

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 196761 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196761 has 27 members, 2 are drafts.

Phages represented in each track:

- Track 1: Hasitha_42, CaptainRex_42, Librie_42, Fulton_42
- Track 2 : QuadZero_42
- Track 3 : Zayuliv_42
- Track 4: Greenlyy 41
- Track 5 : LilTerminator 42
- Track 6 : Zepp_42
- Track 7: Morrigan 43
- Track 8 : Juicer_43, Jemerald_43
- Track 9: KatChan_43, Chepli_43, Luna18_43
- Track 10 : WilliamStrong 42
- Track 11 : Milani 44
- Track 12 : FireCastle 45
- Track 13 : Htur_46Track 14 : Rasovi_46
- Track 15 : Sucha 44
- Track 16: Benry 46, IndiRoo 48
- Track 17 : PermaG_46
- Track 18: Pickles13 59
- Track 19: Huwbert 18
- Track 20 : Triscuit 17

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

The start number called the most often in the published annotations is 8, it was called in 14 of the 25 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

 CaptainRex_42, Chepli_43, Fulton_42, GreenIvy_41, Hasitha_42, Jemerald_43, Juicer_43, KatChan_43, Librie_42, LilTerminator_42, Luna18_43, 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, IndiRoo_48, Milani_44, Morrigan_43, PermaG_46, Pickles13_59, Rasovi_46, Sucha_44, Triscuit_17,

Summary by start number:

Start 6:

- Found in 2 of 27 (7.4%) of genes in pham
- Manual Annotations of this start: 2 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Huwbert_18 (GG), Triscuit_17 (GG),

Start 8:

- Found in 15 of 27 (55.6%) of genes in pham
- Manual Annotations of this start: 14 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CaptainRex_42 (EA5), Chepli_43 (EA6), Fulton_42 (EA5), Greenlvy_41 (EA5), Hasitha_42 (EA5), Jemerald_43 (EA6), Juicer_43 (EA6), KatChan_43 (EA6), Librie_42 (EA5), LilTerminator_42 (EA5), Luna18_43 (EA6), QuadZero_42 (EA5), WilliamStrong_42 (EA6), Zayuliv_42 (EA5), Zepp_42 (EA5),

Start 9:

- Found in 6 of 27 (22.2%) of genes in pham
- Manual Annotations of this start: 5 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Benry_46 (EJ), IndiRoo_48 (EJ), Milani_44 (EJ), Morrigan_43 (EA6), Pickles13_59 (GA), Sucha_44 (EJ),

Start 10:

- Found in 2 of 27 (7.4%) of genes in pham
- Manual Annotations of this start: 2 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Htur_46 (EJ), Rasovi_46 (EJ),

Start 11:

- Found in 2 of 27 (7.4%) of genes in pham
- Manual Annotations of this start: 2 of 25
- 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, EJ, EA5, GA, EA6,

Info for manual annotations of cluster EA5:

•Start number 8 was manually annotated 8 times for cluster EA5.

Info for manual annotations of cluster EA6:

- •Start number 8 was manually annotated 6 times for cluster EA6.
- Start number 9 was manually annotated 1 time for cluster EA6.

Info for manual annotations of cluster EJ:

- •Start number 9 was manually annotated 3 times for cluster EJ.
- •Start number 10 was manually annotated 2 times for cluster EJ.
- •Start number 11 was manually annotated 2 times for cluster EJ.

Info for manual annotations of cluster GA:

•Start number 9 was manually annotated 1 time for cluster GA.

Info for manual annotations of cluster GG:

•Start number 6 was manually annotated 2 times for cluster GG.

Gene Information:

Gene: Benry 46 Start: 28257, Stop: 28490, Start Num: 9

Candidate Starts for Benry 46:

(Start: 9 @28257 has 5 MA's), (13, 28281), (16, 28308), (24, 28359), (26, 28380), (30, 28419), (34,

28431), (37, 28437), (49, 28470),

Gene: CaptainRex_42 Start: 29567, Stop: 29343, Start Num: 8

Candidate Starts for CaptainRex 42:

(Start: 8 @ 29567 has 14 MA's), (31, 29408), (33, 29402), (35, 29396), (36, 29393),

Gene: Chepli 43 Start: 30856, Stop: 30521, Start Num: 8

Candidate Starts for Chepli 43:

(Start: 8 @ 30856 has 14 MA's), (24, 30739), (34, 30664), (50, 30610),

Gene: FireCastle 45 Start: 29401, Stop: 29607, Start Num: 11

Candidate Starts for FireCastle 45:

(7, 29392), (Start: 11 @29401 has 2 MA's), (13, 29425), (14, 29428), (15, 29449), (19, 29467), (20,

29470), (22, 29476), (35, 29563), (41, 29578),

Gene: Fulton 42 Start: 29568, Stop: 29344, Start Num: 8

Candidate Starts for Fulton 42:

(Start: 8 @ 29568 has 14 MA's), (31, 29409), (33, 29403), (35, 29397), (36, 29394),

Gene: Greenlyy 41 Start: 29908, Stop: 29678, Start Num: 8

Candidate Starts for Greenlyy 41:

(Start: 8 @ 29908 has 14 MA's), (31, 29749), (33, 29743), (35, 29737), (36, 29734), (41, 29722), (49,

29695),

Gene: Hasitha_42 Start: 29580, Stop: 29356, Start Num: 8

Candidate Starts for Hasitha 42:

(Start: 8 @ 29580 has 14 MA's), (31, 29421), (33, 29415), (35, 29409), (36, 29406),

Gene: Htur 46 Start: 29833, Stop: 30033, Start Num: 10

Candidate Starts for Htur 46:

(7, 29827), (Start: 10 @29833 has 2 MA's), (14, 29860), (20, 29902), (21, 29905), (22, 29908), (31, 29983),

Gene: Huwbert 18 Start: 6388, Stop: 6663, Start Num: 6

Candidate Starts for Huwbert 18:

(Start: 6 @6388 has 2 MA's), (13, 6427), (27, 6556), (33, 6574), (40, 6592), (42, 6598), (49, 6619),

Gene: IndiRoo_48 Start: 28373, Stop: 28606, Start Num: 9

Candidate Starts for IndiRoo_48:

(Start: 9 @28373 has 5 MA's), (13, 28397), (16, 28424), (24, 28475), (26, 28496), (30, 28535), (34, 28547), (37, 28553), (49, 28586),

Gene: Jemerald_43 Start: 31971, Stop: 31714, Start Num: 8

Candidate Starts for Jemerald 43:

(5, 31986), (Start: 8 @ 31971 has 14 MA's), (17, 31908), (24, 31857), (29, 31797), (48, 31743),

Gene: Juicer 43 Start: 31971, Stop: 31714, Start Num: 8

Candidate Starts for Juicer 43:

(5, 31986), (Start: 8 @ 31971 has 14 MA's), (17, 31908), (24, 31857), (29, 31797), (48, 31743),

Gene: KatChan_43 Start: 30868, Stop: 30533, Start Num: 8

Candidate Starts for KatChan_43:

(Start: 8 @ 30868 has 14 MA's), (24, 30751), (34, 30676), (50, 30622),

Gene: Librie 42 Start: 29567, Stop: 29343, Start Num: 8

Candidate Starts for Librie_42:

(Start: 8 @ 29567 has 14 MA's), (31, 29408), (33, 29402), (35, 29396), (36, 29393),

Gene: LilTerminator 42 Start: 29589, Stop: 29365, Start Num: 8

Candidate Starts for LilTerminator_42:

(Start: 8 @ 29589 has 14 MA's), (31, 29430), (36, 29415), (39, 29409),

Gene: Luna18_43 Start: 30868, Stop: 30533, Start Num: 8

Candidate Starts for Luna18 43:

(Start: 8 @ 30868 has 14 MA's), (24, 30751), (34, 30676), (50, 30622),

Gene: Milani_44 Start: 28679, Stop: 28912, Start Num: 9

Candidate Starts for Milani_44:

(Start: 9 @28679 has 5 MA's), (13, 28703), (14, 28706), (16, 28730), (24, 28781), (26, 28802), (27, 28832), (37, 28859), (49, 28892),

Gene: Morrigan_43 Start: 30869, Stop: 30540, Start Num: 9

Candidate Starts for Morrigan_43:

(3, 30908), (4, 30905), (Start: 9 @ 30869 has 5 MA's), (24, 30752), (28, 30695), (30, 30692), (32, 30686), (34, 30680), (38, 30671), (40, 30665), (42, 30662),

Gene: PermaG 46 Start: 29499, Stop: 29699, Start Num: 11

Candidate Starts for PermaG_46:

(1, 29385), (2, 29424), (7, 29490), (Start: 11 @29499 has 2 MA's), (13, 29523), (14, 29526), (19, 29565), (21, 29571), (22, 29574), (29, 29643), (46, 29694),

Gene: Pickles13_59 Start: 35548, Stop: 35790, Start Num: 9

Candidate Starts for Pickles13_59:

(Start: 9 @ 35548 has 5 MA's), (45, 35755), (47, 35758), (49, 35764),

Gene: QuadZero 42 Start: 29737, Stop: 29513, Start Num: 8

Candidate Starts for QuadZero_42:

(Start: 8 @ 29737 has 14 MA's), (18, 29689), (31, 29578), (33, 29572),

Gene: Rasovi_46 Start: 29833, Stop: 30033, Start Num: 10

Candidate Starts for Rasovi_46:

(7, 29827), (Start: 10 @29833 has 2 MA's), (14, 29860), (20, 29902), (21, 29905), (22, 29908), (31, 29983), (32, 29986),

Gene: Sucha 44 Start: 27874, Stop: 28107, Start Num: 9

Candidate Starts for Sucha_44:

(Start: 9 @27874 has 5 MA's), (13, 27898), (16, 27925), (24, 27976), (25, 27982), (26, 27997), (30, 28036), (34, 28048), (37, 28054), (49, 28087),

Gene: Triscuit_17 Start: 6303, Stop: 6596, Start Num: 6

Candidate Starts for Triscuit 17:

(Start: 6 @ 6303 has 2 MA's), (23, 6432), (35, 6513), (41, 6528),

Gene: WilliamStrong_42 Start: 31432, Stop: 31187, Start Num: 8

Candidate Starts for WilliamStrong_42:

(Start: 8 @31432 has 14 MA's), (12, 31414), (13, 31396), (24, 31318), (33, 31246), (34, 31243), (36, 31237), (40, 31228), (41, 31225), (43, 31219), (47, 31207),

Gene: Zayuliv_42 Start: 30190, Stop: 29966, Start Num: 8

Candidate Starts for Zayuliv_42:

(Start: 8 @ 30190 has 14 MA's), (31, 30031), (36, 30016),

Gene: Zepp_42 Start: 29624, Stop: 29400, Start Num: 8

Candidate Starts for Zepp_42:

(Start: 8 @ 29624 has 14 MA's), (31, 29465), (33, 29459), (35, 29453), (36, 29450), (44, 29429),