

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 311716 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311716 has 48 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Jay2Jay_214, Warpy_212
- Track 2 : Daubenski_202
- Track 3 : Teutsch_208, Peebs_206, EGole_212, Coogler_206, Leo04_210
- Track 4 : Braelyn_206, Navo_204, Davielle_209, Persimmon_212, PynkPanther_221, Bartholomune_210
- Track 5 : Eliot67_210, PinkiePie_209, Liandry_209, Paradiddles_201, FreddyDRoo_212, Squillium_212
- Track 6 : Lululemon_206, Samisti12_213, ArianaSWT_220, Watermoore_208, PacManQ_206, Cross_208, Cursive_211
- Track 7 : Mildred21_217
- Track 8 : WhereRU_209
- Track 9 : Pepperwood_209
- Track 10 : Shuckle_207
- Track 11 : Anedea_223, LilSaint_211, Riptide_211
- Track 12 : MulchMansion_211, LilMartin_207, Angela_210
- Track 13 : Marsus_211
- Track 14 : WashU_212
- Track 15 : BlueOtter_207, HangryHippo_207
- Track 16 : Larnav_208
- Track 17 : Evy_200
- Track 18 : Sushi23_209
- Track 19 : Targaryen_208
- Track 20 : NootNoot_206
- Track 21 : Bmoc_213
- Track 22 : Tomas_221

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

The start number called the most often in the published annotations is 17, it was called in 18 of the 43 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Angela_210, Bartholomune_210, BlueOtter_207, Bmoc_213, Braelyn_206, Daubenski_202, Davielle_209, HangryHippo_207, Jay2Jay_214, Larnav_208,

LilMartin_207, Marsus_211, Mildred21_217, MulchMansion_211, Navo_204, NootNoot_206, Persimmon_212, PynkPanther_221, Warpy_212,

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

- Anedea_223, ArianaSWT_220, Coogler_206, Cross_208, Cursive_211, EGole_212, Eliot67_210, Evy_200, FreddyDRoo_212, Leo04_210, Liandry_209, LilSaint_211, Lululemon_206, PacManQ_206, Paradiddles_201, Peebs_206, Pepperwood_209, PinkiePie_209, Riptide_211, Samisti12_213, Shuckle_207, Squillium_212, Sushi23_209, Targaryen_208, Teutsch_208, WashU_212, Watermoore_208, WhereRU_209,

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

- Tomas_221,

Summary by start number:

Start 12:

- Found in 1 of 48 (2.1%) of genes in pham
- Manual Annotations of this start: 1 of 43
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Tomas_221 (BE2),

Start 13:

- Found in 8 of 48 (16.7%) of genes in pham
- Manual Annotations of this start: 6 of 43
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Coogler_206 (BE1), EGole_212 (BE1), Leo04_210 (BE1), Peebs_206 (BE1), Shuckle_207 (BE1), Teutsch_208 (BE1),

Start 14:

- Found in 39 of 48 (81.2%) of genes in pham
- Manual Annotations of this start: 16 of 43
- Called 48.7% of time when present
- Phage (with cluster) where this start called: Anedea_223 (BE1), ArianaSWT_220 (BE1), Cross_208 (BE1), Cursive_211 (BE1), Eliot67_210 (BE1), FreddyDRoo_212 (BE1), Liandry_209 (BE1), LilSaint_211 (BE1), Lululemon_206 (BE1), PacManQ_206 (BE1), Paradiddles_201 (BE1), Pepperwood_209 (BE1), PinkiePie_209 (BE1), Riptide_211 (BE1), Samisti12_213 (BE1), Squillium_212 (BE1), Targaryen_208 (BE1), Watermoore_208 (BE1), WhereRU_209 (BE1),

Start 17:

- Found in 47 of 48 (97.9%) of genes in pham
- Manual Annotations of this start: 18 of 43
- Called 40.4% of time when present
- Phage (with cluster) where this start called: Angela_210 (BE1), Bartholomune_210 (BE1), BlueOtter_207 (BE1), Bmoc_213 (BE1), Braelyn_206 (BE1), Daubenski_202 (BE1), Davielle_209 (BE1), HangryHippo_207 (BE1), Jay2Jay_214 (BE1), Larnav_208 (BE1), LilMartin_207 (BE1), Marsus_211 (BE1), Mildred21_217 (BE1), MulchMansion_211 (BE1), Navo_204 (BE1), NootNoot_206 (BE1), Persimmon_212 (BE1), PynkPanther_221 (BE1), Warpy_212 (BE1),

Start 19:

- Found in 48 of 48 (100.0%) of genes in pham

- Manual Annotations of this start: 1 of 43
- Called 4.2% of time when present
- Phage (with cluster) where this start called: Sushi23_209 (BE1), WashU_212 (BE1),

Start 22:

- Found in 21 of 48 (43.8%) of genes in pham
- Manual Annotations of this start: 1 of 43
- Called 4.8% of time when present
- Phage (with cluster) where this start called: Evy_200 (BE1),

Summary by clusters:

There are 2 clusters represented in this pham: BE2, BE1,

Info for manual annotations of cluster BE1:

- Start number 13 was manually annotated 6 times for cluster BE1.
- Start number 14 was manually annotated 16 times for cluster BE1.
- Start number 17 was manually annotated 18 times for cluster BE1.
- Start number 19 was manually annotated 1 time for cluster BE1.
- Start number 22 was manually annotated 1 time for cluster BE1.

Info for manual annotations of cluster BE2:

- Start number 12 was manually annotated 1 time for cluster BE2.

Gene Information:

Gene: Anedea_223 Start: 108049, Stop: 108228, Start Num: 14

Candidate Starts for Anedea_223:

(1, 107962), (3, 107977), (4, 107980), (6, 108001), (8, 108016), (Start: 14 @108049 has 16 MA's), (Start: 17 @108085 has 18 MA's), (18, 108091), (Start: 19 @108103 has 1 MA's), (20, 108115), (Start: 22 @108133 has 1 MA's), (23, 108142), (27, 108169), (29, 108196),

Gene: Angela_210 Start: 105164, Stop: 105301, Start Num: 17

Candidate Starts for Angela_210:

(Start: 14 @105128 has 16 MA's), (Start: 17 @105164 has 18 MA's), (Start: 19 @105182 has 1 MA's), (Start: 22 @105212 has 1 MA's), (29, 105269),

Gene: ArianaSWT_220 Start: 107567, Stop: 107770, Start Num: 14

Candidate Starts for ArianaSWT_220:

(4, 107498), (6, 107519), (8, 107534), (9, 107555), (10, 107561), (Start: 14 @107567 has 16 MA's), (Start: 17 @107603 has 18 MA's), (Start: 19 @107621 has 1 MA's), (28, 107693), (29, 107717),

Gene: Bartholomune_210 Start: 105719, Stop: 105883, Start Num: 17

Candidate Starts for Bartholomune_210:

(5, 105629), (Start: 14 @105683 has 16 MA's), (16, 105692), (Start: 17 @105719 has 18 MA's), (Start: 19 @105737 has 1 MA's), (Start: 22 @105767 has 1 MA's), (29, 105830),

Gene: BlueOtter_207 Start: 105856, Stop: 106023, Start Num: 17

Candidate Starts for BlueOtter_207:

(4, 105751), (6, 105772), (8, 105787), (9, 105808), (10, 105814), (Start: 14 @105820 has 16 MA's), (Start: 17 @105856 has 18 MA's), (Start: 19 @105874 has 1 MA's), (28, 105946), (29, 105970),

Gene: Bmoc_213 Start: 105977, Stop: 106114, Start Num: 17

Candidate Starts for Bmoc_213:

(2, 105860), (7, 105896), (8, 105908), (Start: 14 @105941 has 16 MA's), (Start: 17 @105977 has 18 MA's), (Start: 19 @105995 has 1 MA's), (Start: 22 @106025 has 1 MA's), (29, 106082),

Gene: Braelyn_206 Start: 105366, Stop: 105530, Start Num: 17

Candidate Starts for Braelyn_206:

(5, 105276), (Start: 14 @105330 has 16 MA's), (16, 105339), (Start: 17 @105366 has 18 MA's), (Start: 19 @105384 has 1 MA's), (Start: 22 @105414 has 1 MA's), (29, 105477),

Gene: Coogler_206 Start: 106212, Stop: 106415, Start Num: 13

Candidate Starts for Coogler_206:

(Start: 13 @106212 has 6 MA's), (Start: 17 @106248 has 18 MA's), (Start: 19 @106266 has 1 MA's), (28, 106338), (29, 106362),

Gene: Cross_208 Start: 106465, Stop: 106668, Start Num: 14

Candidate Starts for Cross_208:

(4, 106396), (6, 106417), (8, 106432), (9, 106453), (10, 106459), (Start: 14 @106465 has 16 MA's), (Start: 17 @106501 has 18 MA's), (Start: 19 @106519 has 1 MA's), (28, 106591), (29, 106615),

Gene: Cursive_211 Start: 106149, Stop: 106352, Start Num: 14

Candidate Starts for Cursive_211:

(4, 106080), (6, 106101), (8, 106116), (9, 106137), (10, 106143), (Start: 14 @106149 has 16 MA's), (Start: 17 @106185 has 18 MA's), (Start: 19 @106203 has 1 MA's), (28, 106275), (29, 106299),

Gene: Daubenski_202 Start: 106555, Stop: 106716, Start Num: 17

Candidate Starts for Daubenski_202:

(Start: 14 @106519 has 16 MA's), (Start: 17 @106555 has 18 MA's), (Start: 19 @106573 has 1 MA's), (Start: 22 @106603 has 1 MA's), (25, 106630), (29, 106663),

Gene: Davielle_209 Start: 105764, Stop: 105928, Start Num: 17

Candidate Starts for Davielle_209:

(5, 105674), (Start: 14 @105728 has 16 MA's), (16, 105737), (Start: 17 @105764 has 18 MA's), (Start: 19 @105782 has 1 MA's), (Start: 22 @105812 has 1 MA's), (29, 105875),

Gene: EGole_212 Start: 108162, Stop: 108365, Start Num: 13

Candidate Starts for EGole_212:

(Start: 13 @108162 has 6 MA's), (Start: 17 @108198 has 18 MA's), (Start: 19 @108216 has 1 MA's), (28, 108288), (29, 108312),

Gene: Eliot67_210 Start: 105219, Stop: 105419, Start Num: 14

Candidate Starts for Eliot67_210:

(6, 105171), (8, 105186), (10, 105213), (Start: 14 @105219 has 16 MA's), (Start: 17 @105255 has 18 MA's), (Start: 19 @105273 has 1 MA's), (29, 105366),

Gene: Evy_200 Start: 106705, Stop: 106821, Start Num: 22

Candidate Starts for Evy_200:

(5, 106567), (Start: 14 @106621 has 16 MA's), (Start: 17 @106657 has 18 MA's), (Start: 19 @106675 has 1 MA's), (Start: 22 @106705 has 1 MA's), (23, 106714), (29, 106768),

Gene: FreddyDRoo_212 Start: 105219, Stop: 105419, Start Num: 14

Candidate Starts for FreddyDRoo_212:

(6, 105171), (8, 105186), (10, 105213), (Start: 14 @105219 has 16 MA's), (Start: 17 @105255 has 18 MA's), (Start: 19 @105273 has 1 MA's), (29, 105366),

Gene: HangryHippo_207 Start: 105856, Stop: 106023, Start Num: 17

Candidate Starts for HangryHippo_207:

(4, 105751), (6, 105772), (8, 105787), (9, 105808), (10, 105814), (Start: 14 @105820 has 16 MA's), (Start: 17 @105856 has 18 MA's), (Start: 19 @105874 has 1 MA's), (28, 105946), (29, 105970),

Gene: Jay2Jay_214 Start: 106812, Stop: 106976, Start Num: 17

Candidate Starts for Jay2Jay_214:

(5, 106722), (Start: 14 @106776 has 16 MA's), (Start: 17 @106812 has 18 MA's), (Start: 19 @106830 has 1 MA's), (Start: 22 @106860 has 1 MA's), (23, 106869), (29, 106923),

Gene: Larnav_208 Start: 106317, Stop: 106484, Start Num: 17

Candidate Starts for Larnav_208:

(Start: 13 @106281 has 6 MA's), (Start: 17 @106317 has 18 MA's), (Start: 19 @106335 has 1 MA's), (28, 106407), (29, 106431),

Gene: Leo04_210 Start: 106846, Stop: 107049, Start Num: 13

Candidate Starts for Leo04_210:

(Start: 13 @106846 has 6 MA's), (Start: 17 @106882 has 18 MA's), (Start: 19 @106900 has 1 MA's), (28, 106972), (29, 106996),

Gene: Liandry_209 Start: 105926, Stop: 106126, Start Num: 14

Candidate Starts for Liandry_209:

(6, 105878), (8, 105893), (10, 105920), (Start: 14 @105926 has 16 MA's), (Start: 17 @105962 has 18 MA's), (Start: 19 @105980 has 1 MA's), (29, 106073),

Gene: LilMartin_207 Start: 104528, Stop: 104665, Start Num: 17

Candidate Starts for LilMartin_207:

(Start: 14 @104492 has 16 MA's), (Start: 17 @104528 has 18 MA's), (Start: 19 @104546 has 1 MA's), (Start: 22 @104576 has 1 MA's), (29, 104633),

Gene: LilSaint_211 Start: 106421, Stop: 106600, Start Num: 14

Candidate Starts for LilSaint_211:

(1, 106334), (3, 106349), (4, 106352), (6, 106373), (8, 106388), (Start: 14 @106421 has 16 MA's), (Start: 17 @106457 has 18 MA's), (18, 106463), (Start: 19 @106475 has 1 MA's), (20, 106487), (Start: 22 @106505 has 1 MA's), (23, 106514), (27, 106541), (29, 106568),

Gene: Lululemon_206 Start: 105201, Stop: 105404, Start Num: 14

Candidate Starts for Lululemon_206:

(4, 105132), (6, 105153), (8, 105168), (9, 105189), (10, 105195), (Start: 14 @105201 has 16 MA's), (Start: 17 @105237 has 18 MA's), (Start: 19 @105255 has 1 MA's), (28, 105327), (29, 105351),

Gene: Marsus_211 Start: 106272, Stop: 106409, Start Num: 17

Candidate Starts for Marsus_211:

(8, 106203), (Start: 14 @106236 has 16 MA's), (Start: 17 @106272 has 18 MA's), (Start: 19 @106290 has 1 MA's), (Start: 22 @106320 has 1 MA's), (29, 106377),

Gene: Mildred21_217 Start: 104294, Stop: 104452, Start Num: 17

Candidate Starts for Mildred21_217:

(5, 104204), (Start: 14 @104258 has 16 MA's), (Start: 17 @104294 has 18 MA's), (Start: 19 @104312 has 1 MA's), (Start: 22 @104342 has 1 MA's), (29, 104399),

Gene: MulchMansion_211 Start: 106162, Stop: 106299, Start Num: 17

Candidate Starts for MulchMansion_211:

(Start: 14 @106126 has 16 MA's), (Start: 17 @106162 has 18 MA's), (Start: 19 @106180 has 1 MA's), (Start: 22 @106210 has 1 MA's), (29, 106267),

Gene: Navo_204 Start: 104570, Stop: 104734, Start Num: 17

Candidate Starts for Navo_204:

(5, 104480), (Start: 14 @104534 has 16 MA's), (16, 104543), (Start: 17 @104570 has 18 MA's), (Start: 19 @104588 has 1 MA's), (Start: 22 @104618 has 1 MA's), (29, 104681),

Gene: NootNoot_206 Start: 104774, Stop: 104938, Start Num: 17

Candidate Starts for NootNoot_206:

(6, 104690), (8, 104705), (10, 104732), (Start: 14 @104738 has 16 MA's), (15, 104744), (Start: 17 @104774 has 18 MA's), (Start: 19 @104792 has 1 MA's), (29, 104885),

Gene: PacManQ_206 Start: 105201, Stop: 105404, Start Num: 14

Candidate Starts for PacManQ_206:

(4, 105132), (6, 105153), (8, 105168), (9, 105189), (10, 105195), (Start: 14 @105201 has 16 MA's), (Start: 17 @105237 has 18 MA's), (Start: 19 @105255 has 1 MA's), (28, 105327), (29, 105351),

Gene: Paradiddles_201 Start: 107113, Stop: 107313, Start Num: 14

Candidate Starts for Paradiddles_201:

(6, 107065), (8, 107080), (10, 107107), (Start: 14 @107113 has 16 MA's), (Start: 17 @107149 has 18 MA's), (Start: 19 @107167 has 1 MA's), (29, 107260),

Gene: Peebs_206 Start: 106252, Stop: 106455, Start Num: 13

Candidate Starts for Peebs_206:

(Start: 13 @106252 has 6 MA's), (Start: 17 @106288 has 18 MA's), (Start: 19 @106306 has 1 MA's), (28, 106378), (29, 106402),

Gene: Pepperwood_209 Start: 106487, Stop: 106690, Start Num: 14

Candidate Starts for Pepperwood_209:

(4, 106418), (6, 106439), (8, 106454), (9, 106475), (10, 106481), (Start: 14 @106487 has 16 MA's), (Start: 17 @106523 has 18 MA's), (Start: 19 @106541 has 1 MA's), (26, 106607), (28, 106613), (29, 106637),

Gene: Persimmon_212 Start: 105588, Stop: 105752, Start Num: 17

Candidate Starts for Persimmon_212:

(5, 105498), (Start: 14 @105552 has 16 MA's), (16, 105561), (Start: 17 @105588 has 18 MA's), (Start: 19 @105606 has 1 MA's), (Start: 22 @105636 has 1 MA's), (29, 105699),

Gene: PinkiePie_209 Start: 105926, Stop: 106126, Start Num: 14

Candidate Starts for PinkiePie_209:

(6, 105878), (8, 105893), (10, 105920), (Start: 14 @105926 has 16 MA's), (Start: 17 @105962 has 18 MA's), (Start: 19 @105980 has 1 MA's), (29, 106073),

Gene: PynkPanther_221 Start: 106404, Stop: 106568, Start Num: 17

Candidate Starts for PynkPanther_221:

(5, 106314), (Start: 14 @106368 has 16 MA's), (16, 106377), (Start: 17 @106404 has 18 MA's), (Start: 19 @106422 has 1 MA's), (Start: 22 @106452 has 1 MA's), (29, 106515),

Gene: Riptide_211 Start: 105579, Stop: 105758, Start Num: 14

Candidate Starts for Riptide_211:

(1, 105492), (3, 105507), (4, 105510), (6, 105531), (8, 105546), (Start: 14 @105579 has 16 MA's), (Start: 17 @105615 has 18 MA's), (18, 105621), (Start: 19 @105633 has 1 MA's), (20, 105645), (Start: 22 @105663 has 1 MA's), (23, 105672), (27, 105699), (29, 105726),

Gene: Samisti12_213 Start: 108111, Stop: 108314, Start Num: 14

Candidate Starts for Samisti12_213:

(4, 108042), (6, 108063), (8, 108078), (9, 108099), (10, 108105), (Start: 14 @108111 has 16 MA's), (Start: 17 @108147 has 18 MA's), (Start: 19 @108165 has 1 MA's), (28, 108237), (29, 108261),

Gene: Shuckle_207 Start: 106484, Stop: 106684, Start Num: 13

Candidate Starts for Shuckle_207:

(11, 106481), (Start: 13 @106484 has 6 MA's), (Start: 17 @106520 has 18 MA's), (Start: 19 @106538 has 1 MA's), (29, 106631),

Gene: Squillum_212 Start: 105928, Stop: 106128, Start Num: 14

Candidate Starts for Squillum_212:

(6, 105880), (8, 105895), (10, 105922), (Start: 14 @105928 has 16 MA's), (Start: 17 @105964 has 18 MA's), (Start: 19 @105982 has 1 MA's), (29, 106075),

Gene: Sushi23_209 Start: 107175, Stop: 107324, Start Num: 19

Candidate Starts for Sushi23_209:

(4, 107052), (6, 107073), (8, 107088), (9, 107109), (10, 107115), (Start: 14 @107121 has 16 MA's), (Start: 17 @107157 has 18 MA's), (Start: 19 @107175 has 1 MA's), (26, 107241), (28, 107247), (29, 107271),

Gene: Targaryen_208 Start: 107305, Stop: 107505, Start Num: 14

Candidate Starts for Targaryen_208:

(5, 107251), (Start: 14 @107305 has 16 MA's), (Start: 17 @107341 has 18 MA's), (Start: 19 @107359 has 1 MA's), (Start: 22 @107389 has 1 MA's), (23, 107398), (29, 107452),

Gene: Teutsch_208 Start: 106940, Stop: 107143, Start Num: 13

Candidate Starts for Teutsch_208:

(Start: 13 @106940 has 6 MA's), (Start: 17 @106976 has 18 MA's), (Start: 19 @106994 has 1 MA's), (28, 107066), (29, 107090),

Gene: Tomas_221 Start: 107946, Stop: 108128, Start Num: 12

Candidate Starts for Tomas_221:

(Start: 12 @107946 has 1 MA's), (16, 107955), (Start: 19 @108000 has 1 MA's), (20, 108012), (21, 108021), (24, 108051), (29, 108069),

Gene: Warpy_212 Start: 106250, Stop: 106414, Start Num: 17

Candidate Starts for Warpy_212:

(5, 106160), (Start: 14 @106214 has 16 MA's), (Start: 17 @106250 has 18 MA's), (Start: 19 @106268 has 1 MA's), (Start: 22 @106298 has 1 MA's), (23, 106307), (29, 106361),

Gene: WashU_212 Start: 106785, Stop: 106934, Start Num: 19

Candidate Starts for WashU_212:

(Start: 13 @106731 has 6 MA's), (Start: 17 @106767 has 18 MA's), (Start: 19 @106785 has 1 MA's), (28, 106857), (29, 106881),

Gene: Watermoore_208 Start: 107463, Stop: 107666, Start Num: 14

Candidate Starts for Watermoore_208:

(4, 107394), (6, 107415), (8, 107430), (9, 107451), (10, 107457), (Start: 14 @107463 has 16 MA's),
(Start: 17 @107499 has 18 MA's), (Start: 19 @107517 has 1 MA's), (28, 107589), (29, 107613),

Gene: WhereRU_209 Start: 105731, Stop: 105931, Start Num: 14

Candidate Starts for WhereRU_209:

(5, 105677), (Start: 14 @105731 has 16 MA's), (16, 105740), (Start: 17 @105767 has 18 MA's), (Start:
19 @105785 has 1 MA's), (Start: 22 @105815 has 1 MA's), (29, 105878),