:  
(Start: 3 @88488 has 25 MA's), (8, 88608), (12, 88656), (14, 88677), (16, 88689), (23, 88725), (25, 88734), (32, 88812), (35, 88851), (37, 88893), (40, 88935), (42, 88947),

Gene: Beuffert\_157 Start: 86417, Stop: 86890, Start Num: 3  
Candidate Starts for Beuffert\_157:  
(Start: 3 @86417 has 25 MA's), (12, 86585), (16, 86618), (25, 86663), (32, 86741), (35, 86780), (37, 86822),

Gene: BillNye\_128 Start: 77977, Stop: 78453, Start Num: 3  
Candidate Starts for BillNye\_128:  
(Start: 3 @77977 has 25 MA's), (7, 78088), (8, 78097), (9, 78106), (10, 78115), (15, 78175), (22, 78214), (25, 78226), (26, 78229), (35, 78343), (36, 78364), (39, 78418),

Gene: Blueeyedbeauty\_160 Start: 86300, Stop: 86776, Start Num: 3  
Candidate Starts for Blueeyedbeauty\_160:  
(1, 86249), (Start: 3 @86300 has 25 MA's), (12, 86468), (14, 86489), (16, 86501), (23, 86537), (25, 86546), (32, 86624), (35, 86663), (37, 86705), (41, 86753), (42, 86759),

Gene: Chaewon\_132 Start: 77909, Stop: 78385, Start Num: 3  
Candidate Starts for Chaewon\_132:  
(Start: 3 @77909 has 25 MA's), (8, 78029), (10, 78047), (19, 78125), (22, 78146), (25, 78158), (26, 78161), (35, 78275), (36, 78296),

Gene: Circinus\_129 Start: 77945, Stop: 78421, Start Num: 3  
Candidate Starts for Circinus\_129:  
(Start: 3 @77945 has 25 MA's), (7, 78056), (8, 78065), (9, 78074), (10, 78083), (22, 78182), (25, 78194), (26, 78197), (35, 78311), (36, 78332), (39, 78386),

Gene: Comrade\_162 Start: 88690, Stop: 89166, Start Num: 3  
Candidate Starts for Comrade\_162:  
(Start: 3 @88690 has 25 MA's), (8, 88810), (12, 88858), (14, 88879), (16, 88891), (23, 88927), (25, 88936), (32, 89014), (35, 89053), (37, 89095), (40, 89137), (42, 89149),

Gene: DeluluLabubu\_172 Start: 89320, Stop: 89808, Start Num: 3  
Candidate Starts for DeluluLabubu\_172:  
(Start: 3 @89320 has 25 MA's), (Start: 4 @89326 has 1 MA's), (8, 89440), (9, 89449), (25, 89578), (35, 89695), (37, 89737), (41, 89785), (42, 89791),

Gene: Emma1919\_169 Start: 87379, Stop: 87867, Start Num: 3  
Candidate Starts for Emma1919\_169:  
(Start: 3 @87379 has 25 MA's), (Start: 4 @87385 has 1 MA's), (8, 87499), (9, 87508), (25, 87637), (35, 87754), (37, 87796), (41, 87844), (42, 87850),

Gene: Faust\_157 Start: 87675, Stop: 88151, Start Num: 3  
Candidate Starts for Faust\_157:  
(Start: 3 @87675 has 25 MA's), (6, 87753), (11, 87822), (27, 87936), (35, 88041), (37, 88083),

Gene: Forrest\_170 Start: 88362, Stop: 88847, Start Num: 3

Candidate Starts for Forrest\_170:

(Start: 3 @88362 has 25 MA's), (8, 88482), (9, 88491), (25, 88620), (35, 88737), (36, 88758),

Gene: Francob\_167 Start: 87884, Stop: 88372, Start Num: 3

Candidate Starts for Francob\_167:

(Start: 3 @87884 has 25 MA's), (Start: 4 @87890 has 1 MA's), (8, 88004), (13, 88067), (18, 88097), (21, 88127), (23, 88133), (25, 88142), (31, 88211), (32, 88220), (34, 88241), (35, 88259), (37, 88301), (41, 88349), (42, 88355),

Gene: Gilson\_168 Start: 87347, Stop: 87829, Start Num: 4

Candidate Starts for Gilson\_168:

(Start: 3 @87341 has 25 MA's), (Start: 4 @87347 has 1 MA's), (8, 87461), (9, 87470), (25, 87599), (35, 87716), (37, 87758), (41, 87806), (42, 87812),

Gene: Jada\_167 Start: 87058, Stop: 87543, Start Num: 3

Candidate Starts for Jada\_167:

(Start: 3 @87058 has 25 MA's), (Start: 4 @87064 has 1 MA's), (8, 87178), (9, 87187), (25, 87316), (35, 87433), (36, 87454),

Gene: Karp\_159 Start: 87914, Stop: 88390, Start Num: 3

Candidate Starts for Karp\_159:

(Start: 3 @87914 has 25 MA's), (12, 88082), (14, 88103), (16, 88115), (23, 88151), (25, 88160), (32, 88238), (35, 88277), (37, 88319), (40, 88361), (42, 88373),

Gene: Kenrey\_171 Start: 88511, Stop: 88984, Start Num: 3

Candidate Starts for Kenrey\_171:

(Start: 3 @88511 has 25 MA's), (Start: 4 @88517 has 1 MA's), (14, 88700), (16, 88712), (17, 88715), (25, 88757), (31, 88826), (32, 88835), (35, 88874),

Gene: Limpid\_159 Start: 87871, Stop: 88338, Start Num: 2

Candidate Starts for Limpid\_159:

(Start: 2 @87871 has 2 MA's), (5, 87937), (25, 88108), (28, 88129), (29, 88138), (34, 88210), (35, 88228), (37, 88270),

Gene: Maupel\_169 Start: 87341, Stop: 87829, Start Num: 3

Candidate Starts for Maupel\_169:

(Start: 3 @87341 has 25 MA's), (Start: 4 @87347 has 1 MA's), (8, 87461), (9, 87470), (25, 87599), (35, 87716), (37, 87758), (41, 87806), (42, 87812),

Gene: MeganTheeKilla\_166 Start: 86965, Stop: 87450, Start Num: 3

Candidate Starts for MeganTheeKilla\_166:

(Start: 3 @86965 has 25 MA's), (8, 87085), (9, 87094), (25, 87223), (35, 87340), (37, 87382),

Gene: Moab\_165 Start: 89688, Stop: 90161, Start Num: 3

Candidate Starts for Moab\_165:

(Start: 3 @89688 has 25 MA's), (8, 89808), (14, 89877), (16, 89889), (25, 89934), (32, 90012), (35, 90051), (37, 90093),

Gene: Muntaha\_136 Start: 76880, Stop: 77359, Start Num: 3

Candidate Starts for Muntaha\_136:

(Start: 3 @76880 has 25 MA's), (14, 77069), (19, 77093), (23, 77117), (25, 77126), (31, 77201), (35, 77249), (36, 77270), (39, 77324),

Gene: Patelgo\_167 Start: 90380, Stop: 90856, Start Num: 3

Candidate Starts for Patelgo\_167:

(Start: 3 @90380 has 25 MA's), (8, 90500), (14, 90569), (16, 90581), (23, 90617), (25, 90626), (32, 90704), (33, 90719), (35, 90743), (37, 90785), (41, 90833), (42, 90839),

Gene: Phredrick\_168 Start: 86854, Stop: 87339, Start Num: 3

Candidate Starts for Phredrick\_168:

(Start: 3 @86854 has 25 MA's), (Start: 4 @86860 has 1 MA's), (8, 86974), (13, 87037), (16, 87058), (18, 87067), (25, 87112), (35, 87229), (37, 87271),

Gene: SeresaTree\_159 Start: 87057, Stop: 87533, Start Num: 3

Candidate Starts for SeresaTree\_159:

(Start: 3 @87057 has 25 MA's), (6, 87135), (11, 87204), (27, 87318), (35, 87423), (37, 87465),

Gene: Sham\_158 Start: 88846, Stop: 89325, Start Num: 3

Candidate Starts for Sham\_158:

(Start: 3 @88846 has 25 MA's), (17, 89053), (20, 89068), (25, 89095), (35, 89215), (37, 89257), (38, 89281),

Gene: SparkleGoddess\_164 Start: 88701, Stop: 89177, Start Num: 3

Candidate Starts for SparkleGoddess\_164:

(Start: 3 @88701 has 25 MA's), (8, 88821), (14, 88890), (16, 88902), (23, 88938), (25, 88947), (31, 89016), (32, 89025), (35, 89064), (37, 89106), (40, 89148), (42, 89160),

Gene: Stigma\_163 Start: 89135, Stop: 89611, Start Num: 3

Candidate Starts for Stigma\_163:

(Start: 3 @89135 has 25 MA's), (8, 89255), (12, 89303), (14, 89324), (16, 89336), (23, 89372), (25, 89381), (32, 89459), (35, 89498), (37, 89540), (40, 89582), (42, 89594),

Gene: TunaTartare\_164 Start: 90092, Stop: 90559, Start Num: 3

Candidate Starts for TunaTartare\_164:

(Start: 3 @90092 has 25 MA's), (5, 90158), (24, 90323), (25, 90329), (28, 90350), (30, 90395), (35, 90449), (37, 90491), (38, 90515),

Gene: Wakanda\_135 Start: 76822, Stop: 77301, Start Num: 3

Candidate Starts for Wakanda\_135:

(Start: 3 @76822 has 25 MA's), (14, 77011), (19, 77035), (23, 77059), (25, 77068), (31, 77143), (35, 77191), (36, 77212), (39, 77266),

Gene: Westy\_167 Start: 89450, Stop: 89926, Start Num: 3

Candidate Starts for Westy\_167:

(Start: 3 @89450 has 25 MA's), (8, 89570), (12, 89618), (14, 89639), (16, 89651), (23, 89687), (25, 89696), (32, 89774), (35, 89813), (37, 89855), (40, 89897), (42, 89909),