Pham 289557

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 289557 Report

This analysis was run 03/28/26 on database version 641.

Pham number 289557 has 39 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Teutsch_208, Peebs_206, EGole_212, Leo04_210, Coogler_206
• Track 2 : Braelyn_206, Navo_204, Davielle_209, Persimmon_212, Bartholomune_210
• Track 3 : NootNoot_206
• Track 4 : Samisti12_213, Lululemon_206, Watermoore_208, PacManQ_206, Cross_208, Cursive_211
• Track 5 : Mildred21_217
• Track 6 : Eliot67_210, PinkiePie_209, Liandry_209, Paradiddles_201, FreddyDRoo_212, Squillium_212
• Track 7 : WhereRU_209
• Track 8 : Pepperwood_209
• Track 9 : Warpy_212, Jay2Jay_214
• Track 10 : Targaryen_208
• Track 11 : Anedea_223, LilSaint_211, Riptide_211
• Track 12 : BlueOtter_207, HangryHippo_207
• Track 13 : Larnav_208
• Track 14 : Evy_200
• Track 15 : Sushi23_209
• Track 16 : Shuckle_207
• Track 17 : 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 10, it was called in 17 of the 37 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Anedea_223, Cross_208, Cursive_211, Eliot67_210, FreddyDRoo_212, Liandry_209, LilSaint_211, Lululemon_206, PacManQ_206, Paradiddles_201, Pepperwood_209, PinkiePie_209, Riptide_211, Samisti12_213, Squillium_212, Targaryen_208, Tomas_221, Watermoore_208, WhereRU_209,

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

• Bartholomune_210, BlueOtter_207, Braelyn_206, Davielle_209, Evy_200, HangryHippo_207, Jay2Jay_214, Mildred21_217, Navo_204, NootNoot_206, Persimmon_212, Sushi23_209, Warpy_212,

Genes that do not have the "Most Annotated" start:
• Coogler_206, EGole_212, Larnav_208, Leo04_210, Peebs_206, Shuckle_207, Teutsch_208,

Summary by start number:

Start 9:
• Found in 7 of 39 (17.9%) of genes in pham
• Manual Annotations of this start: 6 of 37
• Called 85.7% 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 10:
• Found in 32 of 39 (82.1%) of genes in pham
• Manual Annotations of this start: 17 of 37
• Called 59.4% of time when present
• Phage (with cluster) where this start called: Anedea_223 (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), Tomas_221 (BE2), Watermoore_208 (BE1), WhereRU_209 (BE1),

Start 13:
• Found in 38 of 39 (97.4%) of genes in pham
• Manual Annotations of this start: 12 of 37
• Called 31.6% of time when present
• Phage (with cluster) where this start called: Bartholomune_210 (BE1), BlueOtter_207 (BE1), Braelyn_206 (BE1), Davielle_209 (BE1), HangryHippo_207 (BE1), Jay2Jay_214 (BE1), Larnav_208 (BE1), Mildred21_217 (BE1), Navo_204 (BE1), NootNoot_206 (BE1), Persimmon_212 (BE1), Warpy_212 (BE1),

Start 15:
• Found in 39 of 39 (100.0%) of genes in pham
• Manual Annotations of this start: 1 of 37
• Called 2.6% of time when present
• Phage (with cluster) where this start called: Sushi23_209 (BE1),

Start 18:
• Found in 14 of 39 (35.9%) of genes in pham
• Manual Annotations of this start: 1 of 37
• Called 7.1% 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 9 was manually annotated 6 times for cluster BE1.
•Start number 10 was manually annotated 16 times for cluster BE1.
•Start number 13 was manually annotated 12 times 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.

Info for manual annotations of cluster BE2:
•Start number 10 was manually annotated 1 time for cluster BE2.

Gene Information:

Gene: Anedea_223 Start: 108049, Stop: 108228, Start Num: 10
Candidate Starts for Anedea_223:
(1, 107962), (2, 107977), (3, 107980), (4, 108001), (5, 108016), (Start: 10 @108049 has 17 MA's),
(Start: 13 @108085 has 12 MA's), (14, 108091), (Start: 15 @108103 has 1 MA's), (16, 108115), (Start:
18 @108133 has 1 MA's), (19, 108142), (22, 108169), (24, 108196),

Gene: Bartholomune_210 Start: 105719, Stop: 105883, Start Num: 13
Candidate Starts for Bartholomune_210:
(4, 105629), (Start: 10 @105683 has 17 MA's), (12, 105692), (Start: 13 @105719 has 12 MA's), (Start:
15 @105737 has 1 MA's), (Start: 18 @105767 has 1 MA's), (24, 105830),

Gene: BlueOtter_207 Start: 105856, Stop: 106023, Start Num: 13
Candidate Starts for BlueOtter_207:
(3, 105751), (4, 105772), (5, 105787), (6, 105808), (7, 105814), (Start: 10 @105820 has 17 MA's),
(Start: 13 @105856 has 12 MA's), (Start: 15 @105874 has 1 MA's), (23, 105946), (24, 105970),

Gene: Braelyn_206 Start: 105366, Stop: 105530, Start Num: 13
Candidate Starts for Braelyn_206:
(4, 105276), (Start: 10 @105330 has 17 MA's), (12, 105339), (Start: 13 @105366 has 12 MA's), (Start:
15 @105384 has 1 MA's), (Start: 18 @105414 has 1 MA's), (24, 105477),

Gene: Coogler_206 Start: 106212, Stop: 106415, Start Num: 9
Candidate Starts for Coogler_206:
(Start: 9 @106212 has 6 MA's), (Start: 13 @106248 has 12 MA's), (Start: 15 @106266 has 1 MA's),
(23, 106338), (24, 106362),

Gene: Cross_208 Start: 106465, Stop: 106668, Start Num: 10
Candidate Starts for Cross_208:
(3, 106396), (4, 106417), (5, 106432), (6, 106453), (7, 106459), (Start: 10 @106465 has 17 MA's),
(Start: 13 @106501 has 12 MA's), (Start: 15 @106519 has 1 MA's), (23, 106591), (24, 106615),

Gene: Cursive_211 Start: 106149, Stop: 106352, Start Num: 10
Candidate Starts for Cursive_211:
(3, 106080), (4, 106101), (5, 106116), (6, 106137), (7, 106143), (Start: 10 @106149 has 17 MA's),
(Start: 13 @106185 has 12 MA's), (Start: 15 @106203 has 1 MA's), (23, 106275), (24, 106299),

Gene: Davielle_209 Start: 105764, Stop: 105928, Start Num: 13
Candidate Starts for Davielle_209:

(4, 105674), (Start: 10 @105728 has 17 MA's), (12, 105737), (Start: 13 @105764 has 12 MA's), (Start: 15 @105782 has 1 MA's), (Start: 18 @105812 has 1 MA's), (24, 105875),

Gene: EGole_212 Start: 108162, Stop: 108365, Start Num: 9
Candidate Starts for EGole_212:
(Start: 9 @108162 has 6 MA's), (Start: 13 @108198 has 12 MA's), (Start: 15 @108216 has 1 MA's), (23, 108288), (24, 108312),

Gene: Eliot67_210 Start: 105219, Stop: 105419, Start Num: 10
Candidate Starts for Eliot67_210:
(4, 105171), (5, 105186), (7, 105213), (Start: 10 @105219 has 17 MA's), (Start: 13 @105255 has 12 MA's), (Start: 15 @105273 has 1 MA's), (24, 105366),

Gene: Evy_200 Start: 106705, Stop: 106821, Start Num: 18
Candidate Starts for Evy_200:
(4, 106567), (Start: 10 @106621 has 17 MA's), (Start: 13 @106657 has 12 MA's), (Start: 15 @106675 has 1 MA's), (Start: 18 @106705 has 1 MA's), (19, 106714), (24, 106768),

Gene: FreddyDRoo_212 Start: 105219, Stop: 105419, Start Num: 10
Candidate Starts for FreddyDRoo_212:
(4, 105171), (5, 105186), (7, 105213), (Start: 10 @105219 has 17 MA's), (Start: 13 @105255 has 12 MA's), (Start: 15 @105273 has 1 MA's), (24, 105366),

Gene: HangryHippo_207 Start: 105856, Stop: 106023, Start Num: 13
Candidate Starts for HangryHippo_207:
(3, 105751), (4, 105772), (5, 105787), (6, 105808), (7, 105814), (Start: 10 @105820 has 17 MA's), (Start: 13 @105856 has 12 MA's), (Start: 15 @105874 has 1 MA's), (23, 105946), (24, 105970),

Gene: Jay2Jay_214 Start: 106812, Stop: 106976, Start Num: 13
Candidate Starts for Jay2Jay_214:
(4, 106722), (Start: 10 @106776 has 17 MA's), (Start: 13 @106812 has 12 MA's), (Start: 15 @106830 has 1 MA's), (Start: 18 @106860 has 1 MA's), (19, 106869), (24, 106923),

Gene: Larnav_208 Start: 106317, Stop: 106484, Start Num: 13
Candidate Starts for Larnav_208:
(Start: 9 @106281 has 6 MA's), (Start: 13 @106317 has 12 MA's), (Start: 15 @106335 has 1 MA's), (23, 106407), (24, 106431),

Gene: Leo04_210 Start: 106846, Stop: 107049, Start Num: 9
Candidate Starts for Leo04_210:
(Start: 9 @106846 has 6 MA's), (Start: 13 @106882 has 12 MA's), (Start: 15 @106900 has 1 MA's), (23, 106972), (24, 106996),

Gene: Liandry_209 Start: 105926, Stop: 106126, Start Num: 10
Candidate Starts for Liandry_209:
(4, 105878), (5, 105893), (7, 105920), (Start: 10 @105926 has 17 MA's), (Start: 13 @105962 has 12 MA's), (Start: 15 @105980 has 1 MA's), (24, 106073),

Gene: LilSaint_211 Start: 106421, Stop: 106600, Start Num: 10
Candidate Starts for LilSaint_211:
(1, 106334), (2, 106349), (3, 106352), (4, 106373), (5, 106388), (Start: 10 @106421 has 17 MA's), (Start: 13 @106457 has 12 MA's), (14, 106463), (Start: 15 @106475 has 1 MA's), (16, 106487), (Start: 18 @106505 has 1 MA's), (19, 106514), (22, 106541), (24, 106568),

Gene: Lululemon_206 Start: 105201, Stop: 105404, Start Num: 10
Candidate Starts for Lululemon_206:
(3, 105132), (4, 105153), (5, 105168), (6, 105189), (7, 105195), (Start: 10 @105201 has 17 MA's),
(Start: 13 @105237 has 12 MA's), (Start: 15 @105255 has 1 MA's), (23, 105327), (24, 105351),

Gene: Mildred21_217 Start: 104294, Stop: 104452, Start Num: 13
Candidate Starts for Mildred21_217:
(4, 104204), (Start: 10 @104258 has 17 MA's), (Start: 13 @104294 has 12 MA's), (Start: 15 @104312
has 1 MA's), (Start: 18 @104342 has 1 MA's), (24, 104399),

Gene: Navo_204 Start: 104570, Stop: 104734, Start Num: 13
Candidate Starts for Navo_204:
(4, 104480), (Start: 10 @104534 has 17 MA's), (12, 104543), (Start: 13 @104570 has 12 MA's), (Start:
15 @104588 has 1 MA's), (Start: 18 @104618 has 1 MA's), (24, 104681),

Gene: NootNoot_206 Start: 104774, Stop: 104938, Start Num: 13
Candidate Starts for NootNoot_206:
(4, 104690), (5, 104705), (7, 104732), (Start: 10 @104738 has 17 MA's), (11, 104744), (Start: 13
@104774 has 12 MA's), (Start: 15 @104792 has 1 MA's), (24, 104885),

Gene: PacManQ_206 Start: 105201, Stop: 105404, Start Num: 10
Candidate Starts for PacManQ_206:
(3, 105132), (4, 105153), (5, 105168), (6, 105189), (7, 105195), (Start: 10 @105201 has 17 MA's),
(Start: 13 @105237 has 12 MA's), (Start: 15 @105255 has 1 MA's), (23, 105327), (24, 105351),

Gene: Paradiddles_201 Start: 107113, Stop: 107313, Start Num: 10
Candidate Starts for Paradiddles_201:
(4, 107065), (5, 107080), (7, 107107), (Start: 10 @107113 has 17 MA's), (Start: 13 @107149 has 12
MA's), (Start: 15 @107167 has 1 MA's), (24, 107260),

Gene: Peebs_206 Start: 106252, Stop: 106455, Start Num: 9
Candidate Starts for Peebs_206:
(Start: 9 @106252 has 6 MA's), (Start: 13 @106288 has 12 MA's), (Start: 15 @106306 has 1 MA's),
(23, 106378), (24, 106402),

Gene: Pepperwood_209 Start: 106487, Stop: 106690, Start Num: 10
Candidate Starts for Pepperwood_209:
(3, 106418), (4, 106439), (5, 106454), (6, 106475), (7, 106481), (Start: 10 @106487 has 17 MA's),
(Start: 13 @106523 has 12 MA's), (Start: 15 @106541 has 1 MA's), (21, 106607), (23, 106613), (24,
106637),

Gene: Persimmon_212 Start: 105588, Stop: 105752, Start Num: 13
Candidate Starts for Persimmon_212:
(4, 105498), (Start: 10 @105552 has 17 MA's), (12, 105561), (Start: 13 @105588 has 12 MA's), (Start:
15 @105606 has 1 MA's), (Start: 18 @105636 has 1 MA's), (24, 105699),

Gene: PinkiePie_209 Start: 105926, Stop: 106126, Start Num: 10
Candidate Starts for PinkiePie_209:
(4, 105878), (5, 105893), (7, 105920), (Start: 10 @105926 has 17 MA's), (Start: 13 @105962 has 12
MA's), (Start: 15 @105980 has 1 MA's), (24, 106073),

Gene: Riptide_211 Start: 105579, Stop: 105758, Start Num: 10

Candidate Starts for Riptide_211:
(1, 105492), (2, 105507), (3, 105510), (4, 105531), (5, 105546), (Start: 10 @105579 has 17 MA's), (Start: 13 @105615 has 12 MA's), (14, 105621), (Start: 15 @105633 has 1 MA's), (16, 105645), (Start: 18 @105663 has 1 MA's), (19, 105672), (22, 105699), (24, 105726),

Gene: Samisti12_213 Start: 108111, Stop: 108314, Start Num: 10
Candidate Starts for Samisti12_213:
(3, 108042), (4, 108063), (5, 108078), (6, 108099), (7, 108105), (Start: 10 @108111 has 17 MA's), (Start: 13 @108147 has 12 MA's), (Start: 15 @108165 has 1 MA's), (23, 108237), (24, 108261),

Gene: Shuckle_207 Start: 106484, Stop: 106684, Start Num: 9
Candidate Starts for Shuckle_207:
(8, 106481), (Start: 9 @106484 has 6 MA's), (Start: 13 @106520 has 12 MA's), (Start: 15 @106538 has 1 MA's), (24, 106631),

Gene: Squillium_212 Start: 105928, Stop: 106128, Start Num: 10
Candidate Starts for Squillium_212:
(4, 105880), (5, 105895), (7, 105922), (Start: 10 @105928 has 17 MA's), (Start: 13 @105964 has 12 MA's), (Start: 15 @105982 has 1 MA's), (24, 106075),

Gene: Sushi23_209 Start: 107175, Stop: 107324, Start Num: 15
Candidate Starts for Sushi23_209:
(3, 107052), (4, 107073), (5, 107088), (6, 107109), (7, 107115), (Start: 10 @107121 has 17 MA's), (Start: 13 @107157 has 12 MA's), (Start: 15 @107175 has 1 MA's), (21, 107241), (23, 107247), (24, 107271),

Gene: Targaryen_208 Start: 107305, Stop: 107505, Start Num: 10
Candidate Starts for Targaryen_208:
(4, 107251), (Start: 10 @107305 has 17 MA's), (Start: 13 @107341 has 12 MA's), (Start: 15 @107359 has 1 MA's), (Start: 18 @107389 has 1 MA's), (19, 107398), (24, 107452),

Gene: Teutsch_208 Start: 106940, Stop: 107143, Start Num: 9
Candidate Starts for Teutsch_208:
(Start: 9 @106940 has 6 MA's), (Start: 13 @106976 has 12 MA's), (Start: 15 @106994 has 1 MA's), (23, 107066), (24, 107090),

Gene: Tomas_221 Start: 107946, Stop: 108128, Start Num: 10
Candidate Starts for Tomas_221:
(Start: 10 @107946 has 17 MA's), (12, 107955), (Start: 15 @108000 has 1 MA's), (16, 108012), (17, 108021), (20, 108051), (24, 108069),

Gene: Warpy_212 Start: 106250, Stop: 106414, Start Num: 13
Candidate Starts for Warpy_212:
(4, 106160), (Start: 10 @106214 has 17 MA's), (Start: 13 @106250 has 12 MA's), (Start: 15 @106268 has 1 MA's), (Start: 18 @106298 has 1 MA's), (19, 106307), (24, 106361),

Gene: Watermoore_208 Start: 107463, Stop: 107666, Start Num: 10
Candidate Starts for Watermoore_208:
(3, 107394), (4, 107415), (5, 107430), (6, 107451), (7, 107457), (Start: 10 @107463 has 17 MA's), (Start: 13 @107499 has 12 MA's), (Start: 15 @107517 has 1 MA's), (23, 107589), (24, 107613),

Gene: WhereRU_209 Start: 105731, Stop: 105931, Start Num: 10
Candidate Starts for WhereRU_209:

(4, 105677), (Start: 10 @105731 has 17 MA's), (12, 105740), (Start: 13 @105767 has 12 MA's), (Start: 15 @105785 has 1 MA's), (Start: 18 @105815 has 1 MA's), (24, 105878),