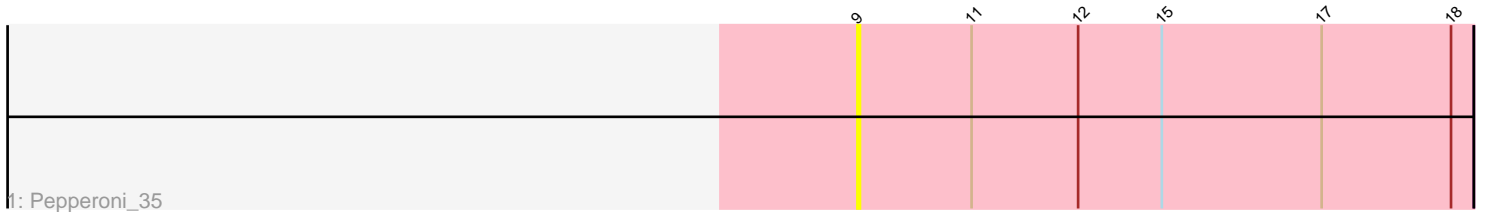
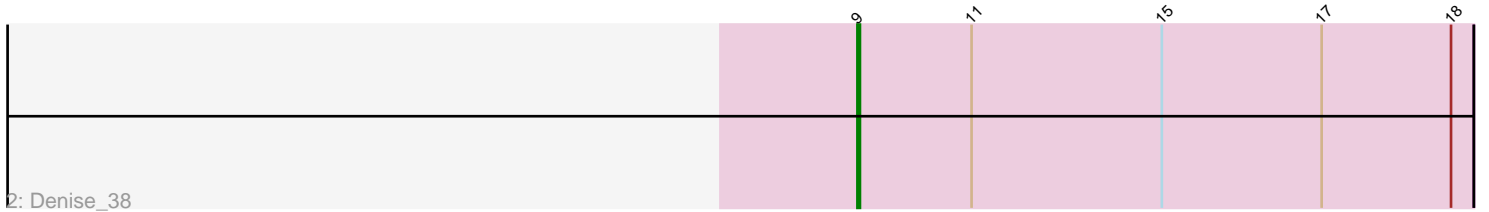


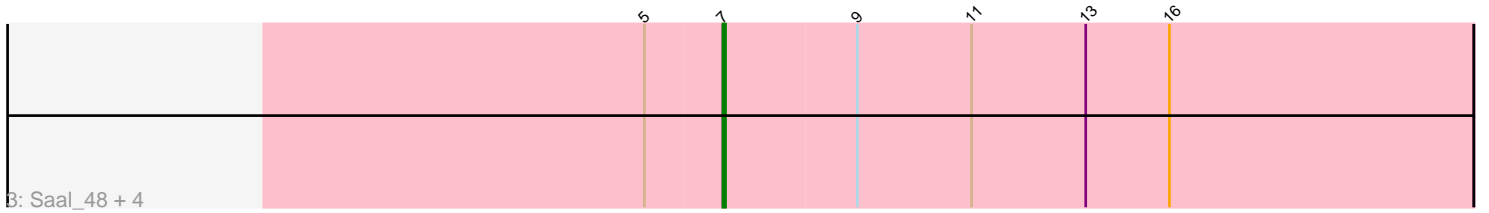
Pham 220034



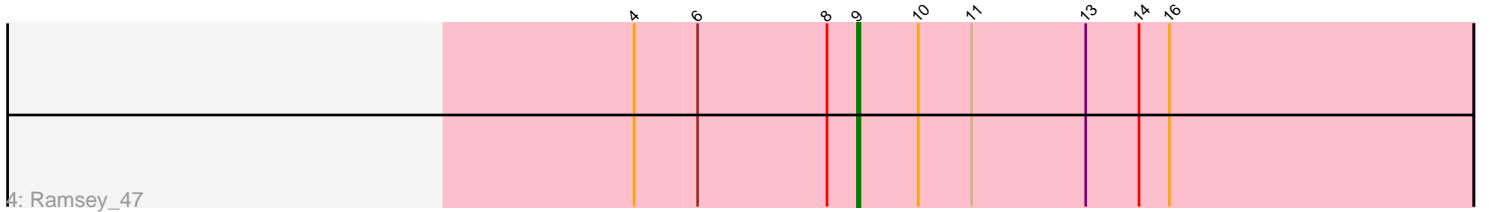
1: Pepperoni_35



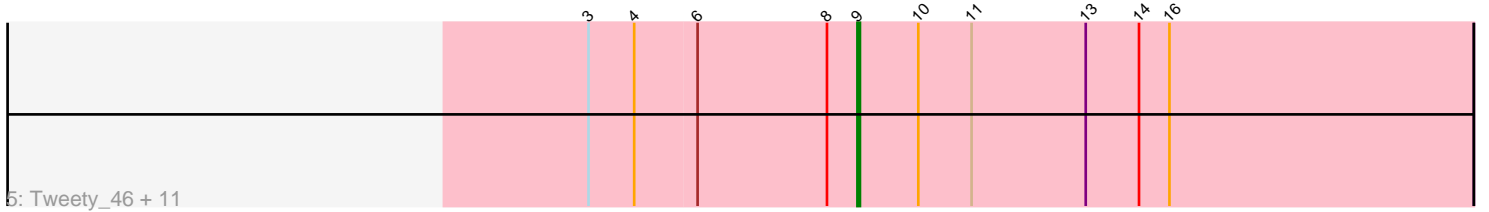
2: Denise_38



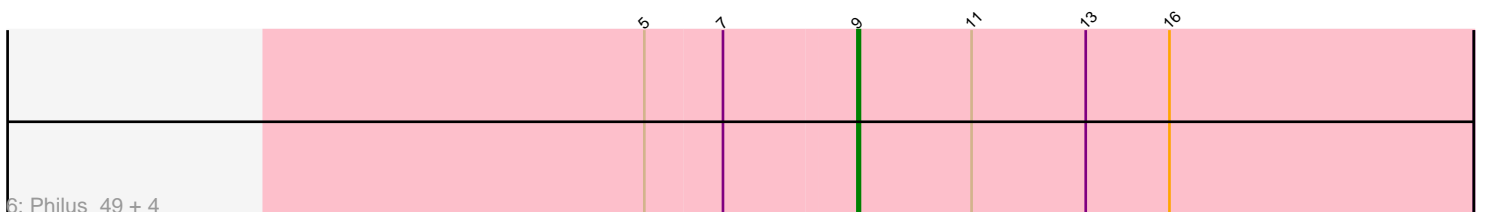
3: Saal_48 + 4



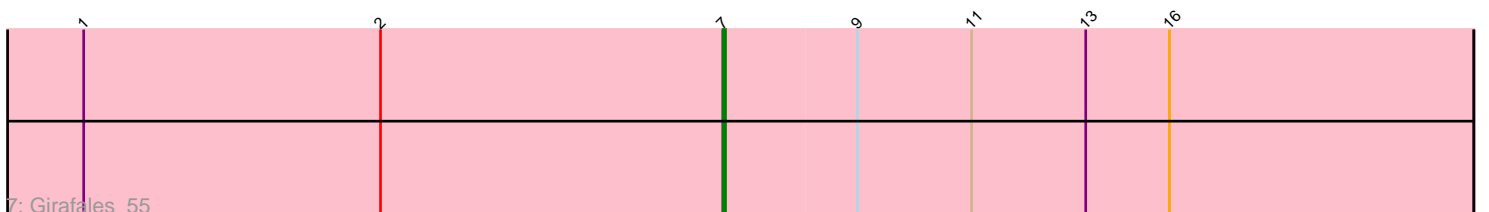
4: Ramsey_47



5: Tweety_46 + 11



6: Philus_49 + 4



7: Girafales_55

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 220034 Report

This analysis was run 03/28/25 on database version 593.

Pham number 220034 has 26 members, 9 are drafts.

Phages represented in each track:

- Track 1 : Pepperoni_35
- Track 2 : Denise_38
- Track 3 : Saal_48, Mattes_49, BobaPhett_48, James_49, ByChance_36
- Track 4 : Ramsey_47
- Track 5 : Tweety_46, OldBen_44, PhlipPhlop_43, Mantra_43, Violac_49, DaddyRickover_46, Slim_47, EmiMonkey_43, Emmaloid_47, IbOuu_48, Vivum_51, Radiance_45
- Track 6 : Philus_49, Gorge_50, SwagPigglett_51, DosHalletts_46, DRBy19_48
- Track 7 : Girafales_55

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 11 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- DRBy19_48, DaddyRickover_46, Denise_38, DosHalletts_46, EmiMonkey_43, Emmaloid_47, Gorge_50, IbOuu_48, Mantra_43, OldBen_44, Pepperoni_35, Philus_49, PhlipPhlop_43, Radiance_45, Ramsey_47, Slim_47, SwagPigglett_51, Tweety_46, Violac_49, Vivum_51,

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 26 (42.3%) of genes in pham
- Manual Annotations of this start: 6 of 17
- 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 26 of 26 (100.0%) of genes in pham
- Manual Annotations of this start: 11 of 17
- Called 76.9% 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), Emmaloid_47 (F1), Gorge_50 (F1), IbOuu_48 (F1), Mantra_43 (F1), OldBen_44 (F1), Pepperoni_35 (CZ), Philus_49 (F1), PhilipPhlop_43 (F1), Radiance_45 (F1), Ramsey_47 (F1), Slim_47 (F1), SwagPiggett_51 (F1), Tweety_46 (F1), Violac_49 (F1), Vivum_51 (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 10 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 11 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 11 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 11 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 11 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 11 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 11 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 11 MA's), (10, 35908), (11, 35929), (13, 35974), (14, 35995), (16, 36007),

Gene: Emmaloid_47 Start: 35960, Stop: 36202, Start Num: 9

Candidate Starts for Emmaloid_47:

(3, 35855), (4, 35873), (6, 35897), (8, 35948), (Start: 9 @35960 has 11 MA's), (10, 35984), (11, 36005), (13, 36050), (14, 36071), (16, 36083),

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 11 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 11 MA's), (11, 35452), (13, 35497), (16, 35530),

Gene: lbOuu_48 Start: 35008, Stop: 35250, Start Num: 9

Candidate Starts for lbOuu_48:

(3, 34903), (4, 34921), (6, 34945), (8, 34996), (Start: 9 @35008 has 11 MA's), (10, 35032), (11, 35053), (13, 35098), (14, 35119), (16, 35131),

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 11 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 11 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 11 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 11 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 11 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 11 MA's), (11, 35294), (13, 35339), (16, 35372),

Gene: PhlipPhlop_43 Start: 35884, Stop: 36126, Start Num: 9

Candidate Starts for PhlipPhlop_43:

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

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 11 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 11 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 11 MA's), (11, 35272), (13, 35317), (16, 35350),

Gene: Slim_47 Start: 35951, Stop: 36193, Start Num: 9

Candidate Starts for Slim_47:

(3, 35846), (4, 35864), (6, 35888), (8, 35939), (Start: 9 @35951 has 11 MA's), (10, 35975), (11, 35996), (13, 36041), (14, 36062), (16, 36074),

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 11 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 11 MA's), (10, 35338), (11, 35359), (13, 35404), (14, 35425), (16, 35437),

Gene: Violac_49 Start: 35876, Stop: 36118, Start Num: 9

Candidate Starts for Violac_49:

(3, 35771), (4, 35789), (6, 35813), (8, 35864), (Start: 9 @35876 has 11 MA's), (10, 35900), (11, 35921), (13, 35966), (14, 35987), (16, 35999),

Gene: Vivum_51 Start: 35564, Stop: 35806, Start Num: 9

Candidate Starts for Vivum_51:

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