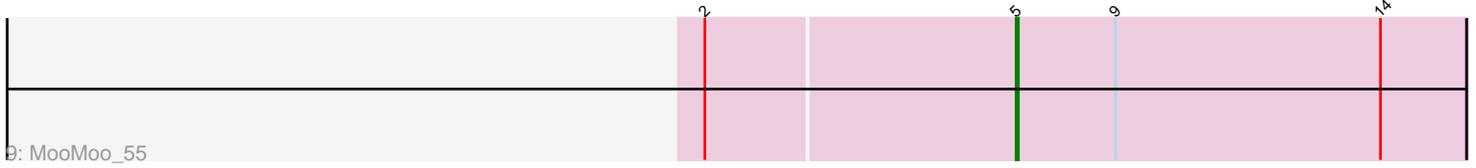
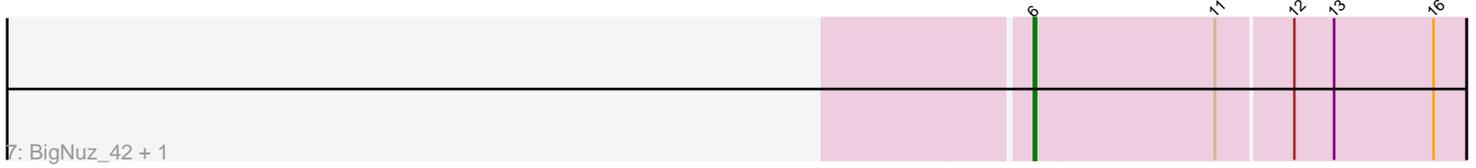
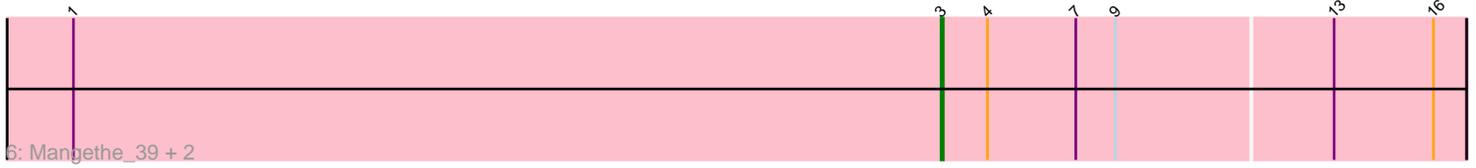
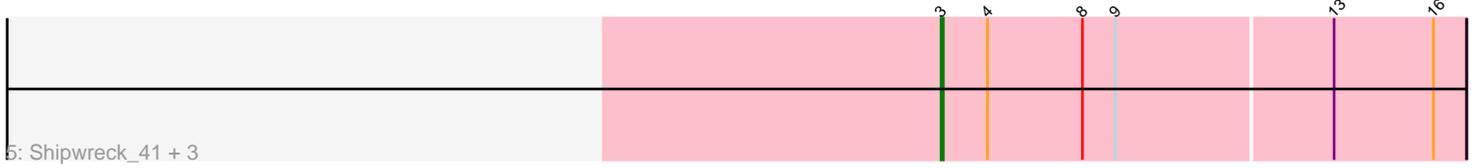
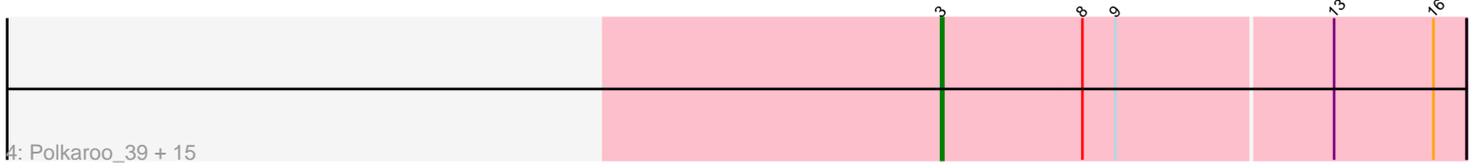
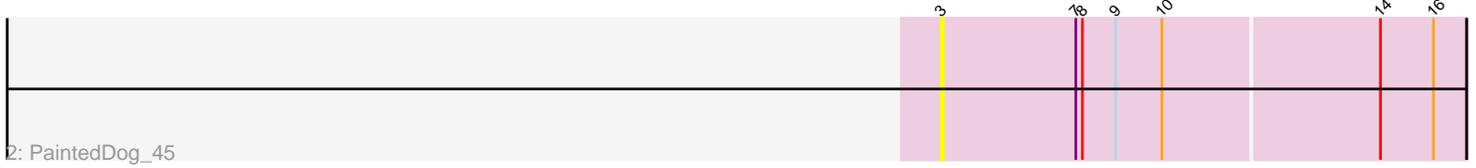
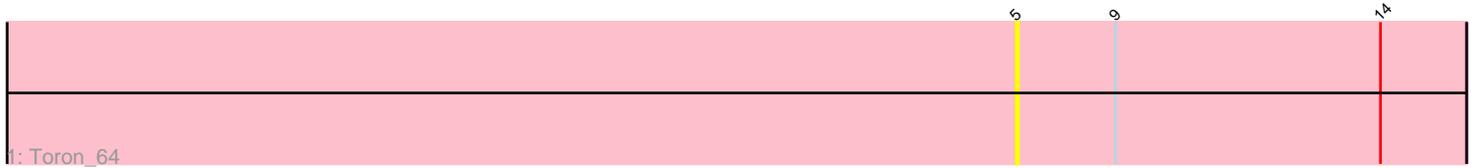


Pham 291366



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 291366 Report

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

Pham number 291366 has 34 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Toron\_64
- Track 2 : PaintedDog\_45
- Track 3 : Brusacoram\_39, Xeno\_41, GreaseLightnin\_39, Atcoo\_39, Thespis\_39
- Track 4 : Polkaroo\_39, Bhagsy\_39, KilKor\_39, Phalm\_39, PeanutPie\_39, Bunnies\_39, Willsammy\_38, Jung\_38, Ksquared\_39, StevieRay\_39, StressBall\_39, CactusJack\_39, Gavriela\_39, Glaske\_39, Juniormint\_39, Megiddo\_39
- Track 5 : Shipwreck\_41, Camster\_39, Bogie\_41, Pygmy\_41
- Track 6 : Mangethe\_39, Majeke\_39, Phegasus\_39
- Track 7 : BigNuz\_42, Nazo\_43
- Track 8 : ThulaThula\_46
- Track 9 : MooMoo\_55

### ***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 26 of the 30 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Atcoo\_39, Bhagsy\_39, Bogie\_41, Brusacoram\_39, Bunnies\_39, CactusJack\_39, Camster\_39, Gavriela\_39, Glaske\_39, GreaseLightnin\_39, Jung\_38, Juniormint\_39, KilKor\_39, Ksquared\_39, Majeke\_39, Mangethe\_39, Megiddo\_39, PaintedDog\_45, PeanutPie\_39, Phalm\_39, Phegasus\_39, Polkaroo\_39, Pygmy\_41, Shipwreck\_41, StevieRay\_39, StressBall\_39, Thespis\_39, Willsammy\_38, Xeno\_41,

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

- 

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

- BigNuz\_42, MooMoo\_55, Nazo\_43, ThulaThula\_46, Toron\_64,

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

Start 3:

- Found in 29 of 34 ( 85.3% ) of genes in pham

- Manual Annotations of this start: 26 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Atcoo\_39 (P1), Bhagsy\_39 (P1), Bogie\_41 (P1), Brusacoram\_39 (P1), Bunnies\_39 (P1), CactusJack\_39 (P1), Camster\_39 (P1), Gavriela\_39 (P1), Glaske\_39 (P1), GreaseLightnin\_39 (P1), Jung\_38 (P1), Juniormint\_39 (P1), KilKor\_39 (P1), Ksquared\_39 (P1), Majeke\_39 (P1), Mangethe\_39 (P1), Megiddo\_39 (P1), PaintedDog\_45 (I1), PeanutPie\_39 (P1), Phalm\_39 (P1), Phegasus\_39 (P1), Polkaroo\_39 (P1), Pygmy\_41 (P1), Shipwreck\_41 (P1), StevieRay\_39 (P1), StressBall\_39 (P1), Thespis\_39 (P1), Willsammy\_38 (P1), Xeno\_41 (N),

#### Start 5:

- Found in 3 of 34 ( 8.8% ) of genes in pham
- Manual Annotations of this start: 2 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MooMoo\_55 (singleton), ThulaThula\_46 (P5), Toron\_64 (F6),

#### Start 6:

- Found in 2 of 34 ( 5.9% ) of genes in pham
- Manual Annotations of this start: 2 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BigNuz\_42 (P4), Nazo\_43 (P4),

### **Summary by clusters:**

There are 7 clusters represented in this pham: singleton, P1, F6, P4, P5, I1, N,

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

- Start number 3 was manually annotated 1 time for cluster N.

#### Info for manual annotations of cluster P1:

- Start number 3 was manually annotated 25 times for cluster P1.

#### Info for manual annotations of cluster P4:

- Start number 6 was manually annotated 2 times for cluster P4.

#### Info for manual annotations of cluster P5:

- Start number 5 was manually annotated 1 time for cluster P5.

### **Gene Information:**

Gene: Atcoo\_39 Start: 30787, Stop: 31020, Start Num: 3

Candidate Starts for Atcoo\_39:

(1, 30397), (Start: 3 @30787 has 26 MA's), (8, 30850), (9, 30865), (13, 30961), (16, 31006),

Gene: Bhagsy\_39 Start: 30302, Stop: 30535, Start Num: 3

Candidate Starts for Bhagsy\_39:

(Start: 3 @30302 has 26 MA's), (8, 30365), (9, 30380), (13, 30476), (16, 30521),

Gene: BigNuz\_42 Start: 32428, Stop: 32619, Start Num: 6

Candidate Starts for BigNuz\_42:

(Start: 6 @32428 has 2 MA's), (11, 32509), (12, 32542), (13, 32560), (16, 32605),

Gene: Bogie\_41 Start: 32086, Stop: 32319, Start Num: 3

Candidate Starts for Bogie\_41:

(Start: 3 @32086 has 26 MA's), (4, 32107), (8, 32149), (9, 32164), (13, 32260), (16, 32305),

Gene: Brusacoram\_39 Start: 30293, Stop: 30526, Start Num: 3

Candidate Starts for Brusacoram\_39:

(1, 29903), (Start: 3 @30293 has 26 MA's), (8, 30356), (9, 30371), (13, 30467), (16, 30512),

Gene: Bunnies\_39 Start: 30317, Stop: 30550, Start Num: 3

Candidate Starts for Bunnies\_39:

(Start: 3 @30317 has 26 MA's), (8, 30380), (9, 30395), (13, 30491), (16, 30536),

Gene: CactusJack\_39 Start: 30557, Stop: 30790, Start Num: 3

Candidate Starts for CactusJack\_39:

(Start: 3 @30557 has 26 MA's), (8, 30620), (9, 30635), (13, 30731), (16, 30776),

Gene: Camster\_39 Start: 30333, Stop: 30566, Start Num: 3

Candidate Starts for Camster\_39:

(Start: 3 @30333 has 26 MA's), (4, 30354), (8, 30396), (9, 30411), (13, 30507), (16, 30552),

Gene: Gavriela\_39 Start: 30557, Stop: 30790, Start Num: 3

Candidate Starts for Gavriela\_39:

(Start: 3 @30557 has 26 MA's), (8, 30620), (9, 30635), (13, 30731), (16, 30776),

Gene: Glaske\_39 Start: 30557, Stop: 30790, Start Num: 3

Candidate Starts for Glaske\_39:

(Start: 3 @30557 has 26 MA's), (8, 30620), (9, 30635), (13, 30731), (16, 30776),

Gene: GreaseLightnin\_39 Start: 30546, Stop: 30779, Start Num: 3

Candidate Starts for GreaseLightnin\_39:

(1, 30156), (Start: 3 @30546 has 26 MA's), (8, 30609), (9, 30624), (13, 30720), (16, 30765),

Gene: Jung\_38 Start: 30264, Stop: 30497, Start Num: 3

Candidate Starts for Jung\_38:

(Start: 3 @30264 has 26 MA's), (8, 30327), (9, 30342), (13, 30438), (16, 30483),

Gene: Juniormint\_39 Start: 30339, Stop: 30572, Start Num: 3

Candidate Starts for Juniormint\_39:

(Start: 3 @30339 has 26 MA's), (8, 30402), (9, 30417), (13, 30513), (16, 30558),

Gene: KilKor\_39 Start: 30557, Stop: 30790, Start Num: 3

Candidate Starts for KilKor\_39:

(Start: 3 @30557 has 26 MA's), (8, 30620), (9, 30635), (13, 30731), (16, 30776),

Gene: Ksquared\_39 Start: 30317, Stop: 30550, Start Num: 3

Candidate Starts for Ksquared\_39:

(Start: 3 @30317 has 26 MA's), (8, 30380), (9, 30395), (13, 30491), (16, 30536),

Gene: Majeke\_39 Start: 30351, Stop: 30584, Start Num: 3  
Candidate Starts for Majeke\_39:  
(1, 29958), (Start: 3 @30351 has 26 MA's), (4, 30372), (7, 30411), (9, 30429), (13, 30525), (16, 30570),

Gene: Mangethe\_39 Start: 30351, Stop: 30584, Start Num: 3  
Candidate Starts for Mangethe\_39:  
(1, 29958), (Start: 3 @30351 has 26 MA's), (4, 30372), (7, 30411), (9, 30429), (13, 30525), (16, 30570),

Gene: Megiddo\_39 Start: 30557, Stop: 30790, Start Num: 3  
Candidate Starts for Megiddo\_39:  
(Start: 3 @30557 has 26 MA's), (8, 30620), (9, 30635), (13, 30731), (16, 30776),

Gene: MooMoo\_55 Start: 38695, Stop: 38898, Start Num: 5  
Candidate Starts for MooMoo\_55:  
(2, 38557), (Start: 5 @38695 has 2 MA's), (9, 38740), (14, 38860),

Gene: Nazo\_43 Start: 32625, Stop: 32816, Start Num: 6  
Candidate Starts for Nazo\_43:  
(Start: 6 @32625 has 2 MA's), (11, 32706), (12, 32739), (13, 32757), (16, 32802),

Gene: PaintedDog\_45 Start: 32921, Stop: 33154, Start Num: 3  
Candidate Starts for PaintedDog\_45:  
(Start: 3 @32921 has 26 MA's), (7, 32981), (8, 32984), (9, 32999), (10, 33020), (14, 33116), (16, 33140),

Gene: PeanutPie\_39 Start: 30302, Stop: 30535, Start Num: 3  
Candidate Starts for PeanutPie\_39:  
(Start: 3 @30302 has 26 MA's), (8, 30365), (9, 30380), (13, 30476), (16, 30521),

Gene: Phalm\_39 Start: 30557, Stop: 30790, Start Num: 3  
Candidate Starts for Phalm\_39:  
(Start: 3 @30557 has 26 MA's), (8, 30620), (9, 30635), (13, 30731), (16, 30776),

Gene: Phegasus\_39 Start: 30318, Stop: 30551, Start Num: 3  
Candidate Starts for Phegasus\_39:  
(1, 29925), (Start: 3 @30318 has 26 MA's), (4, 30339), (7, 30378), (9, 30396), (13, 30492), (16, 30537),

Gene: Polkaroo\_39 Start: 30314, Stop: 30547, Start Num: 3  
Candidate Starts for Polkaroo\_39:  
(Start: 3 @30314 has 26 MA's), (8, 30377), (9, 30392), (13, 30488), (16, 30533),

Gene: Pygmy\_41 Start: 32142, Stop: 32375, Start Num: 3  
Candidate Starts for Pygmy\_41:  
(Start: 3 @32142 has 26 MA's), (4, 32163), (8, 32205), (9, 32220), (13, 32316), (16, 32361),

Gene: Shipwreck\_41 Start: 32117, Stop: 32350, Start Num: 3  
Candidate Starts for Shipwreck\_41:  
(Start: 3 @32117 has 26 MA's), (4, 32138), (8, 32180), (9, 32195), (13, 32291), (16, 32336),

Gene: StevieRay\_39 Start: 30259, Stop: 30492, Start Num: 3  
Candidate Starts for StevieRay\_39:  
(Start: 3 @30259 has 26 MA's), (8, 30322), (9, 30337), (13, 30433), (16, 30478),

Gene: StressBall\_39 Start: 30557, Stop: 30790, Start Num: 3

Candidate Starts for StressBall\_39:

(Start: 3 @30557 has 26 MA's), (8, 30620), (9, 30635), (13, 30731), (16, 30776),

Gene: Thespis\_39 Start: 30293, Stop: 30526, Start Num: 3

Candidate Starts for Thespis\_39:

(1, 29903), (Start: 3 @30293 has 26 MA's), (8, 30356), (9, 30371), (13, 30467), (16, 30512),

Gene: ThulaThula\_46 Start: 34718, Stop: 34912, Start Num: 5

Candidate Starts for ThulaThula\_46:

(Start: 5 @34718 has 2 MA's), (8, 34742), (9, 34757), (11, 34802), (15, 34895), (16, 34898),

Gene: Toron\_64 Start: 41626, Stop: 41829, Start Num: 5

Candidate Starts for Toron\_64:

(Start: 5 @41626 has 2 MA's), (9, 41671), (14, 41791),

Gene: Willsammy\_38 Start: 30040, Stop: 30273, Start Num: 3

Candidate Starts for Willsammy\_38:

(Start: 3 @30040 has 26 MA's), (8, 30103), (9, 30118), (13, 30214), (16, 30259),

Gene: Xeno\_41 Start: 29635, Stop: 29868, Start Num: 3

Candidate Starts for Xeno\_41:

(1, 29245), (Start: 3 @29635 has 26 MA's), (8, 29698), (9, 29713), (13, 29809), (16, 29854),