Pham 345645


1: Faust_205 + 1
2: Faust_206 + 1
3: Faust_207
4: TunaTartare_210
5: Blueeyedbeauty_206
6: Annadreamy_198 + 1
7: Annadreamy_197 + 1
8: Sham_202
9: Sham_203
10: Beuffert_204
11: Beuffert_205
12: TunaTartare_211
13: SeresaTree_211
14: Blueeyedbeauty_207
15: BillNye_181
16: Circinus_185 + 1
17: Muntaha_196 + 1
18: Muntaha_200 + 1
19: Circinus_188
20: Chaewon_191
21: BillNye_187
22: BillNye_188 + 2
23: Muntaha_203
24: Chaewon_195
25: Chaewon_198
26: Wakanda_203
27: Circinus_182
28: NiceHouse_176
29: BooTeria_145 + 6
30: Emmetator_149 + 3
31: ReginaGlobina_162
32: SJReid_162
33: Ellewin_146
34: Atuin_149
35: Artu_146
36: LeoJr_159

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 345645 Report

This analysis was run 11/14/26 on database version 672.

Pham number 345645 has 54 members, 8 are drafts.

Phages represented in each track:
- Track 1 : Faust_205, SeresaTree_209
- Track 2 : Faust_206, SeresaTree_210
- Track 3 : Faust_207
- Track 4 : TunaTartare_210
- Track 5 : Blueeyedbeauty_206
- Track 6 : Annadreamy_198, Limpid_205
- Track 7 : Annadreamy_197, Limpid_204
- Track 8 : Sham_202
- Track 9 : Sham_203
- Track 10 : Beuffert_204
- Track 11 : Beuffert_205
- Track 12 : TunaTartare_211
- Track 13 : SeresaTree_211
- Track 14 : Blueeyedbeauty_207
- Track 15 : BillNye_181
- Track 16 : Circinus_185, BillNye_184
- Track 17 : Muntaha_196, Wakanda_196
- Track 18 : Muntaha_200, Wakanda_200
- Track 19 : Circinus_188
- Track 20 : Chaewon_191
- Track 21 : BillNye_187
- Track 22 : BillNye_188, Circinus_189, Chaewon_199
- Track 23 : Muntaha_203
- Track 24 : Chaewon_195
- Track 25 : Chaewon_198
- Track 26 : Wakanda_203
- Track 27 : Circinus_182
- Track 28 : NiceHouse_176
- Track 29 : BooTeria_145, KSunshine22_151, Emmetator_148, DunneganBoMo_145, WaddleDee_141, Panchaali_147, Artu_145
- Track 30 : Emmetator_149, BooTeria_146, WaddleDee_142, DunneganBoMo_146
- Track 31 : ReginaGlobina_162
- Track 32 : SJReid_162
- Track 33 : Ellewin_146
- Track 34 : Atuin_149
- Track 35 : Artu_146
- Track 36 : LeoJr_159

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

The start number called the most often in the published annotations is 22, it was called in 15 of the 46 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Annadreamy_198, Beuffert_205, BillNye_184, BillNye_188, Blueeyedbeauty_207, Chaewon_195, Chaewon_199, Circinus_185, Circinus_189, Faust_207, Limpid_205, Muntaha_200, Sham_203, TunaTartare_211, Wakanda_200,

Genes that have the "Most Annotated" start but do not call it:
• SeresaTree_211,

Genes that do not have the "Most Annotated" start:
• Annadreamy_197, Artu_145, Artu_146, Atuin_149, Beuffert_204, BillNye_181, BillNye_187, Blueeyedbeauty_206, BooTeria_145, BooTeria_146, Chaewon_191, Chaewon_198, Circinus_182, Circinus_188, DunneganBoMo_145, DunneganBoMo_146, Ellewin_146, Emmetator_148, Emmetator_149, Faust_205, Faust_206, KSunshine22_151, LeoJr_159, Limpid_204, Muntaha_196, Muntaha_203, NiceHouse_176, Panchaali_147, ReginaGlobina_162, SJReid_162, SeresaTree_209, SeresaTree_210, Sham_202, TunaTartare_210, WaddleDee_141, WaddleDee_142, Wakanda_196, Wakanda_203,

Summary by start number:

Start 9:
• Found in 8 of 54 (14.8%) of genes in pham
• Manual Annotations of this start: 7 of 46
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Annadreamy_197 (BK1), Beuffert_204 (BK1), Blueeyedbeauty_206 (BK1), Faust_205 (BK1), Limpid_204 (BK1), SeresaTree_209 (BK1), Sham_202 (BK1), TunaTartare_210 (BK1),

Start 11:
• Found in 4 of 54 (7.4%) of genes in pham
• Manual Annotations of this start: 2 of 46
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Atuin_149 (FC), Ellewin_146 (FC), LeoJr_159 (FC), ReginaGlobina_162 (FC),

Start 12:
• Found in 1 of 54 (1.9%) of genes in pham
• Manual Annotations of this start: 1 of 46
• Called 100.0% of time when present
• Phage (with cluster) where this start called: SJReid_162 (FC),

Start 13:
• Found in 5 of 54 (9.3%) of genes in pham
• Manual Annotations of this start: 5 of 46

• Called 100.0% of time when present
• Phage (with cluster) where this start called: BillNye_187 (BK2), Chaewon_198 (BK2), Circinus_188 (BK2), Muntaha_203 (BK2), Wakanda_203 (BK2),

Start 14:
• Found in 5 of 54 (9.3%) of genes in pham
• Manual Annotations of this start: 4 of 46
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Artu_146 (FC), BooTeria_146 (FC), DunneganBoMo_146 (FC), Emmetator_149 (FC), WaddleDee_142 (FC),

Start 16:
• Found in 2 of 54 (3.7%) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: SeresaTree_211 (BK1),

Start 18:
• Found in 1 of 54 (1.9%) of genes in pham
• Manual Annotations of this start: 1 of 46
• Called 100.0% of time when present
• Phage (with cluster) where this start called: NiceHouse_176 (CE),

Start 19:
• Found in 2 of 54 (3.7%) of genes in pham
• Manual Annotations of this start: 1 of 46
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Faust_206 (BK1), SeresaTree_210 (BK1),

Start 20:
• Found in 7 of 54 (13.0%) of genes in pham
• Manual Annotations of this start: 5 of 46
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Artu_145 (FC), BooTeria_145 (FC), DunneganBoMo_145 (FC), Emmetator_148 (FC), KSunshine22_151 (FC), Panchaali_147 (FC), WaddleDee_141 (FC),

Start 21:
• Found in 5 of 54 (9.3%) of genes in pham
• Manual Annotations of this start: 5 of 46
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BillNye_181 (BK2), Chaewon_191 (BK2), Circinus_182 (BK2), Muntaha_196 (BK2), Wakanda_196 (BK2),

Start 22:
• Found in 16 of 54 (29.6%) of genes in pham
• Manual Annotations of this start: 15 of 46
• Called 93.8% of time when present
• Phage (with cluster) where this start called: Annadreamy_198 (BK1), Beuffert_205 (BK1), BillNye_184 (BK2), BillNye_188 (BK2), Blueeyedbeauty_207 (BK1), Chaewon_195 (BK2), Chaewon_199 (BK2), Circinus_185 (BK2), Circinus_189 (BK2), Faust_207 (BK1), Limpid_205 (BK1), Muntaha_200 (BK2), Sham_203 (BK1),

TunaTartare_211 (BK1), Wakanda_200 (BK2),

Summary by clusters:

There are 4 clusters represented in this pham: FC, CE, BK1, BK2,

Info for manual annotations of cluster BK1:
•Start number 9 was manually annotated 7 times for cluster BK1.
•Start number 19 was manually annotated 1 time for cluster BK1.
•Start number 22 was manually annotated 7 times for cluster BK1.

Info for manual annotations of cluster BK2:
•Start number 13 was manually annotated 5 times for cluster BK2.
•Start number 21 was manually annotated 5 times for cluster BK2.
•Start number 22 was manually annotated 8 times for cluster BK2.

Info for manual annotations of cluster CE:
•Start number 18 was manually annotated 1 time for cluster CE.

Info for manual annotations of cluster FC:
•Start number 11 was manually annotated 2 times for cluster FC.
•Start number 12 was manually annotated 1 time for cluster FC.
•Start number 14 was manually annotated 4 times for cluster FC.
•Start number 20 was manually annotated 5 times for cluster FC.

Gene Information:

Gene: Annadreamy_198 Start: 100559, Stop: 100870, Start Num: 22
Candidate Starts for Annadreamy_198:
(Start: 22 @100559 has 15 MA's), (38, 100724), (39, 100730), (47, 100835), (49, 100841),

Gene: Annadreamy_197 Start: 100178, Stop: 100516, Start Num: 9
Candidate Starts for Annadreamy_197:
(Start: 9 @100178 has 7 MA's), (33, 100325), (39, 100382), (46, 100472),

Gene: Artu_145 Start: 101698, Stop: 102027, Start Num: 20
Candidate Starts for Artu_145:
(Start: 20 @101698 has 5 MA's),

Gene: Artu_146 Start: 102038, Stop: 102379, Start Num: 14
Candidate Starts for Artu_146:
(Start: 14 @102038 has 4 MA's), (42, 102263),

Gene: Atuin_149 Start: 104650, Stop: 104988, Start Num: 11
Candidate Starts for Atuin_149:
(Start: 11 @104650 has 2 MA's), (46, 104941),

Gene: Beuffert_204 Start: 104170, Stop: 104508, Start Num: 9
Candidate Starts for Beuffert_204:
(Start: 9 @104170 has 7 MA's), (33, 104317), (39, 104374), (50, 104497),

Gene: Beuffert_205 Start: 104551, Stop: 104862, Start Num: 22
Candidate Starts for Beuffert_205:
(Start: 22 @104551 has 15 MA's), (24, 104560), (32, 104647), (38, 104716), (39, 104722), (49, 104833),

Gene: BillNye_181 Start: 99832, Stop: 100167, Start Num: 21
Candidate Starts for BillNye_181:
(Start: 21 @99832 has 5 MA's), (37, 99994), (48, 100108),

Gene: BillNye_184 Start: 100624, Stop: 100935, Start Num: 22
Candidate Starts for BillNye_184:
(Start: 22 @100624 has 15 MA's), (29, 100699), (35, 100759), (47, 100903),

Gene: BillNye_187 Start: 101461, Stop: 101799, Start Num: 13
Candidate Starts for BillNye_187:
(Start: 13 @101461 has 5 MA's), (30, 101554), (33, 101599), (36, 101623), (38, 101653),

Gene: BillNye_188 Start: 101849, Stop: 102151, Start Num: 22
Candidate Starts for BillNye_188:
(Start: 22 @101849 has 15 MA's),

Gene: Blueeyedbeauty_206 Start: 103898, Stop: 104236, Start Num: 9
Candidate Starts for Blueeyedbeauty_206:
(Start: 9 @103898 has 7 MA's), (26, 103955), (39, 104102), (46, 104192),

Gene: Blueeyedbeauty_207 Start: 104279, Stop: 104596, Start Num: 22
Candidate Starts for Blueeyedbeauty_207:
(Start: 22 @104279 has 15 MA's), (31, 104378), (38, 104450), (49, 104567),

Gene: BooTeria_145 Start: 101992, Stop: 102321, Start Num: 20
Candidate Starts for BooTeria_145:
(Start: 20 @101992 has 5 MA's),

Gene: BooTeria_146 Start: 102332, Stop: 102673, Start Num: 14
Candidate Starts for BooTeria_146:
(Start: 14 @102332 has 4 MA's),

Gene: Chaewon_191 Start: 101363, Stop: 101698, Start Num: 21
Candidate Starts for Chaewon_191:
(Start: 21 @101363 has 5 MA's), (37, 101525), (48, 101639),

Gene: Chaewon_195 Start: 102351, Stop: 102662, Start Num: 22
Candidate Starts for Chaewon_195:
(15, 102324), (Start: 22 @102351 has 15 MA's), (29, 102426), (47, 102630),

Gene: Chaewon_199 Start: 103586, Stop: 103888, Start Num: 22
Candidate Starts for Chaewon_199:
(Start: 22 @103586 has 15 MA's),

Gene: Chaewon_198 Start: 103198, Stop: 103536, Start Num: 13
Candidate Starts for Chaewon_198:
(Start: 13 @103198 has 5 MA's), (30, 103291), (38, 103390), (41, 103408), (49, 103513),

Gene: Circinus_185 Start: 100431, Stop: 100742, Start Num: 22
Candidate Starts for Circinus_185:
(Start: 22 @100431 has 15 MA's), (29, 100506), (35, 100566), (47, 100710),

Gene: Circinus_188 Start: 101268, Stop: 101606, Start Num: 13
Candidate Starts for Circinus_188:
(Start: 13 @101268 has 5 MA's), (30, 101361), (36, 101430), (38, 101460), (41, 101478), (49, 101583),

Gene: Circinus_189 Start: 101656, Stop: 101958, Start Num: 22
Candidate Starts for Circinus_189:
(Start: 22 @101656 has 15 MA's),

Gene: Circinus_182 Start: 99644, Stop: 99973, Start Num: 21
Candidate Starts for Circinus_182:
(Start: 21 @99644 has 5 MA's), (37, 99806), (41, 99824), (44, 99890), (48, 99920),

Gene: DunneganBoMo_145 Start: 101261, Stop: 101590, Start Num: 20
Candidate Starts for DunneganBoMo_145:
(Start: 20 @101261 has 5 MA's),

Gene: DunneganBoMo_146 Start: 101601, Stop: 101942, Start Num: 14
Candidate Starts for DunneganBoMo_146:
(Start: 14 @101601 has 4 MA's),

Gene: Ellewin_146 Start: 101696, Stop: 102037, Start Num: 11
Candidate Starts for Ellewin_146:
(Start: 11 @101696 has 2 MA's), (47, 102002),

Gene: Emmetator_149 Start: 101914, Stop: 102255, Start Num: 14
Candidate Starts for Emmetator_149:
(Start: 14 @101914 has 4 MA's),

Gene: Emmetator_148 Start: 101571, Stop: 101903, Start Num: 20
Candidate Starts for Emmetator_148:
(Start: 20 @101571 has 5 MA's),

Gene: Faust_205 Start: 105087, Stop: 105422, Start Num: 9
Candidate Starts for Faust_205:
(Start: 9 @105087 has 7 MA's), (25, 105135), (28, 105168), (39, 105288),

Gene: Faust_206 Start: 105463, Stop: 105774, Start Num: 19
Candidate Starts for Faust_206:
(17, 105460), (Start: 19 @105463 has 1 MA's), (38, 105634), (39, 105640),

Gene: Faust_207 Start: 105783, Stop: 106088, Start Num: 22
Candidate Starts for Faust_207:
(16, 105771), (Start: 22 @105783 has 15 MA's), (43, 105981), (49, 106059),

Gene: KSunshine22_151 Start: 102661, Stop: 102990, Start Num: 20
Candidate Starts for KSunshine22_151:
(Start: 20 @102661 has 5 MA's),

Gene: LeoJr_159 Start: 105249, Stop: 105587, Start Num: 11

Candidate Starts for LeoJr_159:
(Start: 11 @105249 has 2 MA's), (42, 105474),

Gene: Limpid_205 Start: 105872, Stop: 106183, Start Num: 22
Candidate Starts for Limpid_205:
(Start: 22 @105872 has 15 MA's), (38, 106037), (39, 106043), (47, 106148), (49, 106154),

Gene: Limpid_204 Start: 105491, Stop: 105829, Start Num: 9
Candidate Starts for Limpid_204:
(Start: 9 @105491 has 7 MA's), (33, 105638), (39, 105695), (46, 105785),

Gene: Muntaha_196 Start: 99557, Stop: 99856, Start Num: 21
Candidate Starts for Muntaha_196:
(Start: 21 @99557 has 5 MA's), (40, 99725), (48, 99830),

Gene: Muntaha_200 Start: 100611, Stop: 100922, Start Num: 22
Candidate Starts for Muntaha_200:
(Start: 22 @100611 has 15 MA's), (29, 100686),

Gene: Muntaha_203 Start: 101500, Stop: 101853, Start Num: 13
Candidate Starts for Muntaha_203:
(10, 101494), (Start: 13 @101500 has 5 MA's), (30, 101605), (36, 101674), (38, 101704),

Gene: NiceHouse_176 Start: 100180, Stop: 100518, Start Num: 18
Candidate Starts for NiceHouse_176:
(Start: 18 @100180 has 1 MA's), (23, 100192), (34, 100324), (41, 100390),

Gene: Panchaali_147 Start: 101776, Stop: 102108, Start Num: 20
Candidate Starts for Panchaali_147:
(Start: 20 @101776 has 5 MA's),

Gene: ReginaGlobina_162 Start: 106523, Stop: 106861, Start Num: 11
Candidate Starts for ReginaGlobina_162:
(Start: 11 @106523 has 2 MA's),

Gene: SJReid_162 Start: 96607, Stop: 96969, Start Num: 12
Candidate Starts for SJReid_162:
(6, 96553), (7, 96559), (Start: 12 @96607 has 1 MA's), (42, 96853),

Gene: SeresaTree_210 Start: 105448, Stop: 105759, Start Num: 19
Candidate Starts for SeresaTree_210:
(17, 105445), (Start: 19 @105448 has 1 MA's), (38, 105619), (39, 105625),

Gene: SeresaTree_211 Start: 105756, Stop: 106073, Start Num: 16
Candidate Starts for SeresaTree_211:
(16, 105756), (Start: 22 @105768 has 15 MA's), (43, 105966), (49, 106044),

Gene: SeresaTree_209 Start: 105072, Stop: 105407, Start Num: 9
Candidate Starts for SeresaTree_209:
(Start: 9 @105072 has 7 MA's), (25, 105120), (28, 105153), (39, 105273),

Gene: Sham_202 Start: 106470, Stop: 106805, Start Num: 9
Candidate Starts for Sham_202:

(Start: 9 @106470 has 7 MA's), (25, 106518), (28, 106551), (39, 106671), (45, 106752),

Gene: Sham_203 Start: 106846, Stop: 107148, Start Num: 22
Candidate Starts for Sham_203:
(1, 106684), (2, 106687), (3, 106708), (4, 106744), (5, 106756), (Start: 22 @106846 has 15 MA's), (38, 107002), (43, 107041), (49, 107119),

Gene: TunaTartare_210 Start: 108768, Stop: 109103, Start Num: 9
Candidate Starts for TunaTartare_210:
(Start: 9 @108768 has 7 MA's), (25, 108816), (27, 108840), (28, 108849), (39, 108969), (45, 109050),

Gene: TunaTartare_211 Start: 109144, Stop: 109446, Start Num: 22
Candidate Starts for TunaTartare_211:
(1, 108982), (2, 108985), (3, 109006), (4, 109042), (5, 109054), (8, 109096), (Start: 22 @109144 has 15 MA's), (38, 109300), (43, 109339), (49, 109417),

Gene: WaddleDee_142 Start: 100787, Stop: 101128, Start Num: 14
Candidate Starts for WaddleDee_142:
(Start: 14 @100787 has 4 MA's),

Gene: WaddleDee_141 Start: 100447, Stop: 100776, Start Num: 20
Candidate Starts for WaddleDee_141:
(Start: 20 @100447 has 5 MA's),

Gene: Wakanda_200 Start: 100892, Stop: 101203, Start Num: 22
Candidate Starts for Wakanda_200:
(Start: 22 @100892 has 15 MA's), (29, 100967),

Gene: Wakanda_203 Start: 101737, Stop: 102090, Start Num: 13
Candidate Starts for Wakanda_203:
(Start: 13 @101737 has 5 MA's), (30, 101842), (36, 101911), (38, 101941), (47, 102058),

Gene: Wakanda_196 Start: 99838, Stop: 100137, Start Num: 21
Candidate Starts for Wakanda_196:
(Start: 21 @99838 has 5 MA's), (40, 100006), (48, 100111),