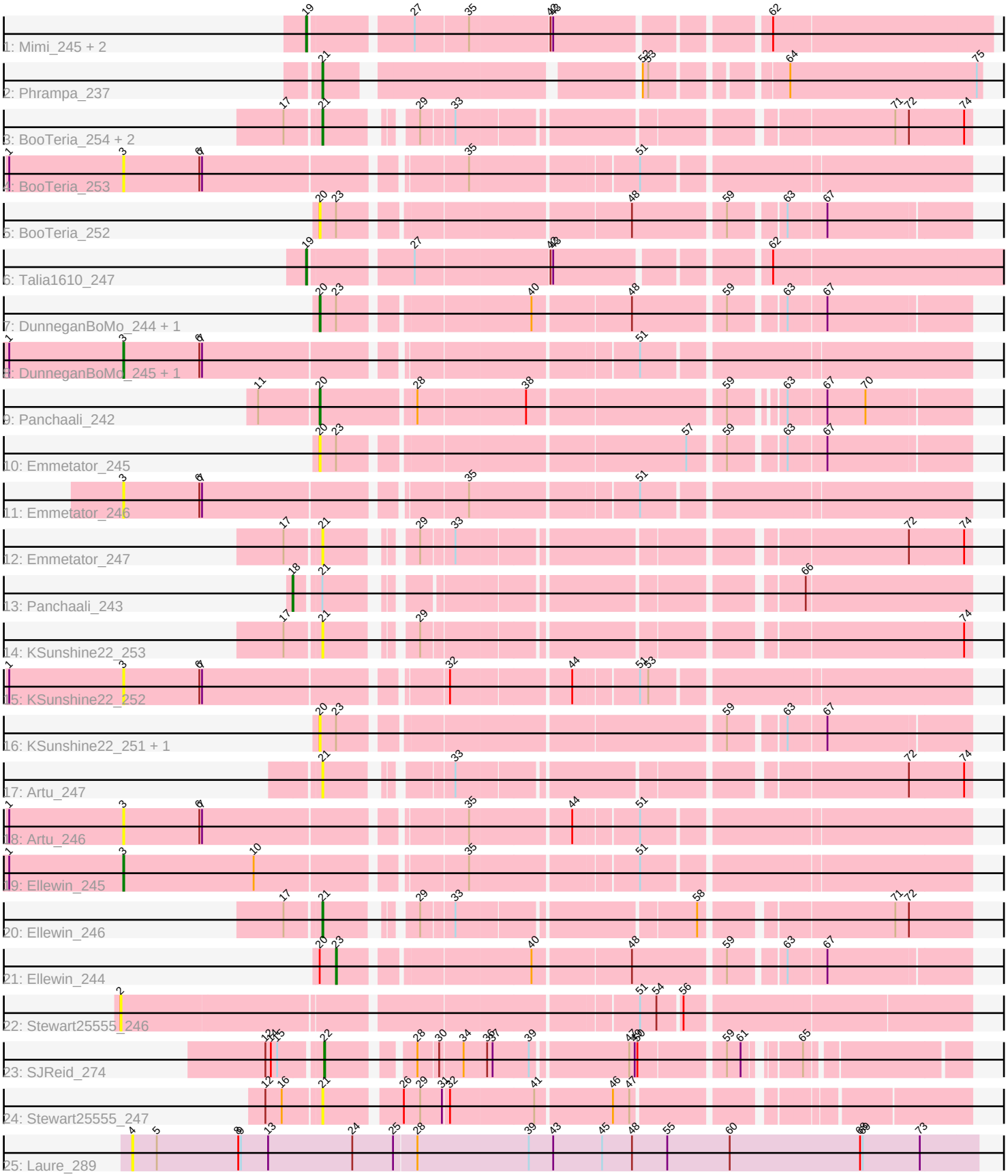
Pham 305194


1: Mimi_245 + 2
2: Phrampa_237
3: BooTeria_254 + 2
4: BooTeria_253
5: BooTeria_252
6: Talia1610_247
7: DunneganBoMo_244 + 1
8: DunneganBoMo_245 + 1
9: Panchaali_242
10: Emmetator_245
11: Emmetator_246
12: Emmetator_247
13: Panchaali_243
14: KSunshine22_253
15: KSunshine22_252
16: KSunshine22_251 + 1
17: Artu_247
18: Artu_246
19: Ellewin_245
20: Ellewin_246
21: Ellewin_244
22: Stewart25555_246
23: SJReid_274
24: Stewart25555_247
25: Laure_289

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 305194 Report

This analysis was run 06/08/26 on database version 649.

Pham number 305194 has 32 members, 16 are drafts.

Phages represented in each track:
- Track 1 : Mimi_245, Bloom_249, Racecar_247
- Track 2 : Phrampa_237
- Track 3 : BooTeria_254, DunneganBoMo_246, WaddleDee_244
- Track 4 : BooTeria_253
- Track 5 : BooTeria_252
- Track 6 : Talia1610_247
- Track 7 : DunneganBoMo_244, WaddleDee_242
- Track 8 : DunneganBoMo_245, WaddleDee_243
- Track 9 : Panchaali_242
- Track 10 : Emmetator_245
- Track 11 : Emmetator_246
- Track 12 : Emmetator_247
- Track 13 : Panchaali_243
- Track 14 : KSunshine22_253
- Track 15 : KSunshine22_252
- Track 16 : KSunshine22_251, Artu_245
- Track 17 : Artu_247
- Track 18 : Artu_246
- Track 19 : Ellewin_245
- Track 20 : Ellewin_246
- Track 21 : Ellewin_244
- Track 22 : Stewart25555_246
- Track 23 : SJReid_274
- Track 24 : Stewart25555_247
- Track 25 : Laure_289

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

The start number called the most often in the published annotations is 21, it was called in 4 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- Artu_247, BooTeria_254, DunneganBoMo_246, Ellewin_246, Emmetator_247, KSunshine22_253, Phrampa_237, Stewart25555_247, WaddleDee_244,

Genes that have the "Most Annotated" start but do not call it:
• Panchaali_243,

Genes that do not have the "Most Annotated" start:
• Artu_245, Artu_246, Bloom_249, BooTeria_252, BooTeria_253, DunneganBoMo_244, DunneganBoMo_245, Ellewin_244, Ellewin_245, Emmetator_245, Emmetator_246, KSunshine22_251, KSunshine22_252, Laure_289, Mimi_245, Panchaali_242, Racecar_247, SJReid_274, Stewart25555_246, Talia1610_247, WaddleDee_242, WaddleDee_243,

Summary by start number:

Start 2:
• Found in 1 of 32 (3.1%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Stewart25555_246 (FC),

Start 3:
• Found in 7 of 32 (21.9%) of genes in pham
• Manual Annotations of this start: 3 of 16
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Artu_246 (FC), BooTeria_253 (FC), DunneganBoMo_245 (FC), Ellewin_245 (FC), Emmetator_246 (FC), KSunshine22_252 (FC), WaddleDee_243 (FC),

Start 4:
• Found in 1 of 32 (3.1%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Laure_289 (UNK),

Start 18:
• Found in 1 of 32 (3.1%) of genes in pham
• Manual Annotations of this start: 1 of 16
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Panchaali_243 (FC),

Start 19:
• Found in 4 of 32 (12.5%) of genes in pham
• Manual Annotations of this start: 3 of 16
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bloom_249 (FC), Mimi_245 (FC), Racecar_247 (FC), Talia1610_247 (FC),

Start 20:
• Found in 8 of 32 (25.0%) of genes in pham
• Manual Annotations of this start: 3 of 16
• Called 87.5% of time when present
• Phage (with cluster) where this start called: Artu_245 (FC), BooTeria_252 (FC), DunneganBoMo_244 (FC), Emmetator_245 (FC), KSunshine22_251 (FC), Panchaali_242 (FC), WaddleDee_242 (FC),

Start 21:
• Found in 10 of 32 (31.2%) of genes in pham
• Manual Annotations of this start: 4 of 16
• Called 90.0% of time when present
• Phage (with cluster) where this start called: Artu_247 (FC), BooTeria_254 (FC), DunneganBoMo_246 (FC), Ellewin_246 (FC), Emmetator_247 (FC), KSunshine22_253 (FC), Phrampa_237 (FC), Stewart25555_247 (FC), WaddleDee_244 (FC),

Start 22:
• Found in 1 of 32 (3.1%) of genes in pham
• Manual Annotations of this start: 1 of 16
• Called 100.0% of time when present
• Phage (with cluster) where this start called: SJReid_274 (FC),

Start 23:
• Found in 7 of 32 (21.9%) of genes in pham
• Manual Annotations of this start: 1 of 16
• Called 14.3% of time when present
• Phage (with cluster) where this start called: Ellewin_244 (FC),

Summary by clusters:

There are 2 clusters represented in this pham: UNK, FC,

Info for manual annotations of cluster FC:
•Start number 3 was manually annotated 3 times for cluster FC.
•Start number 18 was manually annotated 1 time for cluster FC.
•Start number 19 was manually annotated 3 times for cluster FC.
•Start number 20 was manually annotated 3 times for cluster FC.
•Start number 21 was manually annotated 4 times for cluster FC.
•Start number 22 was manually annotated 1 time for cluster FC.
•Start number 23 was manually annotated 1 time for cluster FC.

Gene Information:

Gene: Artu_245 Start: 163165, Stop: 163815, Start Num: 20
Candidate Starts for Artu_245:
(Start: 20 @163165 has 3 MA's), (Start: 23 @163183 has 1 MA's), (59, 163570), (63, 163624), (67, 163663),

Gene: Artu_247 Start: 164757, Stop: 165377, Start Num: 21
Candidate Starts for Artu_247:
(Start: 21 @164757 has 4 MA's), (33, 164865), (72, 165309), (74, 165369),

Gene: Artu_246 Start: 163824, Stop: 164687, Start Num: 3
Candidate Starts for Artu_246:
(1, 163698), (Start: 3 @163824 has 3 MA's), (6, 163908), (7, 163911), (35, 164175), (44, 164280), (51, 164346),

Gene: Bloom_249 Start: 157954, Stop: 158643, Start Num: 19
Candidate Starts for Bloom_249:
(Start: 19 @157954 has 3 MA's), (27, 158056), (35, 158113), (42, 158197), (43, 158200), (62, 158410),

Gene: BooTeria_254 Start: 163257, Stop: 163877, Start Num: 21
Candidate Starts for BooTeria_254:
(17, 163221), (Start: 21 @163257 has 4 MA's), (29, 163332), (33, 163365), (71, 163794), (72, 163809), (74, 163869),

Gene: BooTeria_253 Start: 162323, Stop: 163186, Start Num: 3
Candidate Starts for BooTeria_253:
(1, 162197), (Start: 3 @162323 has 3 MA's), (6, 162407), (7, 162410), (35, 162674), (51, 162845),

Gene: BooTeria_252 Start: 161664, Stop: 162314, Start Num: 20
Candidate Starts for BooTeria_252:
(Start: 20 @161664 has 3 MA's), (Start: 23 @161682 has 1 MA's), (48, 161973), (59, 162069), (63, 162123), (67, 162162),

Gene: DunneganBoMo_244 Start: 161249, Stop: 161899, Start Num: 20
Candidate Starts for DunneganBoMo_244:
(Start: 20 @161249 has 3 MA's), (Start: 23 @161267 has 1 MA's), (40, 161456), (48, 161558), (59, 161654), (63, 161708), (67, 161747),

Gene: DunneganBoMo_245 Start: 161908, Stop: 162771, Start Num: 3
Candidate Starts for DunneganBoMo_245:
(1, 161782), (Start: 3 @161908 has 3 MA's), (6, 161992), (7, 161995), (51, 162430),

Gene: DunneganBoMo_246 Start: 162842, Stop: 163462, Start Num: 21
Candidate Starts for DunneganBoMo_246:
(17, 162806), (Start: 21 @162842 has 4 MA's), (29, 162917), (33, 162950), (71, 163379), (72, 163394), (74, 163454),

Gene: Ellewin_245 Start: 161729, Stop: 162592, Start Num: 3
Candidate Starts for Ellewin_245:
(1, 161603), (Start: 3 @161729 has 3 MA's), (10, 161873), (35, 162080), (51, 162251),

Gene: Ellewin_246 Start: 162663, Stop: 163283, Start Num: 21
Candidate Starts for Ellewin_246:
(17, 162627), (Start: 21 @162663 has 4 MA's), (29, 162738), (33, 162771), (58, 163011), (71, 163200), (72, 163215),

Gene: Ellewin_244 Start: 161088, Stop: 161720, Start Num: 23
Candidate Starts for Ellewin_244:
(Start: 20 @161070 has 3 MA's), (Start: 23 @161088 has 1 MA's), (40, 161277), (48, 161379), (59, 161475), (63, 161529), (67, 161568),

Gene: Emmetator_245 Start: 160546, Stop: 161196, Start Num: 20
Candidate Starts for Emmetator_245:
(Start: 20 @160546 has 3 MA's), (Start: 23 @160564 has 1 MA's), (57, 160915), (59, 160951), (63, 161005), (67, 161044),

Gene: Emmetator_246 Start: 161205, Stop: 162068, Start Num: 3

Candidate Starts for Emmetator_246:
(Start: 3 @161205 has 3 MA's), (6, 161289), (7, 161292), (35, 161556), (51, 161727),

Gene: Emmetator_247 Start: 162139, Stop: 162759, Start Num: 21
Candidate Starts for Emmetator_247:
(17, 162103), (Start: 21 @162139 has 4 MA's), (29, 162214), (33, 162247), (72, 162691), (74, 162751),

Gene: KSunshine22_253 Start: 162760, Stop: 163380, Start Num: 21
Candidate Starts for KSunshine22_253:
(17, 162724), (Start: 21 @162760 has 4 MA's), (29, 162835), (74, 163372),

Gene: KSunshine22_252 Start: 161829, Stop: 162689, Start Num: 3
Candidate Starts for KSunshine22_252:
(1, 161703), (Start: 3 @161829 has 3 MA's), (6, 161913), (7, 161916), (32, 162159), (44, 162282), (51, 162348), (53, 162357),

Gene: KSunshine22_251 Start: 161170, Stop: 161820, Start Num: 20
Candidate Starts for KSunshine22_251:
(Start: 20 @161170 has 3 MA's), (Start: 23 @161188 has 1 MA's), (59, 161575), (63, 161629), (67, 161668),

Gene: Laure_289 Start: 157179, Stop: 158108, Start Num: 4
Candidate Starts for Laure_289:
(4, 157179), (5, 157206), (8, 157296), (9, 157299), (13, 157329), (24, 157422), (25, 157467), (28, 157491), (39, 157614), (43, 157641), (45, 157695), (48, 157728), (55, 157767), (60, 157836), (68, 157980), (69, 157983), (73, 158046),

Gene: Mimi_245 Start: 157329, Stop: 158018, Start Num: 19
Candidate Starts for Mimi_245:
(Start: 19 @157329 has 3 MA's), (27, 157431), (35, 157488), (42, 157572), (43, 157575), (62, 157785),

Gene: Panchaali_242 Start: 160800, Stop: 161456, Start Num: 20
Candidate Starts for Panchaali_242:
(11, 160737), (Start: 20 @160800 has 3 MA's), (28, 160899), (38, 161013), (59, 161217), (63, 161265), (67, 161304), (70, 161346),

Gene: Panchaali_243 Start: 161441, Stop: 162082, Start Num: 18
Candidate Starts for Panchaali_243:
(Start: 18 @161441 has 1 MA's), (Start: 21 @161465 has 4 MA's), (66, 161903),

Gene: Phrampa_237 Start: 158671, Stop: 159309, Start Num: 21
Candidate Starts for Phrampa_237:
(Start: 21 @158671 has 4 MA's), (52, 158974), (53, 158980), (64, 159103), (75, 159304),

Gene: Racecar_247 Start: 157708, Stop: 158397, Start Num: 19
Candidate Starts for Racecar_247:
(Start: 19 @157708 has 3 MA's), (27, 157810), (35, 157867), (42, 157951), (43, 157954), (62, 158164),

Gene: SJReid_274 Start: 159658, Stop: 160269, Start Num: 22
Candidate Starts for SJReid_274:
(12, 159604), (14, 159610), (15, 159616), (Start: 22 @159658 has 1 MA's), (28, 159736), (30, 159757), (34, 159781), (36, 159805), (37, 159811), (39, 159850), (47, 159949), (49, 159955), (50, 159958), (59, 160045), (61, 160060), (65, 160105),

Gene: Stewart25555_246 Start: 159871, Stop: 160743, Start Num: 2
Candidate Starts for Stewart25555_246:
(2, 159871), (51, 160402), (54, 160420), (56, 160444),

Gene: Stewart25555_247 Start: 160819, Stop: 161460, Start Num: 21
Candidate Starts for Stewart25555_247:
(12, 160762), (16, 160780), (Start: 21 @160819 has 4 MA's), (26, 160894), (29, 160912), (31, 160936), (32, 160942), (41, 161032), (46, 161113), (47, 161131),

Gene: Talia1610_247 Start: 157983, Stop: 158684, Start Num: 19
Candidate Starts for Talia1610_247:
(Start: 19 @157983 has 3 MA's), (27, 158085), (42, 158226), (43, 158229), (62, 158439),

Gene: WaddleDee_244 Start: 162375, Stop: 162995, Start Num: 21
Candidate Starts for WaddleDee_244:
(17, 162339), (Start: 21 @162375 has 4 MA's), (29, 162450), (33, 162483), (71, 162912), (72, 162927), (74, 162987),

Gene: WaddleDee_243 Start: 161441, Stop: 162304, Start Num: 3
Candidate Starts for WaddleDee_243:
(1, 161315), (Start: 3 @161441 has 3 MA's), (6, 161525), (7, 161528), (51, 161963),

Gene: WaddleDee_242 Start: 160782, Stop: 161432, Start Num: 20
Candidate Starts for WaddleDee_242:
(Start: 20 @160782 has 3 MA's), (Start: 23 @160800 has 1 MA's), (40, 160989), (48, 161091), (59, 161187), (63, 161241), (67, 161280),