

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 194221 Report

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

Pham number 194221 has 32 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Daubenski 114
- Track 2 : Cursive 112
- Track 3 : EGole_125
- Track 4: Persimmon 159, Navo 157, Braelyn 161, WhereRU 158
- Track 5: WhereRU 140, Persimmon 141
- Track 6 : Watermoore_188
- Track 7: Bartholomune 188
- Track 8 : Spilled 47
- Track 9 : Bordeaux 154
- Track 10 : Mugiwara 178
- Track 11: KentuckyRacer 158, StarPlatinum 159, MulchMansion 147
- Track 12 : StarPlatinum 106
- Track 13 : Tomas_48Track 14 : JimJam_171
- Track 15: Elmer 149
- Track 16 : Gibbi 50
- Track 17 : JimJam_149
- Track 18: UNTPL 74
- Track 19 : Blueeyedbeauty_139
- Track 20 : Forrest_176
- Track 21 : Megan Thee Killa 153
- Track 22 : Phabba 166
- Track 23 : Myrna 144
- Track 24 : Bloom 119
- Track 25 : A3Wally_161
- Track 26 : Magritte 112

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

The start number called the most often in the published annotations is 27, it was called in 4 of the 29 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Braelyn_161, Navo_157, Persimmon_159, WhereRU_158,

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

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

• A3Wally_161, Bartholomune_188, Bloom_119, Blueeyedbeauty_139, Bordeaux_154, Cursive_112, Daubenski_114, EGole_125, Elmer_149, Forrest_176, Gibbi_50, JimJam_149, JimJam_171, KentuckyRacer_158, Magritte_112, MeganTheeKilla_153, Mugiwara_178, MulchMansion_147, Myrna_144, Persimmon_141, Phabba_166, Spilled_47, StarPlatinum_106, StarPlatinum_159, Tomas_48, UNTPL_74, Watermoore_188, WhereRU_140,

Summary by start number:

Start 13:

- Found in 2 of 32 (6.2%) of genes in pham
- Manual Annotations of this start: 1 of 29
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Watermoore_188 (BE1),

Start 14:

- Found in 3 of 32 (9.4%) of genes in pham
- Manual Annotations of this start: 2 of 29
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Bartholomune_188 (BE1), Blueeyedbeauty_139 (BK1),

Start 15:

- Found in 4 of 32 (12.5%) of genes in pham
- Manual Annotations of this start: 4 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bordeaux_154 (BE2), KentuckyRacer_158 (BE2), MulchMansion_147 (BE1), StarPlatinum_159 (BE2),

Start 16:

- Found in 1 of 32 (3.1%) of genes in pham
- Manual Annotations of this start: 1 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Myrna 144 (C2),

Start 17:

- Found in 1 of 32 (3.1%) of genes in pham
- Manual Annotations of this start: 1 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: A3Wally 161 (GD1),

Start 18:

- Found in 1 of 32 (3.1%) of genes in pham
- Manual Annotations of this start: 1 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EGole_125 (BE1),

Start 19:

- Found in 2 of 32 (6.2%) of genes in pham
- Manual Annotations of this start: 2 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Phabba_166 (C2), StarPlatinum_106 (BE2),

Start 20:

- Found in 1 of 32 (3.1%) of genes in pham
- Manual Annotations of this start: 1 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cursive_112 (BE1),

Start 21:

- Found in 1 of 32 (3.1%) of genes in pham
- Manual Annotations of this start: 1 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MeganTheeKilla 153 (BK1),

Start 23:

- Found in 1 of 32 (3.1%) of genes in pham
- Manual Annotations of this start: 1 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Elmer_149 (BE2),

Start 24:

- Found in 1 of 32 (3.1%) of genes in pham
- Manual Annotations of this start: 1 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JimJam 171 (BE2),

Start 26:

- Found in 2 of 32 (6.2%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Bloom_119 (FC),

Start 27:

- Found in 4 of 32 (12.5%) of genes in pham
- Manual Annotations of this start: 4 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Braelyn_161 (BE1), Navo_157 (BE1),
 Persimmon_159 (BE1), WhereRU_158 (BE1),

Start 30:

- Found in 9 of 32 (28.1%) of genes in pham
- Manual Annotations of this start: 3 of 29
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Forrest_176 (BK1), Magritte_112 (singleton), UNTPL_74 (BH),

Start 31:

- Found in 3 of 32 (9.4%) of genes in pham
- Manual Annotations of this start: 2 of 29

- Called 66.7% of time when present
- Phage (with cluster) where this start called: Daubenski_114 (BE1), Tomas_48 (BE2),

Start 32:

- Found in 3 of 32 (9.4%) of genes in pham
- Manual Annotations of this start: 2 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gibbi_50 (BE2), JimJam_149 (BE2), Spilled_47 (BE2),

Start 37:

- Found in 2 of 32 (6.2%) of genes in pham
- Manual Annotations of this start: 2 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Persimmon_141 (BE1), WhereRU_140 (BE1),

Start 38:

- Found in 4 of 32 (12.5%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Mugiwara_178 (BE2),

Summary by clusters:

There are 8 clusters represented in this pham: GD1, singleton, BH, FC, BK1, BE2, C2, BE1,

Info for manual annotations of cluster BE1:

- •Start number 13 was manually annotated 1 time for cluster BE1.
- •Start number 14 was manually annotated 1 time for cluster BE1.
- •Start number 15 was manually annotated 1 time for cluster BE1.
- •Start number 18 was manually annotated 1 time for cluster BE1.
- •Start number 20 was manually annotated 1 time for cluster BE1.
- •Start number 27 was manually annotated 4 times for cluster BE1.
- •Start number 31 was manually annotated 1 time for cluster BE1.
- •Start number 37 was manually annotated 2 times for cluster BE1.

Info for manual annotations of cluster BE2:

- •Start number 15 was manually annotated 3 times for cluster BE2.
- •Start number 19 was manually annotated 1 time for cluster BE2.
- •Start number 23 was manually annotated 1 time for cluster BE2.
- •Start number 24 was manually annotated 1 time for cluster BE2.
- •Start number 31 was manually annotated 1 time for cluster BE2.
- •Start number 32 was manually annotated 2 times for cluster BE2.

Info for manual annotations of cluster BH:

•Start number 30 was manually annotated 1 time for cluster BH.

Info for manual annotations of cluster BK1:

- •Start number 14 was manually annotated 1 time for cluster BK1.
- •Start number 21 was manually annotated 1 time for cluster BK1.

•Start number 30 was manually annotated 1 time for cluster BK1.

Info for manual annotations of cluster C2:

- •Start number 16 was manually annotated 1 time for cluster C2.
- •Start number 19 was manually annotated 1 time for cluster C2.

Info for manual annotations of cluster GD1:

•Start number 17 was manually annotated 1 time for cluster GD1.

Gene Information:

Gene: A3Wally_161 Start: 93240, Stop: 93602, Start Num: 17

Candidate Starts for A3Wally 161:

(Start: 17 @93240 has 1 MA's), (26, 93294), (42, 93381), (49, 93435), (80, 93591),

Gene: Bartholomune_188 Start: 98185, Stop: 98556, Start Num: 14

Candidate Starts for Bartholomune 188:

(Start: 13 @98179 has 1 MA's), (Start: 14 @98185 has 2 MA's), (47, 98344), (59, 98410), (61, 98413), (88, 98551),

Gene: Bloom 119 Start: 91780, Stop: 92142, Start Num: 26

Candidate Starts for Bloom_119:

(12, 91675), (26, 91780), (49, 91936), (77, 92080), (87, 92116),

Gene: Blueeyedbeauty_139 Start: 79396, Stop: 79761, Start Num: 14

Candidate Starts for Blueeyedbeauty_139:

(Start: 14 @79396 has 2 MA's), (Start: 31 @79465 has 2 MA's), (36, 79498), (41, 79510), (47, 79555), (48, 79570), (59, 79621), (79, 79717), (85, 79738), (86, 79741),

Gene: Bordeaux 154 Start: 87839, Stop: 88183, Start Num: 15

Candidate Starts for Bordeaux 154:

(Start: 15 @87839 has 4 MA's), (41, 87968), (48, 88028), (50, 88031), (54, 88061), (59, 88076),

Gene: Braelyn_161 Start: 91079, Stop: 91384, Start Num: 27

Candidate Starts for Braelyn_161:

(Start: 27 @91079 has 4 MA's), (Start: 30 @91100 has 3 MA's), (33, 91112), (63, 91277), (70, 91301),

Gene: Cursive_112 Start: 77217, Stop: 77573, Start Num: 20

Candidate Starts for Cursive 112:

(Start: 20 @77217 has 1 MA's), (45, 77361), (48, 77391), (49, 77394), (53, 77418), (60, 77448), (66, 77466), (76, 77538),

Gene: Daubenski_114 Start: 77002, Stop: 77292, Start Num: 31

Candidate Starts for Daubenski 114:

(1, 76717), (2, 76738), (3, 76753), (5, 76777), (12, 76873), (Start: 31 @77002 has 2 MA's), (47, 77092), (59, 77161), (70, 77191), (81, 77257),

Gene: EGole 125 Start: 82153, Stop: 82503, Start Num: 18

Candidate Starts for EGole 125:

(Start: 18 @82153 has 1 MA's), (49, 82330), (56, 82369), (75, 82456),

Gene: Elmer_149 Start: 88649, Stop: 88993, Start Num: 23

Candidate Starts for Elmer_149:

(5, 88460), (6, 88475), (7, 88508), (8, 88535), (11, 88550), (Start: 23 @88649 has 1 MA's), (39,

88733), (59, 88856), (85, 88982),

Gene: Forrest_176 Start: 93990, Stop: 94280, Start Num: 30

Candidate Starts for Forrest 176:

(Start: 30 @93990 has 3 MA's), (35, 94017), (38, 94029), (45, 94074), (46, 94083), (49, 94113), (55,

94149), (81, 94269),

Gene: Gibbi 50 Start: 22359, Stop: 22634, Start Num: 32

Candidate Starts for Gibbi_50:

(Start: 32 @22359 has 2 MA's), (49, 22458), (51, 22464), (75, 22584),

Gene: JimJam_171 Start: 92515, Stop: 92871, Start Num: 24

Candidate Starts for JimJam 171:

(10, 92407), (Start: 24 @92515 has 1 MA's), (Start: 30 @92545 has 3 MA's), (48, 92647), (60, 92701),

(62, 92704), (68, 92731), (89, 92860),

Gene: JimJam_149 Start: 86635, Stop: 86916, Start Num: 32

Candidate Starts for JimJam_149:

(Start: 32 @86635 has 2 MA's), (61, 86797), (83, 86905),

Gene: KentuckyRacer_158 Start: 88711, Stop: 89055, Start Num: 15

Candidate Starts for KentuckyRacer_158:

(Start: 15 @88711 has 4 MA's), (50, 88903), (54, 88933), (59, 88948),

Gene: Magritte_112 Start: 72994, Stop: 73305, Start Num: 30

Candidate Starts for Magritte_112:

(Start: 30 @72994 has 3 MA's), (35, 73030), (38, 73042), (47, 73102), (58, 73168), (67, 73201), (71,

73228), (78, 73270),

Gene: MeganTheeKilla 153 Start: 84120, Stop: 84458, Start Num: 21

Candidate Starts for MeganTheeKilla_153:

(Start: 21 @84120 has 1 MA's), (22, 84123), (29, 84165), (43, 84234), (57, 84327), (59, 84333), (73,

84387), (84, 84450),

Gene: Mugiwara_178 Start: 93339, Stop: 93584, Start Num: 38

Candidate Starts for Mugiwara_178:

(Start: 30 @93300 has 3 MA's), (35, 93327), (38, 93339), (55, 93459), (74, 93546),

Gene: MulchMansion_147 Start: 87054, Stop: 87398, Start Num: 15

Candidate Starts for MulchMansion 147:

(Start: 15 @87054 has 4 MA's), (50, 87246), (54, 87276), (59, 87291),

Gene: Myrna_144 Start: 92033, Stop: 92380, Start Num: 16

Candidate Starts for Myrna_144:

(Start: 16 @92033 has 1 MA's), (36, 92141), (49, 92213), (69, 92294), (72, 92318),

Gene: Navo_157 Start: 90460, Stop: 90765, Start Num: 27

Candidate Starts for Navo 157:

(Start: 27 @90460 has 4 MA's), (Start: 30 @90481 has 3 MA's), (33, 90493), (63, 90658), (70, 90682),

Gene: Persimmon_159 Start: 89776, Stop: 90081, Start Num: 27

Candidate Starts for Persimmon_159:

(Start: 27 @89776 has 4 MA's), (Start: 30 @89797 has 3 MA's), (33, 89809), (63, 89974), (70, 89998),

Gene: Persimmon_141 Start: 85415, Stop: 85672, Start Num: 37

Candidate Starts for Persimmon_141:

(22, 85337), (25, 85355), (Start: 37 @85415 has 2 MA's), (44, 85442), (64, 85553),

Gene: Phabba_166 Start: 92816, Stop: 93178, Start Num: 19

Candidate Starts for Phabba 166:

(9, 92741), (Start: 19 @92816 has 2 MA's), (34, 92915), (48, 93011), (49, 93014), (52, 93029), (53, 93038), (65, 93083), (73, 93122), (80, 93167), (82, 93173),

Gene: Spilled_47 Start: 22319, Stop: 22594, Start Num: 32

Candidate Starts for Spilled_47:

(Start: 32 @22319 has 2 MA's), (40, 22355), (49, 22418), (51, 22424), (75, 22544),

Gene: StarPlatinum 106 Start: 73373, Stop: 73726, Start Num: 19

Candidate Starts for StarPlatinum_106:

(4, 73211), (12, 73316), (Start: 19 @73373 has 2 MA's), (36, 73475), (45, 73514), (49, 73547),

Gene: StarPlatinum_159 Start: 89611, Stop: 89955, Start Num: 15

Candidate Starts for StarPlatinum_159:

(Start: 15 @89611 has 4 MA's), (50, 89803), (54, 89833), (59, 89848),

Gene: Tomas_48 Start: 24558, Stop: 24836, Start Num: 31

Candidate Starts for Tomas 48:

(28, 24552), (Start: 31 @24558 has 2 MA's), (40, 24597), (49, 24660), (51, 24666), (56, 24702),

Gene: UNTPL_74 Start: 50402, Stop: 50737, Start Num: 30

Candidate Starts for UNTPL_74:

(Start: 30 @50402 has 3 MA's), (35, 50423), (38, 50435), (62, 50576), (84, 50696), (89, 50732),

Gene: Watermoore_188 Start: 100639, Stop: 101016, Start Num: 13

Candidate Starts for Watermoore 188:

(Start: 13 @100639 has 1 MA's), (Start: 14 @100645 has 2 MA's), (47, 100804), (59, 100870), (61, 100873), (88, 101011),

Gene: WhereRU_140 Start: 86167, Stop: 86424, Start Num: 37

Candidate Starts for WhereRU 140:

(22, 86089), (25, 86107), (Start: 37 @86167 has 2 MA's), (44, 86194), (64, 86305),

Gene: WhereRU 158 Start: 90528, Stop: 90833, Start Num: 27

Candidate Starts for WhereRU 158:

(Start: 27 @90528 has 4 MA's), (Start: 30 @90549 has 3 MA's), (33, 90561), (63, 90726), (70, 90750),