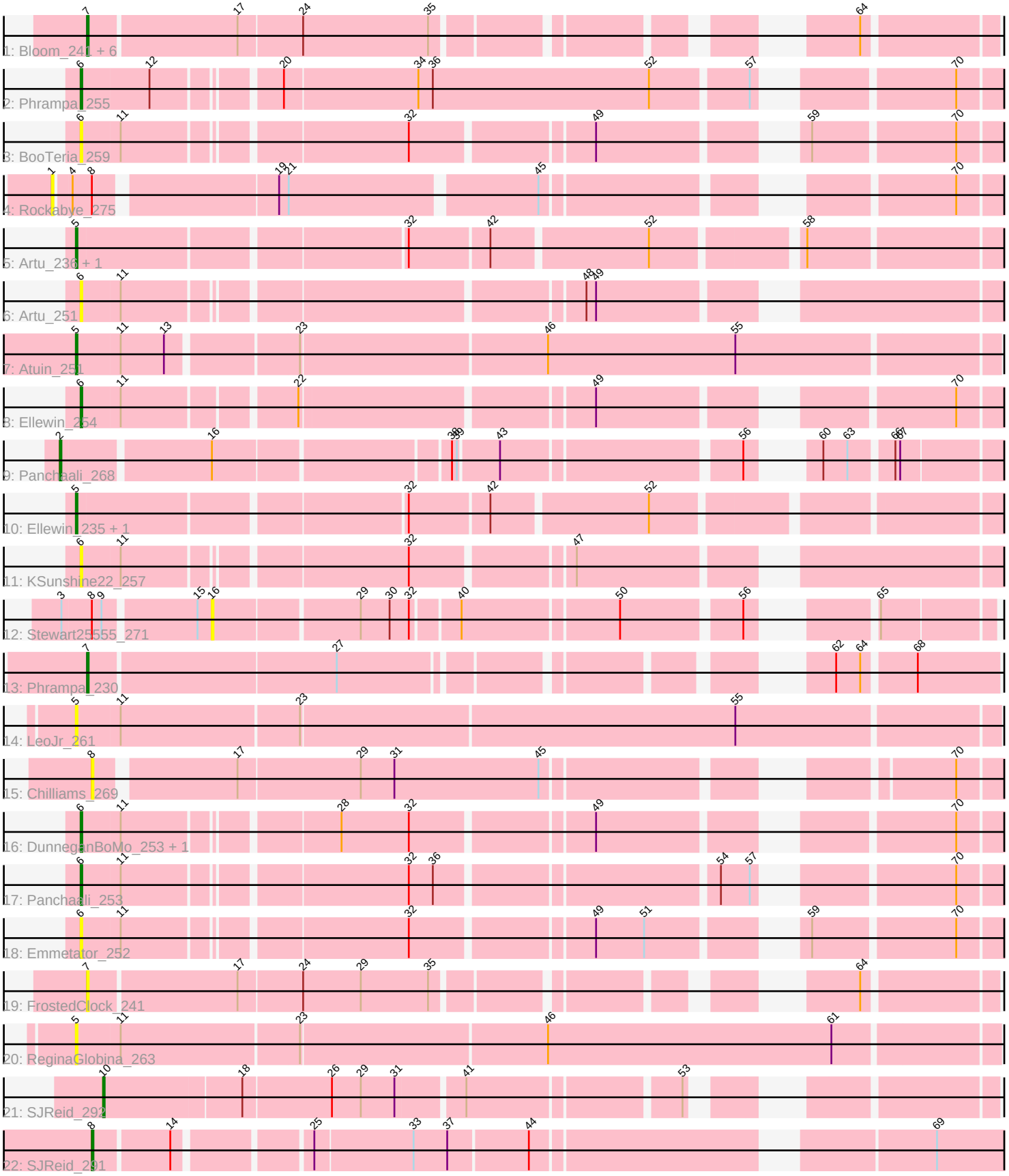
Pham 309029


1: Bloom_240 + 6
2: Phrampal_255
3: BooTeria_259
4: Rockabye_275
5: Artu_236 + 1
6: Artu_251
7: Atuin_251
8: Ellewin_254
9: Panchaali_268
10: Ellewin_235 + 1
11: KSunshine22_257
12: Stewart25555_271
13: Phrampal_230
14: LeoJr_261
15: Chilliams_269
16: DunneganBoMo_253 + 1
17: Panchaali_253
18: Emmetator_252
19: FrostedClock_241
20: ReginaGlobina_263
21: SJReid_292
22: SJReid_291

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 309029 Report

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

Pham number 309029 has 31 members, 14 are drafts.

Phages represented in each track:
• Track 1 : Bloom_241, Racecar_239, Talia1610_239, GoldenEssence_226, FloraSnap32_234, Patbob_235, Mimi_237
• Track 2 : Phrampa_255
• Track 3 : BooTeria_259
• Track 4 : Rockabye_275
• Track 5 : Artu_236, WaddleDee_234
• Track 6 : Artu_251
• Track 7 : Atuin_251
• Track 8 : Ellewin_254
• Track 9 : Panchaali_268
• Track 10 : Ellewin_235, KSunshine22_242
• Track 11 : KSunshine22_257
• Track 12 : Stewart25555_271
• Track 13 : Phrampa_230
• Track 14 : LeoJr_261
• Track 15 : Chilliams_269
• Track 16 : DunneganBoMo_253, WaddleDee_251
• Track 17 : Panchaali_253
• Track 18 : Emmetator_252
• Track 19 : FrostedClock_241
• Track 20 : ReginaGlobina_263
• Track 21 : SJReid_292
• Track 22 : SJReid_291

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

The start number called the most often in the published annotations is 7, it was called in 6 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Bloom_241, FloraSnap32_234, FrostedClock_241, GoldenEssence_226, Mimi_237, Patbob_235, Phrampa_230, Racecar_239, Talia1610_239,

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

•

Genes that do not have the "Most Annotated" start:
• Artu_236, Artu_251, Atuin_251, BooTeria_259, Chilliams_269, DunneganBoMo_253, Ellewin_235, Ellewin_254, Emmetator_252, KSunshine22_242, KSunshine22_257, LeoJr_261, Panchaali_253, Panchaali_268, Phrampa_255, ReginaGlobina_263, Rockabye_275, SJReid_291, SJReid_292, Stewart25555_271, WaddleDee_234, WaddleDee_251,

Summary by start number:

Start 1:
• Found in 1 of 31 (3.2%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Rockabye_275 (FC),

Start 2:
• Found in 1 of 31 (3.2%) of genes in pham
• Manual Annotations of this start: 1 of 17
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Panchaali_268 (FC),

Start 5:
• Found in 7 of 31 (22.6%) of genes in pham
• Manual Annotations of this start: 3 of 17
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Artu_236 (FC), Atuin_251 (FC), Ellewin_235 (FC), KSunshine22_242 (FC), LeoJr_261 (FC), ReginaGlobina_263 (FC), WaddleDee_234 (FC),

Start 6:
• Found in 9 of 31 (29.0%) of genes in pham
• Manual Annotations of this start: 5 of 17
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Artu_251 (FC), BooTeria_259 (FC), DunneganBoMo_253 (FC), Ellewin_254 (FC), Emmetator_252 (FC), KSunshine22_257 (FC), Panchaali_253 (FC), Phrampa_255 (FC), WaddleDee_251 (FC),

Start 7:
• Found in 9 of 31 (29.0%) of genes in pham
• Manual Annotations of this start: 6 of 17
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bloom_241 (FC), FloraSnap32_234 (FC), FrostedClock_241 (FC), GoldenEssence_226 (FC), Mimi_237 (FC), Patbob_235 (FC), Phrampa_230 (FC), Racecar_239 (FC), Talia1610_239 (FC),

Start 8:
• Found in 4 of 31 (12.9%) of genes in pham
• Manual Annotations of this start: 1 of 17
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Chilliams_269 (FC), SJReid_291 (FC),

Start 10:
• Found in 1 of 31 (3.2%) of genes in pham
• Manual Annotations of this start: 1 of 17
• Called 100.0% of time when present
• Phage (with cluster) where this start called: SJReid_292 (FC),

Start 16:
• Found in 2 of 31 (6.5%) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Stewart25555_271 (FC),

Summary by clusters:

There is one cluster represented in this pham: FC

Info for manual annotations of cluster FC:
•Start number 2 was manually annotated 1 time for cluster FC.
•Start number 5 was manually annotated 3 times for cluster FC.
•Start number 6 was manually annotated 5 times for cluster FC.
•Start number 7 was manually annotated 6 times for cluster FC.
•Start number 8 was manually annotated 1 time for cluster FC.
•Start number 10 was manually annotated 1 time for cluster FC.

Gene Information:

Gene: Artu_236 Start: 160052, Stop: 160594, Start Num: 5
Candidate Starts for Artu_236:
(Start: 5 @160052 has 3 MA's), (32, 160244), (42, 160292), (52, 160385), (58, 160469),

Gene: Artu_251 Start: 166105, Stop: 166638, Start Num: 6
Candidate Starts for Artu_251:
(Start: 6 @166105 has 5 MA's), (11, 166129), (48, 166390), (49, 166396),

Gene: Atuin_251 Start: 160201, Stop: 160764, Start Num: 5
Candidate Starts for Atuin_251:
(Start: 5 @160201 has 3 MA's), (11, 160228), (13, 160255), (23, 160330), (46, 160480), (55, 160597),

Gene: Bloom_241 Start: 155102, Stop: 155584, Start Num: 7
Candidate Starts for Bloom_241:
(Start: 7 @155102 has 6 MA's), (17, 155192), (24, 155231), (35, 155309), (64, 155507),

Gene: BooTeria_259 Start: 164825, Stop: 165352, Start Num: 6
Candidate Starts for BooTeria_259:
(Start: 6 @164825 has 5 MA's), (11, 164849), (32, 165011), (49, 165116), (59, 165218), (70, 165302),

Gene: Chilliams_269 Start: 162893, Stop: 163402, Start Num: 8
Candidate Starts for Chilliams_269:
(Start: 8 @162893 has 1 MA's), (17, 162974), (29, 163049), (31, 163070), (45, 163160), (70, 163367),

Gene: DunneganBoMo_253 Start: 164781, Stop: 165308, Start Num: 6
Candidate Starts for DunneganBoMo_253:
(Start: 6 @164781 has 5 MA's), (11, 164805), (28, 164925), (32, 164967), (49, 165072), (70, 165258),

Gene: Ellewin_254 Start: 165533, Stop: 166063, Start Num: 6
Candidate Starts for Ellewin_254:
(Start: 6 @165533 has 5 MA's), (11, 165557), (22, 165656), (49, 165827), (70, 166013),

Gene: Ellewin_235 Start: 158200, Stop: 158742, Start Num: 5
Candidate Starts for Ellewin_235:
(Start: 5 @158200 has 3 MA's), (32, 158392), (42, 158440), (52, 158533),

Gene: Emmetator_252 Start: 163707, Stop: 164234, Start Num: 6
Candidate Starts for Emmetator_252:
(Start: 6 @163707 has 5 MA's), (11, 163731), (32, 163893), (49, 163998), (51, 164028), (59, 164100), (70, 164184),

Gene: FloraSnap32_234 Start: 153261, Stop: 153743, Start Num: 7
Candidate Starts for FloraSnap32_234:
(Start: 7 @153261 has 6 MA's), (17, 153351), (24, 153390), (35, 153468), (64, 153666),

Gene: FrostedClock_241 Start: 155246, Stop: 155728, Start Num: 7
Candidate Starts for FrostedClock_241:
(Start: 7 @155246 has 6 MA's), (17, 155336), (24, 155375), (29, 155411), (35, 155453), (64, 155651),

Gene: GoldenEssence_226 Start: 149079, Stop: 149561, Start Num: 7
Candidate Starts for GoldenEssence_226:
(Start: 7 @149079 has 6 MA's), (17, 149169), (24, 149208), (35, 149286), (64, 149484),

Gene: KSunshine22_257 Start: 164108, Stop: 164641, Start Num: 6
Candidate Starts for KSunshine22_257:
(Start: 6 @164108 has 5 MA's), (11, 164132), (32, 164294), (47, 164387),

Gene: KSunshine22_242 Start: 158057, Stop: 158599, Start Num: 5
Candidate Starts for KSunshine22_242:
(Start: 5 @158057 has 3 MA's), (32, 158249), (42, 158297), (52, 158390),

Gene: LeoJr_261 Start: 159582, Stop: 160151, Start Num: 5
Candidate Starts for LeoJr_261:
(Start: 5 @159582 has 3 MA's), (11, 159609), (23, 159717), (55, 159984),

Gene: Mimi_237 Start: 154477, Stop: 154959, Start Num: 7
Candidate Starts for Mimi_237:
(Start: 7 @154477 has 6 MA's), (17, 154567), (24, 154606), (35, 154684), (64, 154882),

Gene: Panchaali_268 Start: 170896, Stop: 171408, Start Num: 2
Candidate Starts for Panchaali_268:
(Start: 2 @170896 has 1 MA's), (16, 170983), (38, 171121), (39, 171124), (43, 171148), (56, 171286), (60, 171304), (63, 171319), (66, 171343), (67, 171346),

Gene: Panchaali_253 Start: 165838, Stop: 166365, Start Num: 6
Candidate Starts for Panchaali_253:

(Start: 6 @165838 has 5 MA's), (11, 165862), (32, 166024), (36, 166039), (54, 166201), (57, 166219), (70, 166315),

Gene: Patbob_235 Start: 154874, Stop: 155356, Start Num: 7
Candidate Starts for Patbob_235:
(Start: 7 @154874 has 6 MA's), (17, 154964), (24, 155003), (35, 155081), (64, 155279),

Gene: Phrampa_255 Start: 165233, Stop: 165772, Start Num: 6
Candidate Starts for Phrampa_255:
(Start: 6 @165233 has 5 MA's), (12, 165275), (20, 165344), (34, 165425), (36, 165434), (52, 165569), (57, 165626), (70, 165722),

Gene: Phrampa_230 Start: 155986, Stop: 156474, Start Num: 7
Candidate Starts for Phrampa_230:
(Start: 7 @155986 has 6 MA's), (27, 156136), (62, 156379), (64, 156394), (68, 156424),

Gene: Racecar_239 Start: 154856, Stop: 155338, Start Num: 7
Candidate Starts for Racecar_239:
(Start: 7 @154856 has 6 MA's), (17, 154946), (24, 154985), (35, 155063), (64, 155261),

Gene: ReginaGlobina_263 Start: 160788, Stop: 161357, Start Num: 5
Candidate Starts for ReginaGlobina_263:
(Start: 5 @160788 has 3 MA's), (11, 160815), (23, 160923), (46, 161073), (61, 161250),

Gene: Rockabye_275 Start: 162884, Stop: 163408, Start Num: 1
Candidate Starts for Rockabye_275:
(1, 162884), (4, 162893), (Start: 8 @162905 has 1 MA's), (19, 163010), (21, 163016), (45, 163163), (70, 163373),

Gene: SJReid_292 Start: 165814, Stop: 166293, Start Num: 10
Candidate Starts for SJReid_292:
(Start: 10 @165814 has 1 MA's), (18, 165898), (26, 165952), (29, 165970), (31, 165991), (41, 166030), (53, 166153),

Gene: SJReid_291 Start: 165299, Stop: 165817, Start Num: 8
Candidate Starts for SJReid_291:
(Start: 8 @165299 has 1 MA's), (14, 165344), (25, 165419), (33, 165479), (37, 165500), (44, 165548), (69, 165767),

Gene: Stewart25555_271 Start: 170304, Stop: 170723, Start Num: 16
Candidate Starts for Stewart25555_271:
(3, 170217), (Start: 8 @170235 has 1 MA's), (9, 170241), (15, 170295), (16, 170304), (29, 170391), (30, 170409), (32, 170421), (40, 170448), (50, 170541), (56, 170610), (65, 170658),

Gene: Talia1610_239 Start: 154886, Stop: 155368, Start Num: 7
Candidate Starts for Talia1610_239:
(Start: 7 @154886 has 6 MA's), (17, 154976), (24, 155015), (35, 155093), (64, 155291),

Gene: WaddleDee_234 Start: 158186, Stop: 158734, Start Num: 5
Candidate Starts for WaddleDee_234:
(Start: 5 @158186 has 3 MA's), (32, 158384), (42, 158432), (52, 158525), (58, 158609),

Gene: WaddleDee_251 Start: 164314, Stop: 164841, Start Num: 6

Candidate Starts for WaddleDee_251:
(Start: 6 @164314 has 5 MA's), (11, 164338), (28, 164458), (32, 164500), (49, 164605), (70, 164791),