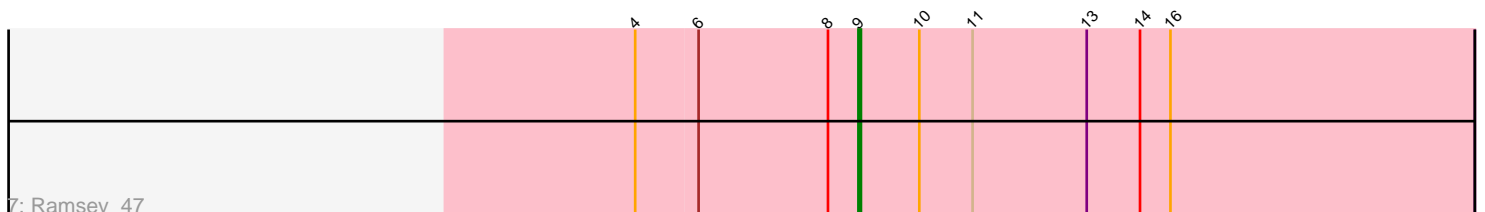
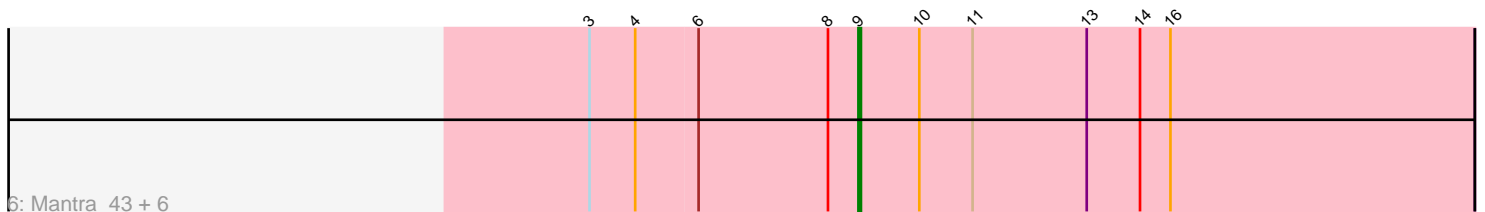
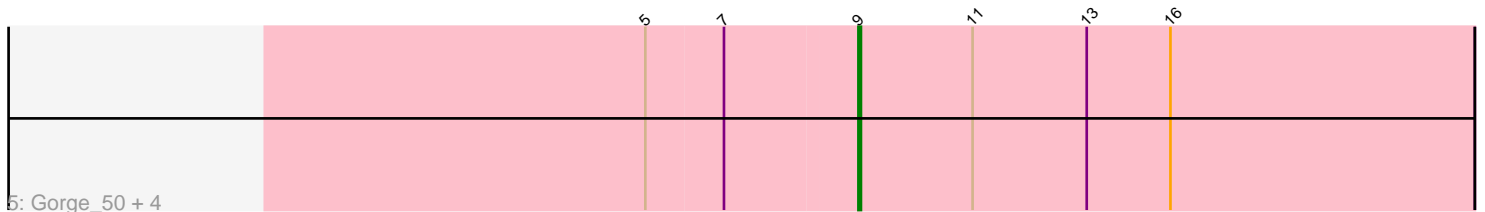
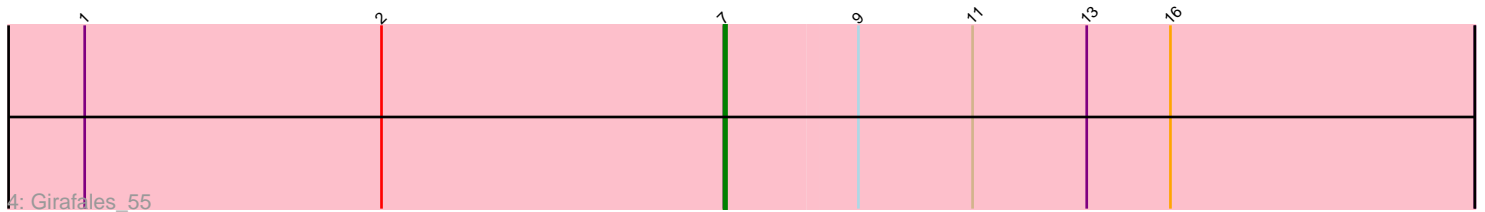
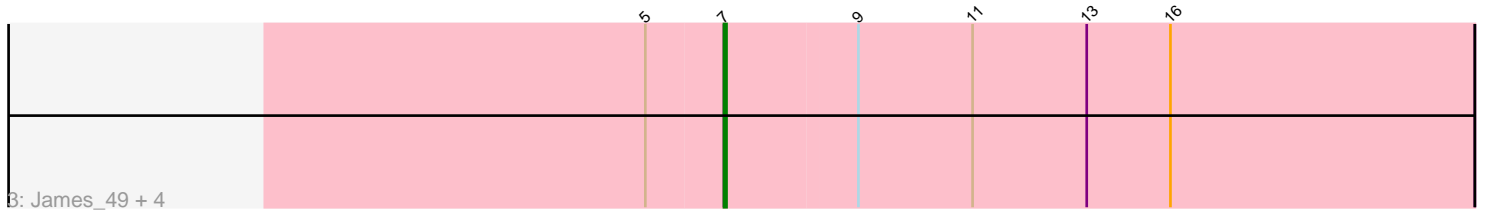
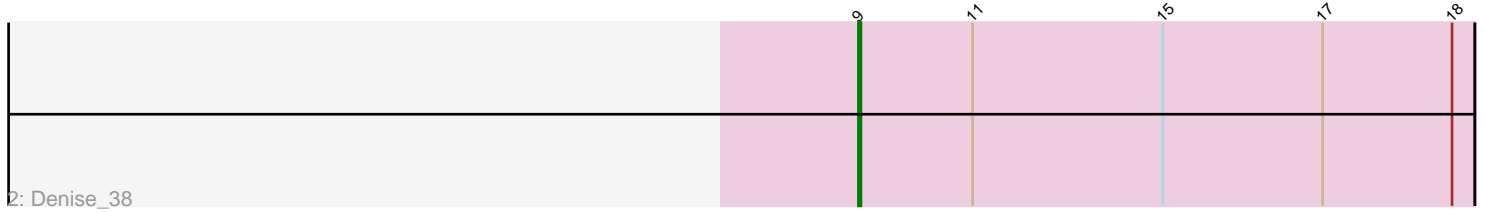
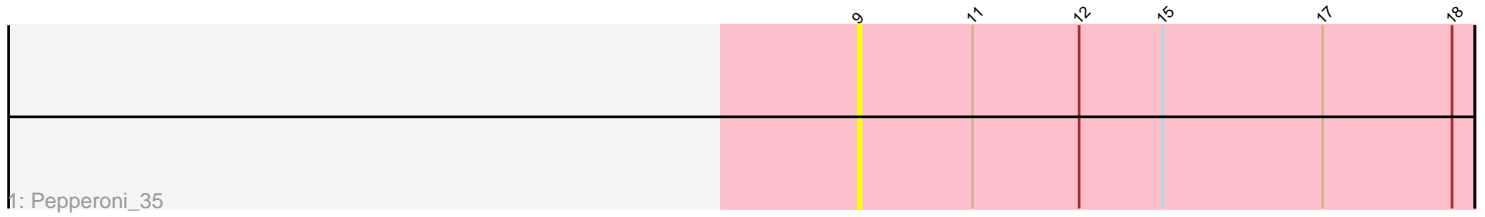


Pham 293151



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 293151 Report

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

Pham number 293151 has 21 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Pepperoni\_35
- Track 2 : Denise\_38
- Track 3 : James\_49, ByChance\_36, Saal\_48, BobaPhett\_48, Mattes\_49
- Track 4 : Girafales\_55
- Track 5 : Gorge\_50, SwagPiggett\_51, Philus\_49, DosHalletts\_46, DRBy19\_48
- Track 6 : Mantra\_43, Radiance\_45, OldBen\_44, DaddyRickover\_46, Vivum\_49, EmiMonkey\_43, Tweety\_46
- Track 7 : Ramsey\_47

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

The start number called the most often in the published annotations is 9, it was called in 12 of the 18 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- DRBy19\_48, DaddyRickover\_46, Denise\_38, DosHalletts\_46, EmiMonkey\_43, Gorge\_50, Mantra\_43, OldBen\_44, Pepperoni\_35, Philus\_49, Radiance\_45, Ramsey\_47, SwagPiggett\_51, Tweety\_46, Vivum\_49,

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

- BobaPhett\_48, ByChance\_36, Girafales\_55, James\_49, Mattes\_49, Saal\_48,

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

- 

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

Start 7:

- Found in 11 of 21 ( 52.4% ) of genes in pham
- Manual Annotations of this start: 6 of 18
- Called 54.5% of time when present
- Phage (with cluster) where this start called: BobaPhett\_48 (F1), ByChance\_36 (F1), Girafales\_55 (F1), James\_49 (F1), Mattes\_49 (F1), Saal\_48 (F1),

Start 9:

- Found in 21 of 21 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 12 of 18
- Called 71.4% of time when present
- Phage (with cluster) where this start called: DRBy19\_48 (F1), DaddyRickover\_46 (F1), Denise\_38 (CZ5), DosHalletts\_46 (F1), EmiMonkey\_43 (F1), Gorge\_50 (F1), Mantra\_43 (F1), OldBen\_44 (F1), Pepperoni\_35 (CZ), Philus\_49 (F1), Radiance\_45 (F1), Ramsey\_47 (F1), SwagPiggett\_51 (F1), Tweety\_46 (F1), Vivum\_49 (F1),

### **Summary by clusters:**

There are 3 clusters represented in this pham: F1, CZ5, CZ,

Info for manual annotations of cluster CZ5:

- Start number 9 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster F1:

- Start number 7 was manually annotated 6 times for cluster F1.
- Start number 9 was manually annotated 11 times for cluster F1.

### **Gene Information:**

Gene: BobaPhett\_48 Start: 36435, Stop: 36728, Start Num: 7

Candidate Starts for BobaPhett\_48:

(5, 36405), (Start: 7 @36435 has 6 MA's), (Start: 9 @36486 has 12 MA's), (11, 36531), (13, 36576), (16, 36609),

Gene: ByChance\_36 Start: 29519, Stop: 29812, Start Num: 7

Candidate Starts for ByChance\_36:

(5, 29489), (Start: 7 @29519 has 6 MA's), (Start: 9 @29570 has 12 MA's), (11, 29615), (13, 29660), (16, 29693),

Gene: DRBy19\_48 Start: 35273, Stop: 35515, Start Num: 9

Candidate Starts for DRBy19\_48:

(5, 35192), (Start: 7 @35222 has 6 MA's), (Start: 9 @35273 has 12 MA's), (11, 35318), (13, 35363), (16, 35396),

Gene: DaddyRickover\_46 Start: 34949, Stop: 35191, Start Num: 9

Candidate Starts for DaddyRickover\_46:

(3, 34844), (4, 34862), (6, 34886), (8, 34937), (Start: 9 @34949 has 12 MA's), (10, 34973), (11, 34994), (13, 35039), (14, 35060), (16, 35072),

Gene: Denise\_38 Start: 30015, Stop: 30257, Start Num: 9

Candidate Starts for Denise\_38:

(Start: 9 @30015 has 12 MA's), (11, 30060), (15, 30135), (17, 30198), (18, 30249),

Gene: DosHalletts\_46 Start: 34544, Stop: 34786, Start Num: 9

Candidate Starts for DosHalletts\_46:

(5, 34463), (Start: 7 @34493 has 6 MA's), (Start: 9 @34544 has 12 MA's), (11, 34589), (13, 34634), (16, 34667),

Gene: EmiMonkey\_43 Start: 35884, Stop: 36126, Start Num: 9

Candidate Starts for EmiMonkey\_43:

(3, 35779), (4, 35797), (6, 35821), (8, 35872), (Start: 9 @35884 has 12 MA's), (10, 35908), (11, 35929), (13, 35974), (14, 35995), (16, 36007),

Gene: Girafales\_55 Start: 35606, Stop: 35899, Start Num: 7

Candidate Starts for Girafales\_55:

(1, 35354), (2, 35471), (Start: 7 @35606 has 6 MA's), (Start: 9 @35657 has 12 MA's), (11, 35702), (13, 35747), (16, 35780),

Gene: Gorge\_50 Start: 35407, Stop: 35649, Start Num: 9

Candidate Starts for Gorge\_50:

(5, 35326), (Start: 7 @35356 has 6 MA's), (Start: 9 @35407 has 12 MA's), (11, 35452), (13, 35497), (16, 35530),

Gene: James\_49 Start: 35313, Stop: 35606, Start Num: 7

Candidate Starts for James\_49:

(5, 35283), (Start: 7 @35313 has 6 MA's), (Start: 9 @35364 has 12 MA's), (11, 35409), (13, 35454), (16, 35487),

Gene: Mantra\_43 Start: 34338, Stop: 34580, Start Num: 9

Candidate Starts for Mantra\_43:

(3, 34233), (4, 34251), (6, 34275), (8, 34326), (Start: 9 @34338 has 12 MA's), (10, 34362), (11, 34383), (13, 34428), (14, 34449), (16, 34461),

Gene: Mattes\_49 Start: 35313, Stop: 35606, Start Num: 7

Candidate Starts for Mattes\_49:

(5, 35283), (Start: 7 @35313 has 6 MA's), (Start: 9 @35364 has 12 MA's), (11, 35409), (13, 35454), (16, 35487),

Gene: OldBen\_44 Start: 34446, Stop: 34688, Start Num: 9

Candidate Starts for OldBen\_44:

(3, 34341), (4, 34359), (6, 34383), (8, 34434), (Start: 9 @34446 has 12 MA's), (10, 34470), (11, 34491), (13, 34536), (14, 34557), (16, 34569),

Gene: Pepperoni\_35 Start: 28741, Stop: 28983, Start Num: 9

Candidate Starts for Pepperoni\_35:

(Start: 9 @28741 has 12 MA's), (11, 28786), (12, 28828), (15, 28861), (17, 28924), (18, 28975),

Gene: Philus\_49 Start: 35249, Stop: 35491, Start Num: 9

Candidate Starts for Philus\_49:

(5, 35168), (Start: 7 @35198 has 6 MA's), (Start: 9 @35249 has 12 MA's), (11, 35294), (13, 35339), (16, 35372),

Gene: Radiance\_45 Start: 34616, Stop: 34858, Start Num: 9

Candidate Starts for Radiance\_45:

(3, 34511), (4, 34529), (6, 34553), (8, 34604), (Start: 9 @34616 has 12 MA's), (10, 34640), (11, 34661), (13, 34706), (14, 34727), (16, 34739),

Gene: Ramsey\_47 Start: 35242, Stop: 35484, Start Num: 9

Candidate Starts for Ramsey\_47:

(4, 35155), (6, 35179), (8, 35230), (Start: 9 @35242 has 12 MA's), (10, 35266), (11, 35287), (13, 35332), (14, 35353), (16, 35365),

Gene: Saal\_48 Start: 35176, Stop: 35469, Start Num: 7

Candidate Starts for Saal\_48:

(5, 35146), (Start: 7 @35176 has 6 MA's), (Start: 9 @35227 has 12 MA's), (11, 35272), (13, 35317), (16, 35350),

Gene: SwagPiggett\_51 Start: 36282, Stop: 36524, Start Num: 9

Candidate Starts for SwagPiggett\_51:

(5, 36201), (Start: 7 @36231 has 6 MA's), (Start: 9 @36282 has 12 MA's), (11, 36327), (13, 36372), (16, 36405),

Gene: Tweety\_46 Start: 35314, Stop: 35556, Start Num: 9

Candidate Starts for Tweety\_46:

(3, 35209), (4, 35227), (6, 35251), (8, 35302), (Start: 9 @35314 has 12 MA's), (10, 35338), (11, 35359), (13, 35404), (14, 35425), (16, 35437),

Gene: Vivum\_49 Start: 35564, Stop: 35806, Start Num: 9

Candidate Starts for Vivum\_49:

(3, 35459), (4, 35477), (6, 35501), (8, 35552), (Start: 9 @35564 has 12 MA's), (10, 35588), (11, 35609), (13, 35654), (14, 35675), (16, 35687),