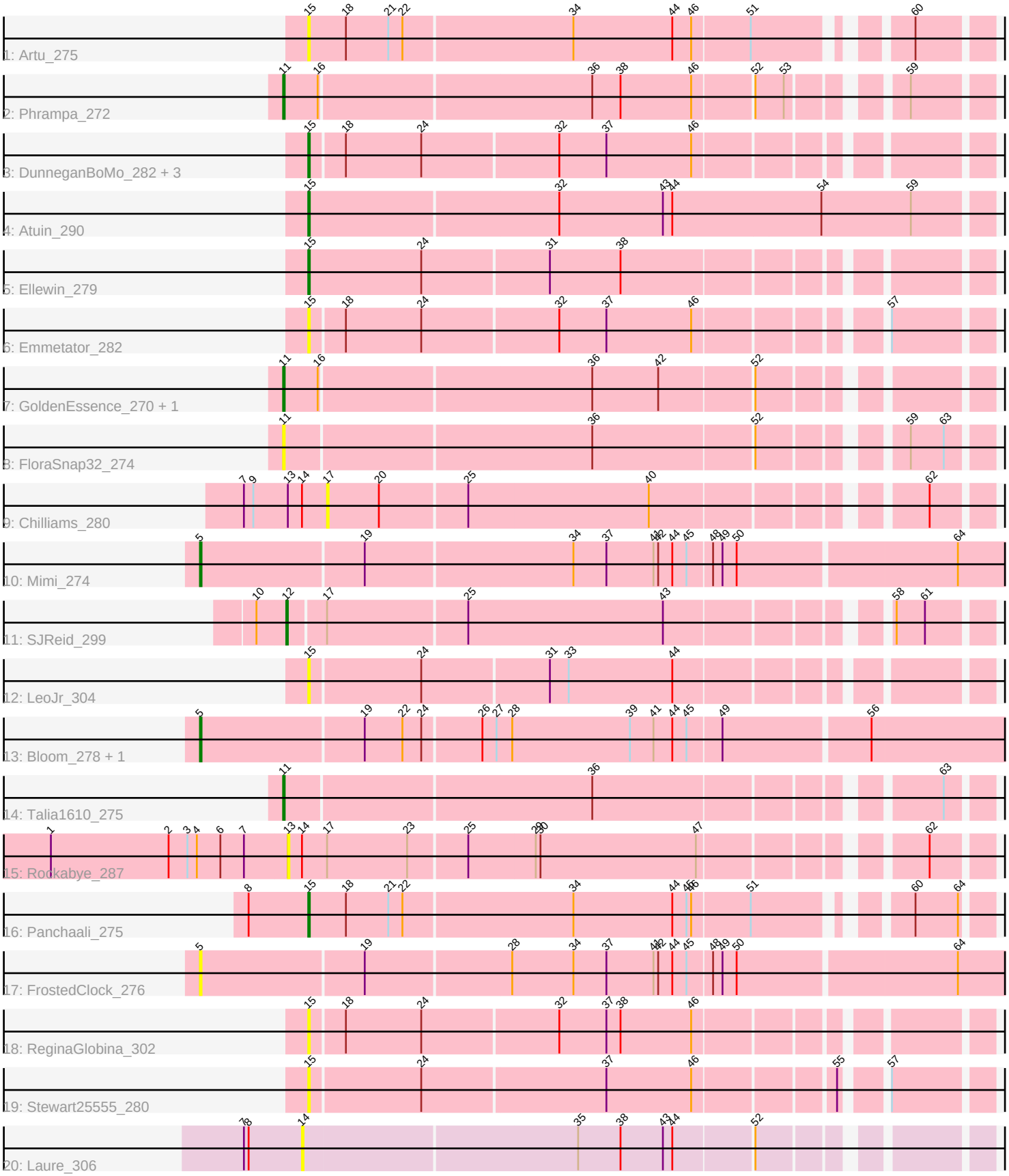
# Pham 309169


1: Artu_275
2: Phrampa_272
3: DunneganBoMo_282 + 3
4: Atuin_290
5: Ellewin_279
6: Emmetator_282
7: GoldenEssence_270 + 1
8: FloraSnap32_274
9: Chilliams_280
10: Mimi_274
11: SJReid_299
12: LeoJr_304
13: Bloom_278 + 1
14: Talia1610_275
15: Rockabye_287
16: Panchaali_275
17: FrostedClock_276
18: ReginaGlobina_302
19: Stewart25555_280
20: Laure_306

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 309169 Report

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

Pham number 309169 has 25 members, 13 are drafts.

Phages represented in each track:
• Track 1 : Artu_275
• Track 2 : Phrampa_272
• Track 3 : DunneganBoMo_282, KSunshine22_281, BooTeria_286, WaddleDee_278
• Track 4 : Atuin_290
• Track 5 : Ellewin_279
• Track 6 : Emmetator_282
• Track 7 : GoldenEssence_270, Racecar_277
• Track 8 : FloraSnap32_274
• Track 9 : Chilliams_280
• Track 10 : Mimi_274
• Track 11 : SJReid_299
• Track 12 : LeoJr_304
• Track 13 : Bloom_278, Patbob_275
• Track 14 : Talia1610_275
• Track 15 : Rockabye_287
• Track 16 : Panchaali_275
• Track 17 : FrostedClock_276
• Track 18 : ReginaGlobina_302
• Track 19 : Stewart25555_280
• Track 20 : Laure_306

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

The start number called the most often in the published annotations is 15, it was called in 5 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Artu_275, Atuin_290, BooTeria_286, DunneganBoMo_282, Ellewin_279, Emmetator_282, KSunshine22_281, LeoJr_304, Panchaali_275, ReginaGlobina_302, Stewart25555_280, WaddleDee_278,

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

Genes that do not have the "Most Annotated" start:
• Bloom_278, Chilliams_280, FloraSnap32_274, FrostedClock_276, GoldenEssence_270, Laure_306, Mimi_274, Patbob_275, Phrampa_272, Racecar_277, Rockabye_287, SJReid_299, Talia1610_275,

**Summary by start number:**

Start 5:
• Found in 4 of 25 ( 16.0% ) of genes in pham
• Manual Annotations of this start: 2 of 12
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bloom_278 (FC), FrostedClock_276 (FC), Mimi_274 (FC), Patbob_275 (FC),

Start 11:
• Found in 5 of 25 ( 20.0% ) of genes in pham
• Manual Annotations of this start: 4 of 12
• Called 100.0% of time when present
• Phage (with cluster) where this start called: FloraSnap32_274 (FC), GoldenEssence_270 (FC), Phrampa_272 (FC), Racecar_277 (FC), Talia1610_275 (FC),

Start 12:
• Found in 1 of 25 ( 4.0% ) of genes in pham
• Manual Annotations of this start: 1 of 12
• Called 100.0% of time when present
• Phage (with cluster) where this start called: SJReid_299 (FC),

Start 13:
• Found in 2 of 25 ( 8.0% ) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Rockabye_287 (FC),

Start 14:
• Found in 3 of 25 ( 12.0% ) of genes in pham
• No Manual Annotations of this start.
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Laure_306 (UNK),

Start 15:
• Found in 12 of 25 ( 48.0% ) of genes in pham
• Manual Annotations of this start: 5 of 12
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Artu_275 (FC), Atuin_290 (FC), BooTeria_286 (FC), DunneganBoMo_282 (FC), Ellewin_279 (FC), Emmetator_282 (FC), KSunshine22_281 (FC), LeoJr_304 (FC), Panchaali_275 (FC), ReginaGlobina_302 (FC), Stewart25555_280 (FC), WaddleDee_278 (FC),

Start 17:
• Found in 3 of 25 ( 12.0% ) of genes in pham
• No Manual Annotations of this start.
• Called 33.3% of time when present

• Phage (with cluster) where this start called: Chilliams_280 (FC),

**Summary by clusters:**

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

Info for manual annotations of cluster FC:
•Start number 5 was manually annotated 2 times for cluster FC.
•Start number 11 was manually annotated 4 times for cluster FC.
•Start number 12 was manually annotated 1 time for cluster FC.
•Start number 15 was manually annotated 5 times for cluster FC.

***Gene Information:***

Gene: Artu_275 Start: 174395, Stop: 174793, Start Num: 15
Candidate Starts for Artu_275:
(Start: 15 @174395 has 5 MA's), (18, 174419), (21, 174446), (22, 174455), (34, 174560), (44, 174623), (46, 174635), (51, 174671), (60, 174749),

Gene: Atuin_290 Start: 172986, Stop: 173411, Start Num: 15
Candidate Starts for Atuin_290:
(Start: 15 @172986 has 5 MA's), (32, 173142), (43, 173208), (44, 173214), (54, 173307), (59, 173364),

Gene: Bloom_278 Start: 169076, Stop: 169582, Start Num: 5
Candidate Starts for Bloom_278:
(Start: 5 @169076 has 2 MA's), (19, 169178), (22, 169202), (24, 169214), (26, 169250), (27, 169259), (28, 169268), (39, 169343), (41, 169358), (44, 169370), (45, 169379), (49, 169400), (56, 169490),

Gene: BooTeria_286 Start: 173692, Stop: 174090, Start Num: 15
Candidate Starts for BooTeria_286:
(Start: 15 @173692 has 5 MA's), (18, 173713), (24, 173761), (32, 173845), (37, 173875), (46, 173929),

Gene: Chilliams_280 Start: 167840, Stop: 168226, Start Num: 17
Candidate Starts for Chilliams_280:
(7, 167789), (9, 167795), (13, 167816), (14, 167825), (17, 167840), (20, 167873), (25, 167927), (40, 168041), (62, 168191),

Gene: DunneganBoMo_282 Start: 174194, Stop: 174592, Start Num: 15
Candidate Starts for DunneganBoMo_282:
(Start: 15 @174194 has 5 MA's), (18, 174215), (24, 174263), (32, 174347), (37, 174377), (46, 174431),

Gene: Ellewin_279 Start: 173573, Stop: 173974, Start Num: 15
Candidate Starts for Ellewin_279:
(Start: 15 @173573 has 5 MA's), (24, 173645), (31, 173723), (38, 173768),

Gene: Emmetator_282 Start: 173494, Stop: 173892, Start Num: 15
Candidate Starts for Emmetator_282:
(Start: 15 @173494 has 5 MA's), (18, 173515), (24, 173563), (32, 173647), (37, 173677), (46, 173731), (57, 173833),

Gene: FloraSnap32_274 Start: 169843, Stop: 170253, Start Num: 11
Candidate Starts for FloraSnap32_274:
(Start: 11 @169843 has 4 MA's), (36, 170032), (52, 170131), (59, 170206), (63, 170227),

Gene: FrostedClock_276 Start: 169569, Stop: 170081, Start Num: 5
Candidate Starts for FrostedClock_276:
(Start: 5 @169569 has 2 MA's), (19, 169671), (28, 169761), (34, 169800), (37, 169821), (41, 169851), (42, 169854), (44, 169863), (45, 169872), (48, 169887), (49, 169893), (50, 169902), (64, 170037),

Gene: GoldenEssence_270 Start: 166279, Stop: 166689, Start Num: 11
Candidate Starts for GoldenEssence_270:
(Start: 11 @166279 has 4 MA's), (16, 166300), (36, 166468), (42, 166510), (52, 166567),

Gene: KSunshine22_281 Start: 172412, Stop: 172810, Start Num: 15
Candidate Starts for KSunshine22_281:
(Start: 15 @172412 has 5 MA's), (18, 172433), (24, 172481), (32, 172565), (37, 172595), (46, 172649),

Gene: Laure_306 Start: 164467, Stop: 164868, Start Num: 14
Candidate Starts for Laure_306:
(7, 164431), (8, 164434), (14, 164467), (35, 164638), (38, 164665), (43, 164692), (44, 164698), (52, 164746),

Gene: LeoJr_304 Start: 173401, Stop: 173799, Start Num: 15
Candidate Starts for LeoJr_304:
(Start: 15 @173401 has 5 MA's), (24, 173470), (31, 173548), (33, 173560), (44, 173626),

Gene: Mimi_274 Start: 168451, Stop: 168963, Start Num: 5
Candidate Starts for Mimi_274:
(Start: 5 @168451 has 2 MA's), (19, 168553), (34, 168682), (37, 168703), (41, 168733), (42, 168736), (44, 168745), (45, 168754), (48, 168769), (49, 168775), (50, 168784), (64, 168919),

Gene: Panchaali_275 Start: 174205, Stop: 174603, Start Num: 15
Candidate Starts for Panchaali_275:
(8, 174172), (Start: 15 @174205 has 5 MA's), (18, 174229), (21, 174256), (22, 174265), (34, 174370), (44, 174433), (45, 174442), (46, 174445), (51, 174481), (60, 174559), (64, 174586),

Gene: Patbob_275 Start: 171060, Stop: 171566, Start Num: 5
Candidate Starts for Patbob_275:
(Start: 5 @171060 has 2 MA's), (19, 171162), (22, 171186), (24, 171198), (26, 171234), (27, 171243), (28, 171252), (39, 171327), (41, 171342), (44, 171354), (45, 171363), (49, 171384), (56, 171474),

Gene: Phrampa_272 Start: 171981, Stop: 172391, Start Num: 11
Candidate Starts for Phrampa_272:
(Start: 11 @171981 has 4 MA's), (16, 172002), (36, 172170), (38, 172188), (46, 172233), (52, 172269), (53, 172287), (59, 172344),

Gene: Racecar_277 Start: 169373, Stop: 169783, Start Num: 11
Candidate Starts for Racecar_277:
(Start: 11 @169373 has 4 MA's), (16, 169394), (36, 169562), (42, 169604), (52, 169661),

Gene: ReginaGlobina_302 Start: 173539, Stop: 173937, Start Num: 15
Candidate Starts for ReginaGlobina_302:

(Start: 15 @173539 has 5 MA's), (18, 173560), (24, 173608), (32, 173692), (37, 173722), (38, 173731), (46, 173776),

Gene: Rockabye_287 Start: 167857, Stop: 168267, Start Num: 13
Candidate Starts for Rockabye_287:
(1, 167707), (2, 167782), (3, 167794), (4, 167800), (6, 167815), (7, 167830), (13, 167857), (14, 167866), (17, 167881), (23, 167932), (25, 167968), (29, 168010), (30, 168013), (47, 168112), (62, 168232),

Gene: SJReid_299 Start: 169164, Stop: 169571, Start Num: 12
Candidate Starts for SJReid_299:
(10, 169146), (Start: 12 @169164 has 1 MA's), (17, 169185), (25, 169272), (43, 169395), (58, 169515), (61, 169533),

Gene: Stewart25555_280 Start: 173155, Stop: 173553, Start Num: 15
Candidate Starts for Stewart25555_280:
(Start: 15 @173155 has 5 MA's), (24, 173224), (37, 173338), (46, 173392), (55, 173473), (57, 173494),

Gene: Talia1610_275 Start: 170280, Stop: 170690, Start Num: 11
Candidate Starts for Talia1610_275:
(Start: 11 @170280 has 4 MA's), (36, 170469), (63, 170664),

Gene: WaddleDee_278 Start: 172978, Stop: 173376, Start Num: 15
Candidate Starts for WaddleDee_278:
(Start: 15 @172978 has 5 MA's), (18, 172999), (24, 173047), (32, 173131), (37, 173161), (46, 173215),