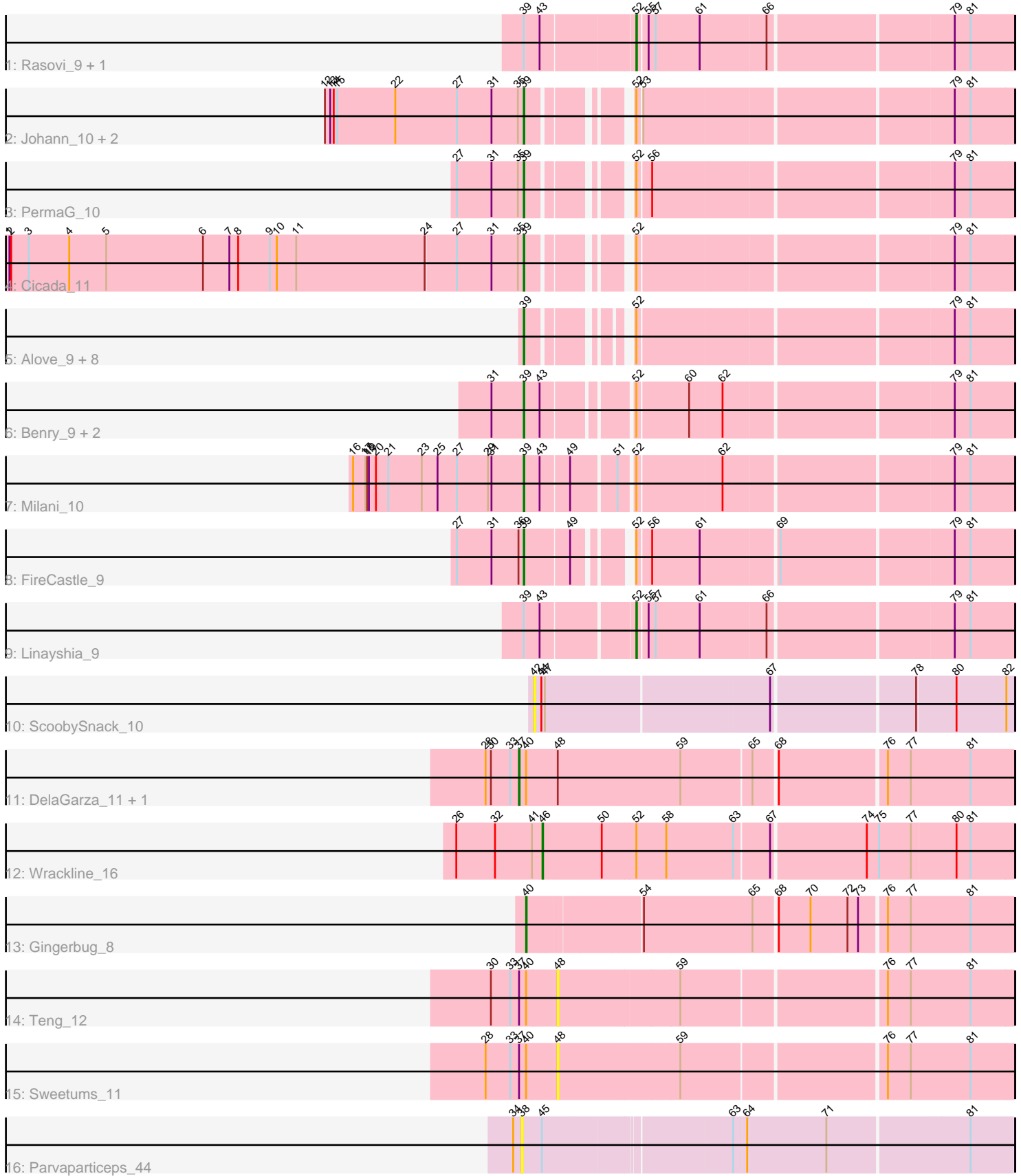


Pham 294977



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 294977 Report

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

Pham number 294977 has 30 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Rasovi\_9, Htur\_9
- Track 2 : Johann\_10, Olympi\_11, Goodman\_10
- Track 3 : PermaG\_10
- Track 4 : Cicada\_11
- Track 5 : Alove\_9, AyoTeo\_11, Jera\_10, Labella\_11, Zanella\_9, SBlackberry\_9, Typher\_11, TurboVicky\_9, Rootkit7\_9
- Track 6 : Benry\_9, IndiRoo\_9, Sucha\_9
- Track 7 : Milani\_10
- Track 8 : FireCastle\_9
- Track 9 : Linayshia\_9
- Track 10 : ScoobySnack\_10
- Track 11 : DelaGarza\_11, Lesiram\_11
- Track 12 : Wrackline\_16
- Track 13 : Gingerbug\_8
- Track 14 : Teng\_12
- Track 15 : Sweetums\_11
- Track 16 : Parvarticeps\_44

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

The start number called the most often in the published annotations is 39, it was called in 15 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alove\_9, AyoTeo\_11, Benry\_9, Cicada\_11, FireCastle\_9, Goodman\_10, IndiRoo\_9, Jera\_10, Johann\_10, Labella\_11, Milani\_10, Olympi\_11, PermaG\_10, Rootkit7\_9, SBlackberry\_9, Sucha\_9, TurboVicky\_9, Typher\_11, Zanella\_9,

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

- Htur\_9, Linayshia\_9, Rasovi\_9,

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

- DelaGarza\_11, Gingerbug\_8, Lesiram\_11, Parvarticeps\_44, ScoobySnack\_10, Sweetums\_11, Teng\_12, Wrackline\_16,

## Summary by start number:

### Start 37:

- Found in 4 of 30 ( 13.3% ) of genes in pham
- Manual Annotations of this start: 2 of 22
- Called 50.0% of time when present
- Phage (with cluster) where this start called: DelaGarza\_11 (GF), Lesiram\_11 (GF),

### Start 38:

- Found in 1 of 30 ( 3.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Parvaparticeps\_44 (UNK),

### Start 39:

- Found in 22 of 30 ( 73.3% ) of genes in pham
- Manual Annotations of this start: 15 of 22
- Called 86.4% of time when present
- Phage (with cluster) where this start called: Alove\_9 (EJ), AyoTeo\_11 (EJ), Benry\_9 (EJ), Cicada\_11 (EJ), FireCastle\_9 (EJ), Goodman\_10 (EJ), IndiRoo\_9 (EJ), Jera\_10 (EJ), Johann\_10 (EJ), Labella\_11 (EJ), Milani\_10 (EJ), Olympi\_11 (EJ), PermaG\_10 (EJ), Rootkit7\_9 (EJ), SBlackberry\_9 (EJ), Sucha\_9 (EJ), TurboVicky\_9 (EJ), Typher\_11 (EJ), Zanella\_9 (EJ),

### Start 40:

- Found in 5 of 30 ( 16.7% ) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Gingerbug\_8 (GF),

### Start 42:

- Found in 1 of 30 ( 3.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ScoobySnack\_10 (GA),

### Start 46:

- Found in 1 of 30 ( 3.3% ) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Wrackline\_16 (GF),

### Start 48:

- Found in 4 of 30 ( 13.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Sweetums\_11 (GF), Teng\_12 (GF),

### Start 52:

- Found in 23 of 30 ( 76.7% ) of genes in pham
- Manual Annotations of this start: 3 of 22
- Called 13.0% of time when present

- Phage (with cluster) where this start called: Htur\_9 (EJ), Linayshia\_9 (EJ), Rasovi\_9 (EJ),

### **Summary by clusters:**

There are 4 clusters represented in this pham: GF, UNK, GA, EJ,

Info for manual annotations of cluster EJ:

- Start number 39 was manually annotated 15 times for cluster EJ.
- Start number 52 was manually annotated 3 times for cluster EJ.

Info for manual annotations of cluster GF:

- Start number 37 was manually annotated 2 times for cluster GF.
- Start number 40 was manually annotated 1 time for cluster GF.
- Start number 46 was manually annotated 1 time for cluster GF.

### **Gene Information:**

Gene: Alove\_9 Start: 8202, Stop: 8933, Start Num: 39

Candidate Starts for Alove\_9:

(Start: 39 @8202 has 15 MA's), (Start: 52 @8322 has 3 MA's), (79, 8832), (81, 8859),

Gene: AyoTeo\_11 Start: 8329, Stop: 9060, Start Num: 39

Candidate Starts for AyoTeo\_11:

(Start: 39 @8329 has 15 MA's), (Start: 52 @8449 has 3 MA's), (79, 8959), (81, 8986),

Gene: Benry\_9 Start: 6358, Stop: 7122, Start Num: 39

Candidate Starts for Benry\_9:

(31, 6304), (Start: 39 @6358 has 15 MA's), (43, 6382), (Start: 52 @6511 has 3 MA's), (60, 6595), (62, 6649), (79, 7021), (81, 7048),

Gene: Cicada\_11 Start: 8447, Stop: 9187, Start Num: 39

Candidate Starts for Cicada\_11:

(1, 7577), (2, 7580), (3, 7610), (4, 7679), (5, 7742), (6, 7907), (7, 7952), (8, 7967), (9, 8021), (10, 8033), (11, 8066), (24, 8285), (27, 8336), (31, 8393), (35, 8438), (Start: 39 @8447 has 15 MA's), (Start: 52 @8576 has 3 MA's), (79, 9086), (81, 9113),

Gene: DelaGarza\_11 Start: 6593, Stop: 7396, Start Num: 37

Candidate Starts for DelaGarza\_11:

(28, 6536), (30, 6545), (33, 6578), (Start: 37 @6593 has 2 MA's), (Start: 40 @6605 has 1 MA's), (48, 6653), (59, 6857), (65, 6974), (68, 7010), (76, 7184), (77, 7223), (81, 7325),

Gene: FireCastle\_9 Start: 8109, Stop: 8858, Start Num: 39

Candidate Starts for FireCastle\_9:

(27, 7998), (31, 8055), (36, 8100), (Start: 39 @8109 has 15 MA's), (49, 8175), (Start: 52 @8247 has 3 MA's), (56, 8268), (61, 8349), (69, 8472), (79, 8757), (81, 8784),

Gene: Gingerbug\_8 Start: 5806, Stop: 6582, Start Num: 40

Candidate Starts for Gingerbug\_8:

(Start: 40 @5806 has 1 MA's), (54, 5980), (65, 6160), (68, 6196), (70, 6250), (72, 6313), (73, 6331), (76, 6370), (77, 6409), (81, 6511),

Gene: Goodman\_10 Start: 8356, Stop: 9096, Start Num: 39

Candidate Starts for Goodman\_10:

(12, 8020), (13, 8029), (14, 8035), (15, 8041), (22, 8140), (27, 8245), (31, 8302), (35, 8347), (Start: 39 @8356 has 15 MA's), (Start: 52 @8485 has 3 MA's), (53, 8491), (79, 8995), (81, 9022),

Gene: Htur\_9 Start: 8424, Stop: 9035, Start Num: 52

Candidate Starts for Htur\_9:

(Start: 39 @8250 has 15 MA's), (43, 8274), (Start: 52 @8424 has 3 MA's), (55, 8439), (57, 8451), (61, 8526), (66, 8634), (79, 8934), (81, 8961),

Gene: IndiRoo\_9 Start: 6360, Stop: 7124, Start Num: 39

Candidate Starts for IndiRoo\_9:

(31, 6306), (Start: 39 @6360 has 15 MA's), (43, 6384), (Start: 52 @6513 has 3 MA's), (60, 6597), (62, 6651), (79, 7023), (81, 7050),

Gene: Jera\_10 Start: 7446, Stop: 8177, Start Num: 39

Candidate Starts for Jera\_10:

(Start: 39 @7446 has 15 MA's), (Start: 52 @7566 has 3 MA's), (79, 8076), (81, 8103),

Gene: Johann\_10 Start: 8356, Stop: 9096, Start Num: 39

Candidate Starts for Johann\_10:

(12, 8020), (13, 8029), (14, 8035), (15, 8041), (22, 8140), (27, 8245), (31, 8302), (35, 8347), (Start: 39 @8356 has 15 MA's), (Start: 52 @8485 has 3 MA's), (53, 8491), (79, 8995), (81, 9022),

Gene: Labella\_11 Start: 8333, Stop: 9064, Start Num: 39

Candidate Starts for Labella\_11:

(Start: 39 @8333 has 15 MA's), (Start: 52 @8453 has 3 MA's), (79, 8963), (81, 8990),

Gene: Lesiram\_11 Start: 6569, Stop: 7369, Start Num: 37

Candidate Starts for Lesiram\_11:

(28, 6512), (30, 6521), (33, 6554), (Start: 37 @6569 has 2 MA's), (Start: 40 @6581 has 1 MA's), (48, 6629), (59, 6830), (65, 6947), (68, 6983), (76, 7157), (77, 7196), (81, 7298),

Gene: Linayshia\_9 Start: 8418, Stop: 9029, Start Num: 52

Candidate Starts for Linayshia\_9:

(Start: 39 @8250 has 15 MA's), (43, 8274), (Start: 52 @8418 has 3 MA's), (55, 8433), (57, 8445), (61, 8520), (66, 8628), (79, 8928), (81, 8955),

Gene: Milani\_10 Start: 7008, Stop: 7781, Start Num: 39

Candidate Starts for Milani\_10:

(16, 6720), (17, 6741), (18, 6744), (19, 6747), (20, 6759), (21, 6780), (23, 6837), (25, 6864), (27, 6897), (29, 6948), (31, 6954), (Start: 39 @7008 has 15 MA's), (43, 7032), (49, 7077), (51, 7149), (Start: 52 @7170 has 3 MA's), (62, 7308), (79, 7680), (81, 7707),

Gene: Olympi\_11 Start: 8347, Stop: 9087, Start Num: 39

Candidate Starts for Olympi\_11:

(12, 8011), (13, 8020), (14, 8026), (15, 8032), (22, 8131), (27, 8236), (31, 8293), (35, 8338), (Start: 39 @8347 has 15 MA's), (Start: 52 @8476 has 3 MA's), (53, 8482), (79, 8986), (81, 9013),

Gene: Parvaparticeps\_44 Start: 31885, Stop: 31091, Start Num: 38

Candidate Starts for Parvaparticeps\_44:

(34, 31900), (38, 31885), (45, 31852), (63, 31549), (64, 31528), (71, 31396), (81, 31162),

Gene: PermaG\_10 Start: 8378, Stop: 9118, Start Num: 39

Candidate Starts for PermaG\_10:

(27, 8267), (31, 8324), (35, 8369), (Start: 39 @8378 has 15 MA's), (Start: 52 @8507 has 3 MA's), (56, 8528), (79, 9017), (81, 9044),

Gene: Rasovi\_9 Start: 8424, Stop: 9035, Start Num: 52

Candidate Starts for Rasovi\_9:

(Start: 39 @8250 has 15 MA's), (43, 8274), (Start: 52 @8424 has 3 MA's), (55, 8439), (57, 8451), (61, 8526), (66, 8634), (79, 8934), (81, 8961),

Gene: Rootkit7\_9 Start: 8202, Stop: 8933, Start Num: 39

Candidate Starts for Rootkit7\_9:

(Start: 39 @8202 has 15 MA's), (Start: 52 @8322 has 3 MA's), (79, 8832), (81, 8859),

Gene: SBlackberry\_9 Start: 8205, Stop: 8936, Start Num: 39

Candidate Starts for SBlackberry\_9:

(Start: 39 @8205 has 15 MA's), (Start: 52 @8325 has 3 MA's), (79, 8835), (81, 8862),

Gene: ScoobySnack\_10 Start: 5993, Stop: 6766, Start Num: 42

Candidate Starts for ScoobySnack\_10:

(42, 5993), (44, 6005), (47, 6011), (67, 6377), (78, 6608), (80, 6671), (82, 6755),

Gene: Sucha\_9 Start: 6355, Stop: 7119, Start Num: 39

Candidate Starts for Sucha\_9:

(31, 6301), (Start: 39 @6355 has 15 MA's), (43, 6379), (Start: 52 @6508 has 3 MA's), (60, 6592), (62, 6646), (79, 7018), (81, 7045),

Gene: Sweetums\_11 Start: 6724, Stop: 7467, Start Num: 48

Candidate Starts for Sweetums\_11:

(28, 6607), (33, 6649), (Start: 37 @6664 has 2 MA's), (Start: 40 @6676 has 1 MA's), (48, 6724), (59, 6928), (76, 7255), (77, 7294), (81, 7396),

Gene: Teng\_12 Start: 6653, Stop: 7393, Start Num: 48

Candidate Starts for Teng\_12:

(30, 6545), (33, 6578), (Start: 37 @6593 has 2 MA's), (Start: 40 @6605 has 1 MA's), (48, 6653), (59, 6854), (76, 7181), (77, 7220), (81, 7322),

Gene: TurboVicky\_9 Start: 8202, Stop: 8933, Start Num: 39

Candidate Starts for TurboVicky\_9:

(Start: 39 @8202 has 15 MA's), (Start: 52 @8322 has 3 MA's), (79, 8832), (81, 8859),

Gene: Typher\_11 Start: 8332, Stop: 9063, Start Num: 39

Candidate Starts for Typher\_11:

(Start: 39 @8332 has 15 MA's), (Start: 52 @8452 has 3 MA's), (79, 8962), (81, 8989),

Gene: Wrackline\_16 Start: 7378, Stop: 8154, Start Num: 46

Candidate Starts for Wrackline\_16:

(26, 7231), (32, 7297), (41, 7360), (Start: 46 @7378 has 1 MA's), (50, 7477), (Start: 52 @7534 has 3 MA's), (58, 7585), (63, 7696), (67, 7753), (74, 7909), (75, 7930), (77, 7984), (80, 8059), (81, 8083),

Gene: Zanella\_9 Start: 8202, Stop: 8933, Start Num: 39

Candidate Starts for Zanella\_9:

(Start: 39 @8202 has 15 MA's), (Start: 52 @8322 has 3 MA's), (79, 8832), (81, 8859),