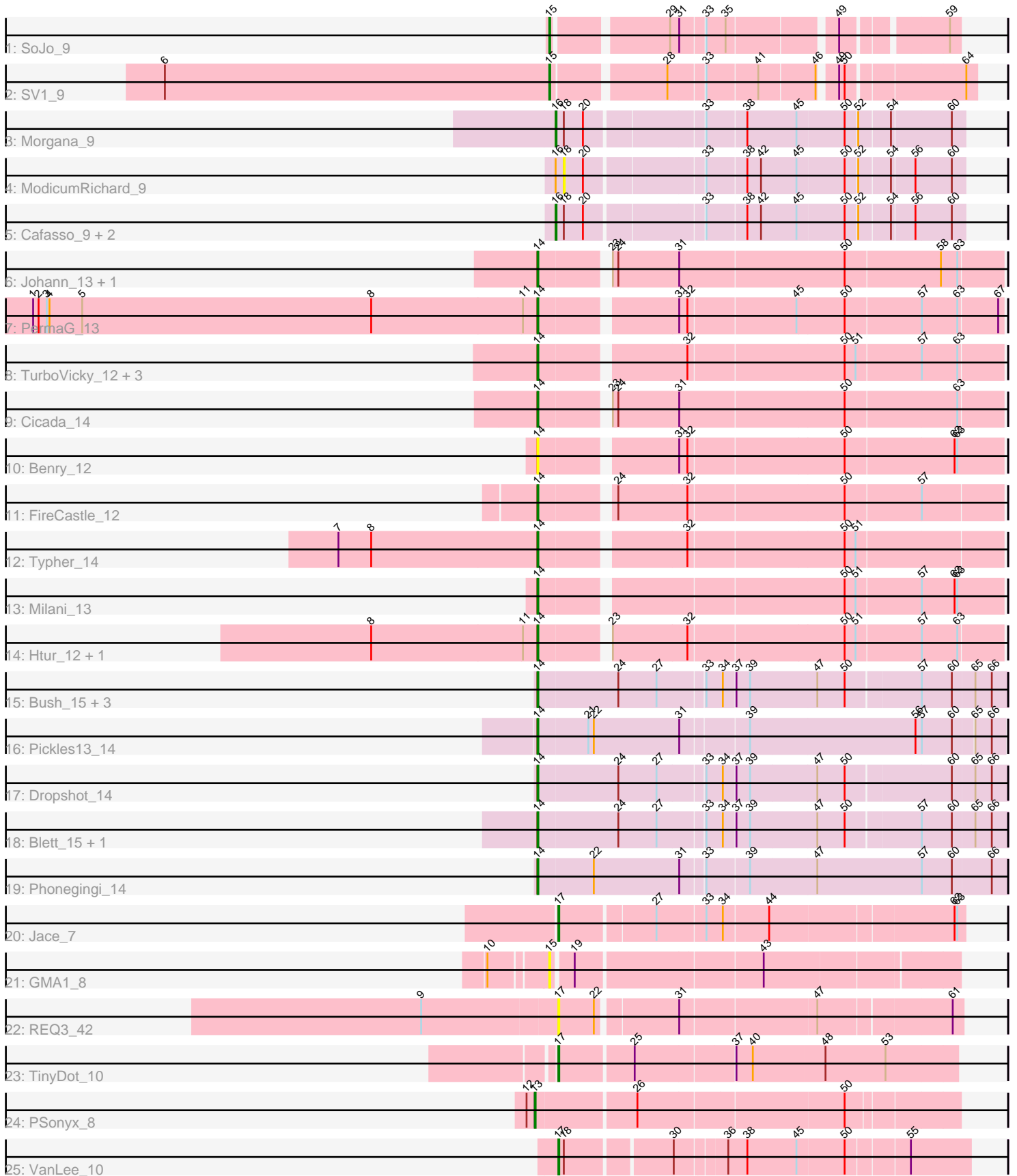


Pham 170155



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 170155 Report

This analysis was run 07/09/24 on database version 566.

Pham number 170155 has 36 members, 5 are drafts.

Phages represented in each track:

- Track 1 : SoJo_9
- Track 2 : SV1_9
- Track 3 : Morgana_9
- Track 4 : ModicumRichard_9
- Track 5 : Cafasso_9, Aleemily_9, ObLaDi_9
- Track 6 : Johann_13, Goodman_13
- Track 7 : PermaG_13
- Track 8 : TurboVicky_12, SBlackberry_12, Jera_13, Zanella_12
- Track 9 : Cicada_14
- Track 10 : Benry_12
- Track 11 : FireCastle_12
- Track 12 : Typher_14
- Track 13 : Milani_13
- Track 14 : Htur_12, Rasovi_12
- Track 15 : Bush_15, MenE_18, Antuna_15, Appa_14
- Track 16 : Pickles13_14
- Track 17 : Dropshot_14
- Track 18 : Blett_15, Warren_15
- Track 19 : Phonegingi_14
- Track 20 : Jace_7
- Track 21 : GMA1_8
- Track 22 : REQ3_42
- Track 23 : TinyDot_10
- Track 24 : PSonyx_8
- Track 25 : VanLee_10

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

The start number called the most often in the published annotations is 14, it was called in 21 of the 31 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Antuna_15, Appa_14, Benry_12, Blett_15, Bush_15, Cicada_14, Dropshot_14, FireCastle_12, Goodman_13, Htur_12, Jera_13, Johann_13, MenE_18, Milani_13,

PermaG_13, Phonegingi_14, Pickles13_14, Rasovi_12, SBlackberry_12, TurboVicky_12, Typher_14, Warren_15, Zanella_12,

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

-

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

• Aleemily_9, Cafasso_9, GMA1_8, Jace_7, ModicumRichard_9, Morgana_9, ObLaDi_9, PSonyx_8, REQ3_42, SV1_9, SoJo_9, TinyDot_10, VanLee_10,

Summary by start number:

Start 13:

- Found in 1 of 36 (2.8%) of genes in pham
- Manual Annotations of this start: 1 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PSonyx_8 (singleton),

Start 14:

- Found in 23 of 36 (63.9%) of genes in pham
- Manual Annotations of this start: 21 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Antuna_15 (GA), Appa_14 (GA), Benry_12 (EJ), Blett_15 (GA), Bush_15 (GA), Cicada_14 (EJ), Dropshot_14 (GA), FireCastle_12 (EJ), Goodman_13 (EJ), Htur_12 (EJ), Jera_13 (EJ), Johann_13 (EJ), MenE_18 (GA), Milani_13 (EJ), PermaG_13 (EJ), Phonegingi_14 (GA), Pickles13_14 (GA), Rasovi_12 (EJ), SBlackberry_12 (EJ), TurboVicky_12 (EJ), Typher_14 (EJ), Warren_15 (GA), Zanella_12 (EJ),

Start 15:

- Found in 3 of 36 (8.3%) of genes in pham
- Manual Annotations of this start: 2 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA1_8 (singleton), SV1_9 (BC1), SoJo_9 (BC1),

Start 16:

- Found in 5 of 36 (13.9%) of genes in pham
- Manual Annotations of this start: 4 of 31
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Aleemily_9 (DZ), Cafasso_9 (DZ), Morgana_9 (DZ), ObLaDi_9 (DZ),

Start 17:

- Found in 4 of 36 (11.1%) of genes in pham
- Manual Annotations of this start: 3 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jace_7 (singleton), REQ3_42 (singleton), TinyDot_10 (singleton), VanLee_10 (singleton),

Start 18:

- Found in 6 of 36 (16.7%) of genes in pham
- No Manual Annotations of this start.

- Called 16.7% of time when present
- Phage (with cluster) where this start called: ModicumRichard_9 (DZ),

Summary by clusters:

There are 5 clusters represented in this pham: singleton, DZ, BC1, GA, EJ,

Info for manual annotations of cluster BC1:

- Start number 15 was manually annotated 2 times for cluster BC1.

Info for manual annotations of cluster DZ:

- Start number 16 was manually annotated 4 times for cluster DZ.

Info for manual annotations of cluster EJ:

- Start number 14 was manually annotated 13 times for cluster EJ.

Info for manual annotations of cluster GA:

- Start number 14 was manually annotated 8 times for cluster GA.

Gene Information:

Gene: Aleemily_9 Start: 7322, Stop: 7741, Start Num: 16

Candidate Starts for Aleemily_9:

(Start: 16 @7322 has 4 MA's), (18, 7331), (20, 7352), (33, 7472), (38, 7514), (42, 7529), (45, 7568), (50, 7619), (52, 7631), (54, 7664), (56, 7688), (60, 7727),

Gene: Antuna_15 Start: 8492, Stop: 8986, Start Num: 14

Candidate Starts for Antuna_15:

(Start: 14 @8492 has 21 MA's), (24, 8579), (27, 8621), (33, 8669), (34, 8687), (37, 8699), (39, 8714), (47, 8786), (50, 8816), (57, 8894), (60, 8927), (65, 8951), (66, 8969),

Gene: Appa_14 Start: 8354, Stop: 8848, Start Num: 14

Candidate Starts for Appa_14:

(Start: 14 @8354 has 21 MA's), (24, 8441), (27, 8483), (33, 8531), (34, 8549), (37, 8561), (39, 8576), (47, 8648), (50, 8678), (57, 8756), (60, 8789), (65, 8813), (66, 8831),

Gene: Benry_12 Start: 8598, Stop: 9080, Start Num: 14

Candidate Starts for Benry_12:

(Start: 14 @8598 has 21 MA's), (31, 8736), (32, 8745), (50, 8910), (62, 9027), (63, 9030),

Gene: Blett_15 Start: 8507, Stop: 9001, Start Num: 14

Candidate Starts for Blett_15:

(Start: 14 @8507 has 21 MA's), (24, 8594), (27, 8636), (33, 8684), (34, 8702), (37, 8714), (39, 8729), (47, 8801), (50, 8831), (57, 8909), (60, 8942), (65, 8966), (66, 8984),

Gene: Bush_15 Start: 8488, Stop: 8982, Start Num: 14

Candidate Starts for Bush_15:

(Start: 14 @8488 has 21 MA's), (24, 8575), (27, 8617), (33, 8665), (34, 8683), (37, 8695), (39, 8710), (47, 8782), (50, 8812), (57, 8890), (60, 8923), (65, 8947), (66, 8965),

Gene: Cafasso_9 Start: 7322, Stop: 7741, Start Num: 16

Candidate Starts for Cafasso_9:

(Start: 16 @7322 has 4 MA's), (18, 7331), (20, 7352), (33, 7472), (38, 7514), (42, 7529), (45, 7568), (50, 7619), (52, 7631), (54, 7664), (56, 7688), (60, 7727),

Gene: Cicada_14 Start: 10667, Stop: 11149, Start Num: 14

Candidate Starts for Cicada_14:

(Start: 14 @10667 has 21 MA's), (23, 10733), (24, 10739), (31, 10805), (50, 10982), (63, 11102),

Gene: Dropshot_14 Start: 8354, Stop: 8848, Start Num: 14

Candidate Starts for Dropshot_14:

(Start: 14 @8354 has 21 MA's), (24, 8441), (27, 8483), (33, 8531), (34, 8549), (37, 8561), (39, 8576), (47, 8648), (50, 8678), (60, 8789), (65, 8813), (66, 8831),

Gene: FireCastle_12 Start: 10331, Stop: 10810, Start Num: 14

Candidate Starts for FireCastle_12:

(Start: 14 @10331 has 21 MA's), (24, 10403), (32, 10478), (50, 10643), (57, 10724),

Gene: GMA1_8 Start: 6454, Stop: 6870, Start Num: 15

Candidate Starts for GMA1_8:

(10, 6400), (Start: 15 @6454 has 2 MA's), (19, 6475), (43, 6667),

Gene: Goodman_13 Start: 10579, Stop: 11061, Start Num: 14

Candidate Starts for Goodman_13:

(Start: 14 @10579 has 21 MA's), (23, 10645), (24, 10651), (31, 10717), (50, 10894), (58, 10996), (63, 11014),

Gene: Htur_12 Start: 10585, Stop: 11064, Start Num: 14

Candidate Starts for Htur_12:

(8, 10405), (11, 10570), (Start: 14 @10585 has 21 MA's), (23, 10651), (32, 10732), (50, 10897), (51, 10909), (57, 10978), (63, 11017),

Gene: Jace_7 Start: 6635, Stop: 7051, Start Num: 17

Candidate Starts for Jace_7:

(Start: 17 @6635 has 3 MA's), (27, 6734), (33, 6782), (34, 6800), (44, 6848), (62, 7040), (63, 7043),

Gene: Jera_13 Start: 9661, Stop: 10140, Start Num: 14

Candidate Starts for Jera_13:

(Start: 14 @9661 has 21 MA's), (32, 9808), (50, 9973), (51, 9985), (57, 10054), (63, 10093),

Gene: Johann_13 Start: 10579, Stop: 11061, Start Num: 14

Candidate Starts for Johann_13:

(Start: 14 @10579 has 21 MA's), (23, 10645), (24, 10651), (31, 10717), (50, 10894), (58, 10996), (63, 11014),

Gene: MenE_18 Start: 8622, Stop: 9116, Start Num: 14

Candidate Starts for MenE_18:

(Start: 14 @8622 has 21 MA's), (24, 8709), (27, 8751), (33, 8799), (34, 8817), (37, 8829), (39, 8844), (47, 8916), (50, 8946), (57, 9024), (60, 9057), (65, 9081), (66, 9099),

Gene: Milani_13 Start: 9257, Stop: 9739, Start Num: 14

Candidate Starts for Milani_13:

(Start: 14 @9257 has 21 MA's), (50, 9569), (51, 9581), (57, 9650), (62, 9686), (63, 9689),

Gene: ModicumRichard_9 Start: 7331, Stop: 7741, Start Num: 18

Candidate Starts for ModicumRichard_9:

(Start: 16 @7322 has 4 MA's), (18, 7331), (20, 7352), (33, 7472), (38, 7514), (42, 7529), (45, 7568), (50, 7619), (52, 7631), (54, 7664), (56, 7688), (60, 7727),

Gene: Morgana_9 Start: 7326, Stop: 7745, Start Num: 16

Candidate Starts for Morgana_9:

(Start: 16 @7326 has 4 MA's), (18, 7335), (20, 7356), (33, 7476), (38, 7518), (45, 7572), (50, 7623), (52, 7635), (54, 7668), (60, 7731),

Gene: ObLaDi_9 Start: 7322, Stop: 7741, Start Num: 16

Candidate Starts for ObLaDi_9:

(Start: 16 @7322 has 4 MA's), (18, 7331), (20, 7352), (33, 7472), (38, 7514), (42, 7529), (45, 7568), (50, 7619), (52, 7631), (54, 7664), (56, 7688), (60, 7727),

Gene: PSonyx_8 Start: 7275, Stop: 7712, Start Num: 13

Candidate Starts for PSonyx_8:

(12, 7266), (Start: 13 @7275 has 1 MA's), (26, 7380), (50, 7596),

Gene: PermaG_13 Start: 10645, Stop: 11124, Start Num: 14

Candidate Starts for PermaG_13:

(1, 10093), (2, 10099), (3, 10108), (4, 10111), (5, 10147), (8, 10465), (11, 10630), (Start: 14 @10645 has 21 MA's), (31, 10783), (32, 10792), (45, 10906), (50, 10957), (57, 11038), (63, 11077), (67, 11119),

Gene: Phonegingi_14 Start: 8348, Stop: 8848, Start Num: 14

Candidate Starts for Phonegingi_14:

(Start: 14 @8348 has 21 MA's), (22, 8408), (31, 8501), (33, 8525), (39, 8570), (47, 8642), (57, 8756), (60, 8789), (66, 8831),

Gene: Pickles13_14 Start: 8518, Stop: 9012, Start Num: 14

Candidate Starts for Pickles13_14:

(Start: 14 @8518 has 21 MA's), (21, 8572), (22, 8578), (31, 8671), (39, 8740), (56, 8920), (57, 8926), (60, 8959), (65, 8980), (66, 8998),

Gene: REQ3_42 Start: 23499, Stop: 23909, Start Num: 17

Candidate Starts for REQ3_42:

(9, 23352), (Start: 17 @23499 has 3 MA's), (22, 23538), (31, 23619), (47, 23760), (61, 23898),

Gene: Rasovi_12 Start: 10585, Stop: 11064, Start Num: 14

Candidate Starts for Rasovi_12:

(8, 10405), (11, 10570), (Start: 14 @10585 has 21 MA's), (23, 10651), (32, 10732), (50, 10897), (51, 10909), (57, 10978), (63, 11017),

Gene: SBlackberry_12 Start: 10420, Stop: 10899, Start Num: 14

Candidate Starts for SBlackberry_12:

(Start: 14 @10420 has 21 MA's), (32, 10567), (50, 10732), (51, 10744), (57, 10813), (63, 10852),

Gene: SV1_9 Start: 7311, Stop: 7727, Start Num: 15

Candidate Starts for SV1_9:

(6, 6888), (Start: 15 @7311 has 2 MA's), (28, 7425), (33, 7461), (41, 7515), (46, 7575), (49, 7590), (50, 7596), (64, 7716),

Gene: SoJo_9 Start: 7360, Stop: 7749, Start Num: 15

Candidate Starts for SoJo_9:

(Start: 15 @7360 has 2 MA's), (29, 7474), (31, 7483), (33, 7507), (35, 7528), (49, 7636), (59, 7738),

Gene: TinyDot_10 Start: 7216, Stop: 7635, Start Num: 17

Candidate Starts for TinyDot_10:

(Start: 17 @7216 has 3 MA's), (25, 7294), (37, 7396), (40, 7414), (48, 7492), (53, 7558),

Gene: TurboVicky_12 Start: 10414, Stop: 10893, Start Num: 14

Candidate Starts for TurboVicky_12:

(Start: 14 @10414 has 21 MA's), (32, 10561), (50, 10726), (51, 10738), (57, 10807), (63, 10846),

Gene: Typher_14 Start: 10548, Stop: 11027, Start Num: 14

Candidate Starts for Typher_14:

(7, 10332), (8, 10368), (Start: 14 @10548 has 21 MA's), (32, 10695), (50, 10860), (51, 10872),

Gene: VanLee_10 Start: 7200, Stop: 7619, Start Num: 17

Candidate Starts for VanLee_10:

(Start: 17 @7200 has 3 MA's), (18, 7206), (30, 7314), (36, 7365), (38, 7386), (45, 7440), (50, 7491), (55, 7554),

Gene: Warren_15 Start: 8551, Stop: 9045, Start Num: 14

Candidate Starts for Warren_15:

(Start: 14 @8551 has 21 MA's), (24, 8638), (27, 8680), (33, 8728), (34, 8746), (37, 8758), (39, 8773), (47, 8845), (50, 8875), (57, 8953), (60, 8986), (65, 9010), (66, 9028),

Gene: Zanella_12 Start: 10417, Stop: 10896, Start Num: 14

Candidate Starts for Zanella_12:

(Start: 14 @10417 has 21 MA's), (32, 10564), (50, 10729), (51, 10741), (57, 10810), (63, 10849),