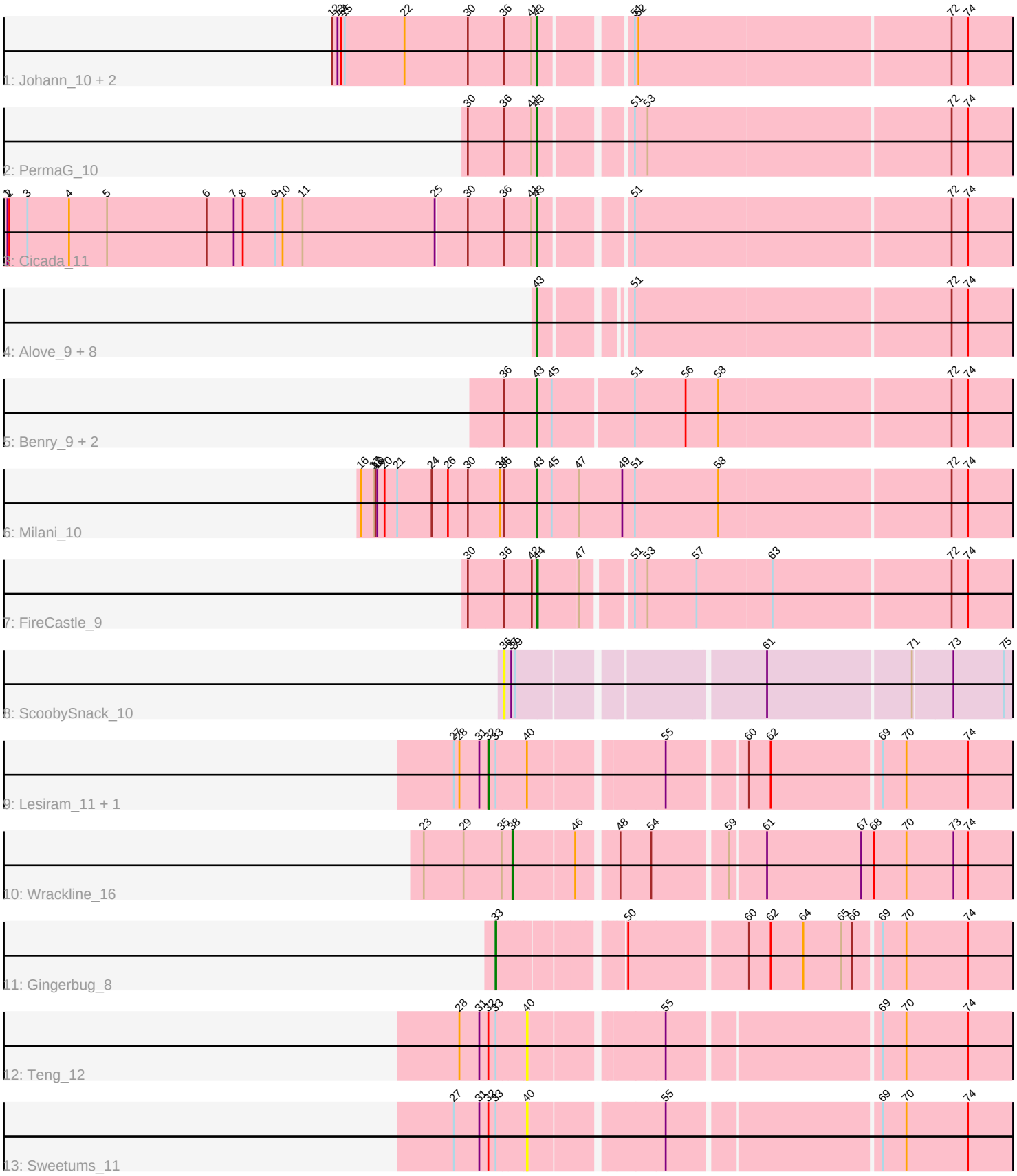
# Pham 296876


1: Johann_10 + 2
2: PermaG_10
3: Cicada_11
4: Alove_9 + 8
5: Benry_9 + 2
6: Milani_10
7: FireCastle_9
8: ScoobySnack_10
9: Lesiram_11 + 1
10: Wrackline_16
11: Gingerbug_8
12: Teng_12
13: Sweetums_11

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 296876 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296876 has 26 members, 7 are drafts.

Phages represented in each track:
• Track 1 : Johann_10, Olympi_11, Goodman_10
• Track 2 : PermaG_10
• Track 3 : Cicada_11
• Track 4 : Alove_9, AyoTeo_11, Jera_10, Zanella_9, SBlackberry_9, Labella_11, Typher_11, TurboVicky_9, Rootkit7_9
• Track 5 : Benry_9, IndiRoo_9, Sucha_9
• Track 6 : Milani_10
• Track 7 : FireCastle_9
• Track 8 : ScoobySnack_10
• Track 9 : Lesiram_11, DelaGarza_11
• Track 10 : Wrackline_16
• Track 11 : Gingerbug_8
• Track 12 : Teng_12
• Track 13 : Sweetums_11

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

The start number called the most often in the published annotations is 43, it was called in 14 of the 19 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Alove_9, AyoTeo_11, Benry_9, Cicada_11, 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:
•

Genes that do not have the "Most Annotated" start:
• DelaGarza_11, FireCastle_9, Gingerbug_8, Lesiram_11, ScoobySnack_10, Sweetums_11, Teng_12, Wrackline_16,

**Summary by start number:**

Start 32:
• Found in 4 of 26 ( 15.4% ) of genes in pham
• Manual Annotations of this start: 2 of 19
• Called 50.0% of time when present
• Phage (with cluster) where this start called: DelaGarza_11 (GF), Lesiram_11 (GF),

Start 33:
• Found in 5 of 26 ( 19.2% ) of genes in pham
• Manual Annotations of this start: 1 of 19
• Called 20.0% of time when present
• Phage (with cluster) where this start called: Gingerbug_8 (GF),

Start 36:
• Found in 11 of 26 ( 42.3% ) of genes in pham
• No Manual Annotations of this start.
• Called 9.1% of time when present
• Phage (with cluster) where this start called: ScoobySnack_10 (GA),

Start 38:
• Found in 1 of 26 ( 3.8% ) of genes in pham
• Manual Annotations of this start: 1 of 19
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Wrackline_16 (GF),

Start 40:
• Found in 4 of 26 ( 15.4% ) 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 43:
• Found in 18 of 26 ( 69.2% ) of genes in pham
• Manual Annotations of this start: 14 of 19
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Alove_9 (EJ), AyoTeo_11 (EJ), Benry_9 (EJ), Cicada_11 (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 44:
• Found in 1 of 26 ( 3.8% ) of genes in pham
• Manual Annotations of this start: 1 of 19
• Called 100.0% of time when present
• Phage (with cluster) where this start called: FireCastle_9 (EJ),

**Summary by clusters:**

There are 3 clusters represented in this pham: GF, GA, EJ,

Info for manual annotations of cluster EJ:
•Start number 43 was manually annotated 14 times for cluster EJ.
•Start number 44 was manually annotated 1 time for cluster EJ.

Info for manual annotations of cluster GF:
•Start number 32 was manually annotated 2 times for cluster GF.
•Start number 33 was manually annotated 1 time for cluster GF.
•Start number 38 was manually annotated 1 time for cluster GF.

### *Gene Information:*

Gene: Alove_9 Start: 8202, Stop: 8933, Start Num: 43
Candidate Starts for Alove_9:
(Start: 43 @8202 has 14 MA's), (51, 8322), (72, 8832), (74, 8859),

Gene: AyoTeo_11 Start: 8329, Stop: 9060, Start Num: 43
Candidate Starts for AyoTeo_11:
(Start: 43 @8329 has 14 MA's), (51, 8449), (72, 8959), (74, 8986),

Gene: Benry_9 Start: 6358, Stop: 7122, Start Num: 43
Candidate Starts for Benry_9:
(36, 6304), (Start: 43 @6358 has 14 MA's), (45, 6382), (51, 6511), (56, 6595), (58, 6649), (72, 7021), (74, 7048),

Gene: Cicada_11 Start: 8447, Stop: 9187, Start Num: 43
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), (25, 8285), (30, 8336), (36, 8393), (41, 8438), (Start: 43 @8447 has 14 MA's), (51, 8576), (72, 9086), (74, 9113),

Gene: DelaGarza_11 Start: 6593, Stop: 7396, Start Num: 32
Candidate Starts for DelaGarza_11:
(27, 6536), (28, 6545), (31, 6578), (Start: 32 @6593 has 2 MA's), (Start: 33 @6605 has 1 MA's), (40, 6653), (55, 6857), (60, 6974), (62, 7010), (69, 7184), (70, 7223), (74, 7325),

Gene: FireCastle_9 Start: 8109, Stop: 8858, Start Num: 44
Candidate Starts for FireCastle_9:
(30, 7998), (36, 8055), (42, 8100), (Start: 44 @8109 has 1 MA's), (47, 8175), (51, 8247), (53, 8268), (57, 8349), (63, 8472), (72, 8757), (74, 8784),

Gene: Gingerbug_8 Start: 5806, Stop: 6582, Start Num: 33
Candidate Starts for Gingerbug_8:
(Start: 33 @5806 has 1 MA's), (50, 5980), (60, 6160), (62, 6196), (64, 6250), (65, 6313), (66, 6331), (69, 6370), (70, 6409), (74, 6511),

Gene: Goodman_10 Start: 8356, Stop: 9096, Start Num: 43
Candidate Starts for Goodman_10:
(12, 8020), (13, 8029), (14, 8035), (15, 8041), (22, 8140), (30, 8245), (36, 8302), (41, 8347), (Start: 43 @8356 has 14 MA's), (51, 8485), (52, 8491), (72, 8995), (74, 9022),

Gene: IndiRoo_9 Start: 6360, Stop: 7124, Start Num: 43
Candidate Starts for IndiRoo_9:

(36, 6306), (Start: 43 @6360 has 14 MA's), (45, 6384), (51, 6513), (56, 6597), (58, 6651), (72, 7023), (74, 7050),

Gene: Jera_10 Start: 7446, Stop: 8177, Start Num: 43
Candidate Starts for Jera_10:
(Start: 43 @7446 has 14 MA's), (51, 7566), (72, 8076), (74, 8103),

Gene: Johann_10 Start: 8356, Stop: 9096, Start Num: 43
Candidate Starts for Johann_10:
(12, 8020), (13, 8029), (14, 8035), (15, 8041), (22, 8140), (30, 8245), (36, 8302), (41, 8347), (Start: 43 @8356 has 14 MA's), (51, 8485), (52, 8491), (72, 8995), (74, 9022),

Gene: Labella_11 Start: 8333, Stop: 9064, Start Num: 43
Candidate Starts for Labella_11:
(Start: 43 @8333 has 14 MA's), (51, 8453), (72, 8963), (74, 8990),

Gene: Lesiram_11 Start: 6569, Stop: 7369, Start Num: 32
Candidate Starts for Lesiram_11:
(27, 6512), (28, 6521), (31, 6554), (Start: 32 @6569 has 2 MA's), (Start: 33 @6581 has 1 MA's), (40, 6629), (55, 6830), (60, 6947), (62, 6983), (69, 7157), (70, 7196), (74, 7298),

Gene: Milani_10 Start: 7008, Stop: 7781, Start Num: 43
Candidate Starts for Milani_10:
(16, 6720), (17, 6741), (18, 6744), (19, 6747), (20, 6759), (21, 6780), (24, 6837), (26, 6864), (30, 6897), (34, 6948), (36, 6954), (Start: 43 @7008 has 14 MA's), (45, 7032), (47, 7077), (49, 7149), (51, 7170), (58, 7308), (72, 7680), (74, 7707),

Gene: Olympi_11 Start: 8347, Stop: 9087, Start Num: 43
Candidate Starts for Olympi_11:
(12, 8011), (13, 8020), (14, 8026), (15, 8032), (22, 8131), (30, 8236), (36, 8293), (41, 8338), (Start: 43 @8347 has 14 MA's), (51, 8476), (52, 8482), (72, 8986), (74, 9013),

Gene: PermaG_10 Start: 8378, Stop: 9118, Start Num: 43
Candidate Starts for PermaG_10:
(30, 8267), (36, 8324), (41, 8369), (Start: 43 @8378 has 14 MA's), (51, 8507), (53, 8528), (72, 9017), (74, 9044),

Gene: Rootkit7_9 Start: 8202, Stop: 8933, Start Num: 43
Candidate Starts for Rootkit7_9:
(Start: 43 @8202 has 14 MA's), (51, 8322), (72, 8832), (74, 8859),

Gene: SBlackberry_9 Start: 8205, Stop: 8936, Start Num: 43
Candidate Starts for SBlackberry_9:
(Start: 43 @8205 has 14 MA's), (51, 8325), (72, 8835), (74, 8862),

Gene: ScoobySnack_10 Start: 5993, Stop: 6766, Start Num: 36
Candidate Starts for ScoobySnack_10:
(36, 5993), (37, 6005), (39, 6011), (61, 6377), (71, 6608), (73, 6671), (75, 6755),

Gene: Sucha_9 Start: 6355, Stop: 7119, Start Num: 43
Candidate Starts for Sucha_9:
(36, 6301), (Start: 43 @6355 has 14 MA's), (45, 6379), (51, 6508), (56, 6592), (58, 6646), (72, 7018), (74, 7045),

Gene: Sweetums_11 Start: 6724, Stop: 7467, Start Num: 40
Candidate Starts for Sweetums_11:
(27, 6607), (31, 6649), (Start: 32 @6664 has 2 MA's), (Start: 33 @6676 has 1 MA's), (40, 6724), (55, 6928), (69, 7255), (70, 7294), (74, 7396),

Gene: Teng_12 Start: 6653, Stop: 7393, Start Num: 40
Candidate Starts for Teng_12:
(28, 6545), (31, 6578), (Start: 32 @6593 has 2 MA's), (Start: 33 @6605 has 1 MA's), (40, 6653), (55, 6854), (69, 7181), (70, 7220), (74, 7322),

Gene: TurboVicky_9 Start: 8202, Stop: 8933, Start Num: 43
Candidate Starts for TurboVicky_9:
(Start: 43 @8202 has 14 MA's), (51, 8322), (72, 8832), (74, 8859),

Gene: Typher_11 Start: 8332, Stop: 9063, Start Num: 43
Candidate Starts for Typher_11:
(Start: 43 @8332 has 14 MA's), (51, 8452), (72, 8962), (74, 8989),

Gene: Wrackline_16 Start: 7378, Stop: 8154, Start Num: 38
Candidate Starts for Wrackline_16:
(23, 7231), (29, 7297), (35, 7360), (Start: 38 @7378 has 1 MA's), (46, 7477), (48, 7534), (54, 7585), (59, 7696), (61, 7753), (67, 7909), (68, 7930), (70, 7984), (73, 8059), (74, 8083),

Gene: Zanella_9 Start: 8202, Stop: 8933, Start Num: 43
Candidate Starts for Zanella_9:
(Start: 43 @8202 has 14 MA's), (51, 8322), (72, 8832), (74, 8859),