

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 156666 Report

This analysis was run 04/28/24 on database version 559.

Pham number 156666 has 21 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Zepp 42
- Track 2 : Greenlvy_42
- Track 3: Librie_42, Fulton_42, Hasitha_42, CaptainRex_42
- Track 4 : Zayuliv 42
- Track 5 : LilŤerminator 42
- Track 6 : QuadZero 42
- Track 7: WilliamStrong 42
- Track 8 : Jemerald 43, Juicer 43
- Track 9 : Sucha 44
- Track 10 : PermaG 46
- Track 11: FireCastle 45
- Track 12 : Htur 46
- Track 13 : Benry_46Track 14 : Rasovi_46
- Track 15 : Milani 44
- Track 16: Pickles13 59
- Track 17 : Huwbert 18

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

The start number called the most often in the published annotations is 6, it was called in 9 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• CaptainRex_42, Fulton_42, GreenIvy_42, Hasitha_42, Jemerald_43, Juicer_43, Librie_42, LilTerminator_42, QuadZero_42, WilliamStrong_42, Zayuliv_42, Zepp_42,

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

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

Benry_46, FireCastle_45, Htur_46, Huwbert_18, Milani_44, PermaG_46, Pickles13_59, Rasovi_46, Sucha_44,

Summary by start number:

Start 4:

- Found in 1 of 21 (4.8%) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pickles13_59 (GA),

Start 5:

- Found in 1 of 21 (4.8%) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Huwbert_18 (GG),

Start 6:

- Found in 12 of 21 (57.1%) of genes in pham
- Manual Annotations of this start: 9 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CaptainRex_42 (EA5), Fulton_42 (EA5), GreenIvy_42 (EA5), Hasitha_42 (EA5), Jemerald_43 (EA6), Juicer_43 (EA6), Librie_42 (EA5), LilTerminator_42 (EA5), QuadZero_42 (EA5), WilliamStrong_42 (EA6), Zayuliv_42 (EA5), Zepp_42 (EA5),

Start 7:

- Found in 3 of 21 (14.3%) of genes in pham
- Manual Annotations of this start: 2 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Benry_46 (EJ), Milani_44 (EJ),
 Sucha_44 (EJ),

Start 12:

- Found in 2 of 21 (9.5%) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Htur_46 (EJ), Rasovi_46 (EJ),

Start 13:

- Found in 2 of 21 (9.5%) of genes in pham
- Manual Annotations of this start: 2 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: FireCastle_45 (EJ), PermaG_46 (EJ),

Summary by clusters:

There are 5 clusters represented in this pham: GG, EA6, EA5, GA, EJ,

Info for manual annotations of cluster EA5:

•Start number 6 was manually annotated 6 times for cluster EA5.

Info for manual annotations of cluster EA6:

•Start number 6 was manually annotated 3 times for cluster EA6.

Info for manual annotations of cluster EJ:

- •Start number 7 was manually annotated 2 times for cluster EJ.
- •Start number 12 was manually annotated 1 time for cluster EJ.
- •Start number 13 was manually annotated 2 times for cluster EJ.

Info for manual annotations of cluster GA:

•Start number 4 was manually annotated 1 time for cluster GA.

Info for manual annotations of cluster GG:

•Start number 5 was manually annotated 1 time for cluster GG.

Gene Information:

Gene: Benry_46 Start: 28257, Stop: 28490, Start Num: 7

Candidate Starts for Benry 46:

(Start: 7 @28257 has 2 MA's), (9, 28281), (14, 28308), (19, 28359), (24, 28380), (28, 28419), (30,

28431), (32, 28437), (40, 28470),

Gene: CaptainRex_42 Start: 29567, Stop: 29343, Start Num: 6

Candidate Starts for CaptainRex 42:

(Start: 6 @ 29567 has 9 MA's), (29, 29408), (30, 29402), (32, 29396), (33, 29393),

Gene: FireCastle 45 Start: 29401, Stop: 29607, Start Num: 13

Candidate Starts for FireCastle 45:

(11, 29392), (Start: 13 @29401 has 2 MA's), (16, 29425), (17, 29428), (18, 29449), (20, 29467), (21,

29470), (23, 29476), (35, 29563), (39, 29578),

Gene: Fulton_42 Start: 29568, Stop: 29344, Start Num: 6

Candidate Starts for Fulton_42:

(Start: 6 @29568 has 9 MA's), (29, 29409), (30, 29403), (32, 29397), (33, 29394),

Gene: Greenlyy 42 Start: 29908, Stop: 29678, Start Num: 6

Candidate Starts for Greenlyy 42:

(Start: 6 @29908 has 9 MA's), (29, 29749), (30, 29743), (32, 29737), (33, 29734), (36, 29722), (41, 29695),

Gene: Hasitha_42 Start: 29580, Stop: 29356, Start Num: 6

Candidate Starts for Hasitha 42:

(Start: 6 @29580 has 9 MA's), (29, 29421), (30, 29415), (32, 29409), (33, 29406),

Gene: Htur_46 Start: 29833, Stop: 30033, Start Num: 12

Candidate Starts for Htur 46:

(11, 29827), (Start: 12 @29833 has 1 MA's), (17, 29860), (21, 29902), (22, 29905), (23, 29908), (32, 29983).

Gene: Huwbert_18 Start: 6388, Stop: 6663, Start Num: 5

Candidate Starts for Huwbert 18:

(Start: 5 @ 6388 has 1 MA's), (9, 6427), (25, 6556), (28, 6574), (31, 6592), (33, 6598), (38, 6619),

Gene: Jemerald 43 Start: 31971, Stop: 31714, Start Num: 6

Candidate Starts for Jemerald 43:

(3, 31986), (Start: 6 @31971 has 9 MA's), (14, 31908), (19, 31857), (27, 31797), (39, 31743),

Gene: Juicer_43 Start: 31971, Stop: 31714, Start Num: 6

Candidate Starts for Juicer_43:

(3, 31986), (Start: 6 @31971 has 9 MA's), (14, 31908), (19, 31857), (27, 31797), (39, 31743),

Gene: Librie_42 Start: 29567, Stop: 29343, Start Num: 6

Candidate Starts for Librie 42:

(Start: 6 @ 29567 has 9 MA's), (29, 29408), (30, 29402), (32, 29396), (33, 29393),

Gene: LilTerminator_42 Start: 29589, Stop: 29365, Start Num: 6

Candidate Starts for LilTerminator 42:

(Start: 6 @ 29589 has 9 MA's), (29, 29430), (33, 29415), (34, 29409),

Gene: Milani_44 Start: 28679, Stop: 28912, Start Num: 7

Candidate Starts for Milani_44:

(Start: 7 @28679 has 2 MA's), (9, 28703), (10, 28706), (14, 28730), (19, 28781), (24, 28802), (26, 28832), (32, 28859), (40, 28892).

Gene: PermaG 46 Start: 29499, Stop: 29699, Start Num: 13

Candidate Starts for PermaG_46:

(1, 29385), (2, 29424), (11, 29490), (Start: 13 @29499 has 2 MA's), (16, 29523), (17, 29526), (20, 29565), (22, 29571), (23, 29574), (30, 29643), (42, 29694),

Gene: Pickles13_59 Start: 35548, Stop: 35790, Start Num: 4

Candidate Starts for Pickles13 59:

(Start: 4 @ 35548 has 1 MA's), (38, 35755), (39, 35758), (40, 35764),

Gene: QuadZero 42 Start: 29737, Stop: 29513, Start Num: 6

Candidate Starts for QuadZero_42:

(Start: 6 @ 29737 has 9 MA's), (15, 29689), (29, 29578), (30, 29572),

Gene: Rasovi_46 Start: 29833, Stop: 30033, Start Num: 12

Candidate Starts for Rasovi 46:

(11, 29827), (Start: 12 @29833 has 1 MA's), (17, 29860), (21, 29902), (22, 29905), (23, 29908), (32, 29983), (33, 29986),

Gene: Sucha_44 Start: 27874, Stop: 28107, Start Num: 7

Candidate Starts for Sucha_44:

(Start: 7 @27874 has 2 MA's), (9, 27898), (14, 27925), (19, 27976), (21, 27982), (24, 27997), (28, 28036), (30, 28048), (32, 28054), (40, 28087),

Gene: WilliamStrong_42 Start: 31432, Stop: 31187, Start Num: 6

Candidate Starts for WilliamStrong 42:

(Start: 6 @31432 has 9 MA's), (8, 31414), (9, 31396), (19, 31318), (30, 31246), (31, 31243), (33, 31237), (35, 31228), (36, 31225), (37, 31219), (40, 31207),

Gene: Zayuliv_42 Start: 30190, Stop: 29966, Start Num: 6

Candidate Starts for Zayuliv_42:

(Start: 6 @30190 has 9 MA's), (29, 30031), (33, 30016),

Gene: Zepp_42 Start: 29624, Stop: 29400, Start Num: 6

Candidate Starts for Zepp 42:

(Start: 6 @ 29624 has 9 MA's), (29, 29465), (30, 29459), (32, 29453), (33, 29450), (38, 29429),