

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 192936 Report

This analysis was run 11/02/24 on database version 579.

Pham number 192936 has 18 members, 3 are drafts.

Phages represented in each track:

• Track 1: Spilled_259, TomSawyer_256, Quaran19_252, Wipeout_242, Enygma_258, JimJam_259, KentuckyRacer_258, CeilingFan_264, Gibbi_260

Track 2 : Karimac_252

Track 3 : GiJojo_172

Track 4 : GiJojo_115

• Track 5 : BobŔoss2024_50

Track 6 : Neville_119, Trax_120

Track 7 : Cece_187

Track 8 : SlimJimmy_84, Glaske16_86

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

The start number called the most often in the published annotations is 16, it was called in 7 of the 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• CeilingFan_264, Enygma_258, Gibbi_260, JimJam_259, KentuckyRacer_258, Quaran19_252, Spilled_259, TomSawyer_256, Wipeout_242,

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

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

• BobRoss2024_50, Cece_187, GiJojo_115, GiJojo_172, Glaske16_86, Karimac_252, Neville_119, SlimJimmy_84, Trax_120,

Summary by start number:

Start 4:

- Found in 1 of 18 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GiJojo_172 (BS),

Start 7:

- Found in 1 of 18 (5.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BobRoss2024_50 (DR),

Start 11:

- Found in 1 of 18 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cece_187 (GD3),

Start 13:

- Found in 2 of 18 (11.1%) of genes in pham
- Manual Annotations of this start: 2 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Glaske16_86 (M1), SlimJimmy_84 (M1),

Start 15:

- Found in 3 of 18 (16.7%) of genes in pham
- Manual Annotations of this start: 2 of 15
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Neville_119 (DU2), Trax_120 (DU2),

Start 16:

- Found in 9 of 18 (50.0%) of genes in pham
- Manual Annotations of this start: 7 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CeilingFan_264 (BE2), Enygma_258 (BE2), Gibbi_260 (BE2), JimJam_259 (BE2), KentuckyRacer_258 (BE2), Quaran19_252 (BE2), Spilled_259 (BE2), TomSawyer_256 (BE2), Wipeout_242 (BE2),

Start 19:

- Found in 2 of 18 (11.1%) of genes in pham
- Manual Annotations of this start: 1 of 15
- Called 50.0% of time when present
- Phage (with cluster) where this start called: GiJojo 115 (BS),

Start 24:

- Found in 10 of 18 (55.6%) of genes in pham
- Manual Annotations of this start: 1 of 15
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Karimac_252 (BE2),

Summary by clusters:

There are 6 clusters represented in this pham: GD3, M1, BS, BE2, DU2, DR,

Info for manual annotations of cluster BE2:

- •Start number 16 was manually annotated 7 times for cluster BE2.
- •Start number 24 was manually annotated 1 time for cluster BE2.

Info for manual annotations of cluster BS:

- •Start number 4 was manually annotated 1 time for cluster BS.
- •Start number 19 was manually annotated 1 time for cluster BS.

Info for manual annotations of cluster DU2:

•Start number 15 was manually annotated 2 times for cluster DU2.

Info for manual annotations of cluster GD3:

•Start number 11 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster M1:

•Start number 13 was manually annotated 2 times for cluster M1.

Gene Information:

Gene: BobRoss2024_50 Start: 44361, Stop: 43870, Start Num: 7

Candidate Starts for BobRoss2024 50:

(1, 44553), (5, 44373), (7, 44361), (8, 44355), (Start: 15 @44304 has 2 MA's), (29, 44163), (32, 44145), (37, 44094), (42, 44073), (47, 43995), (53, 43917),

Gene: Cece_187 Start: 114127, Stop: 113666, Start Num: 11

Candidate Starts for Cece 187:

(2, 114241), (3, 114238), (8, 114148), (9, 114145), (Start: 11 @114127 has 1 MA's), (Start: 19 @114082 has 1 MA's), (22, 114043), (23, 114034), (31, 113941), (34, 113923), (36, 113908), (38, 113875), (42, 113860),

Gene: CeilingFan_264 Start: 116457, Stop: 116897, Start Num: 16

Candidate Starts for CeilingFan 264:

(Start: 16 @116457 has 7 MA's), (18, 116466), (Start: 24 @116526 has 1 MA's), (27, 116577), (37, 116658), (42, 116679), (51, 116817), (56, 116856),

Gene: Enygma 258 Start: 118257, Stop: 118697, Start Num: 16

Candidate Starts for Enygma_258:

(Start: 16 @118257 has 7 MA's), (18, 118266), (Start: 24 @118326 has 1 MA's), (27, 118377), (37, 118458), (42, 118479), (51, 118617), (56, 118656),

Gene: GiJojo 172 Start: 92929, Stop: 93441, Start Num: 4

Candidate Starts for GiJojo 172:

(Start: 4 @ 92929 has 1 MA's), (6, 92962), (12, 92998), (14, 93010), (17, 93028), (20, 93052), (21, 93070), (35, 93199), (37, 93232), (41, 93250), (42, 93253), (44, 93277), (49, 93346),

Gene: GiJojo_115 Start: 67939, Stop: 68364, Start Num: 19

Candidate Starts for GiJojo_115:

(Start: 19 @67939 has 1 MA's), (39, 68146), (40, 68149), (41, 68152), (42, 68155), (44, 68179), (45, 68197), (46, 68215), (48, 68242), (53, 68311),

Gene: Gibbi 260 Start: 115950, Stop: 116390, Start Num: 16

Candidate Starts for Gibbi 260:

(Start: 16 @115950 has 7 MA's), (18, 115959), (Start: 24 @116019 has 1 MA's), (27, 116070), (37, 116151), (42, 116172), (51, 116310), (56, 116349),

Gene: Glaske16_86 Start: 52934, Stop: 53347, Start Num: 13

Candidate Starts for Glaske16 86:

(10, 52916), (Start: 13 @52934 has 2 MA's), (25, 53006), (30, 53078), (33, 53093), (37, 53138), (42, 53159), (43, 53168), (52, 53303), (54, 53318), (55, 53327),

Gene: JimJam_259 Start: 117386, Stop: 117826, Start Num: 16

Candidate Starts for JimJam 259:

(Start: 16 @117386 has 7 MA's), (18, 117395), (Start: 24 @117455 has 1 MA's), (27, 117506), (37, 117587), (42, 117608), (51, 117746), (56, 117785),

Gene: Karimac 252 Start: 115850, Stop: 116224, Start Num: 24

Candidate Starts for Karimac 252:

(18, 115790), (Start: 24 @115850 has 1 MA's), (27, 115901), (37, 115982), (42, 116003), (56, 116180),

Gene: KentuckyRacer_258 Start: 117301, Stop: 117741, Start Num: 16

Candidate Starts for KentuckyRacer_258:

(Start: 16 @117301 has 7 MA's), (18, 117310), (Start: 24 @117370 has 1 MA's), (27, 117421), (37, 117502), (42, 117523), (51, 117661), (56, 117700),

Gene: Neville_119 Start: 67317, Stop: 67757, Start Num: 15

Candidate Starts for Neville_119:

(Start: 15 @67317 has 2 MA's), (26, 67440), (28, 67455), (42, 67554), (50, 67680), (54, 67719), (56, 67731),

Gene: Quaran19_252 Start: 115643, Stop: 116083, Start Num: 16

Candidate Starts for Quaran19 252:

(Start: 16 @115643 has 7 MA's), (18, 115652), (Start: 24 @115712 has 1 MA's), (27, 115763), (37, 115844), (42, 115865), (51, 116003), (56, 116042),

Gene: SlimJimmy_84 Start: 53211, Stop: 53624, Start Num: 13

Candidate Starts for SlimJimmy 84:

(10, 53193), (Start: 13 @53211 has 2 MA's), (25, 53283), (30, 53355), (33, 53370), (37, 53415), (42, 53436), (43, 53445), (52, 53580), (54, 53595), (55, 53604),

Gene: Spilled_259 Start: 116318, Stop: 116758, Start Num: 16

Candidate Starts for Spilled_259:

(Start: 16 @116318 has 7 MA's), (18, 116327), (Start: 24 @116387 has 1 MA's), (27, 116438), (37, 116519), (42, 116540), (51, 116678), (56, 116717),

Gene: TomSawyer_256 Start: 117629, Stop: 118069, Start Num: 16

Candidate Starts for TomSawyer 256:

(Start: 16 @117629 has 7 MA's), (18, 117638), (Start: 24 @117698 has 1 MA's), (27, 117749), (37, 117830), (42, 117851), (51, 117989), (56, 118028),

Gene: Trax_120 Start: 68137, Stop: 68577, Start Num: 15

Candidate Starts for Trax_120:

(Start: 15 @68137 has 2 MA's), (26, 68260), (28, 68275), (42, 68374), (50, 68500), (54, 68539), (56, 68551),

Gene: Wipeout 242 Start: 116581, Stop: 117021, Start Num: 16

Candidate Starts for Wipeout_242:

 $(Start: 16 @116581 \ has \ 7 \ MA's), \ (18, \ 116590), \ (Start: 24 @116650 \ has \ 1 \ MA's), \ (27, \ 116701), \ (37, \ 116782), \ (42, \ 116803), \ (51, \ 116941), \ (56, \ 116980),$