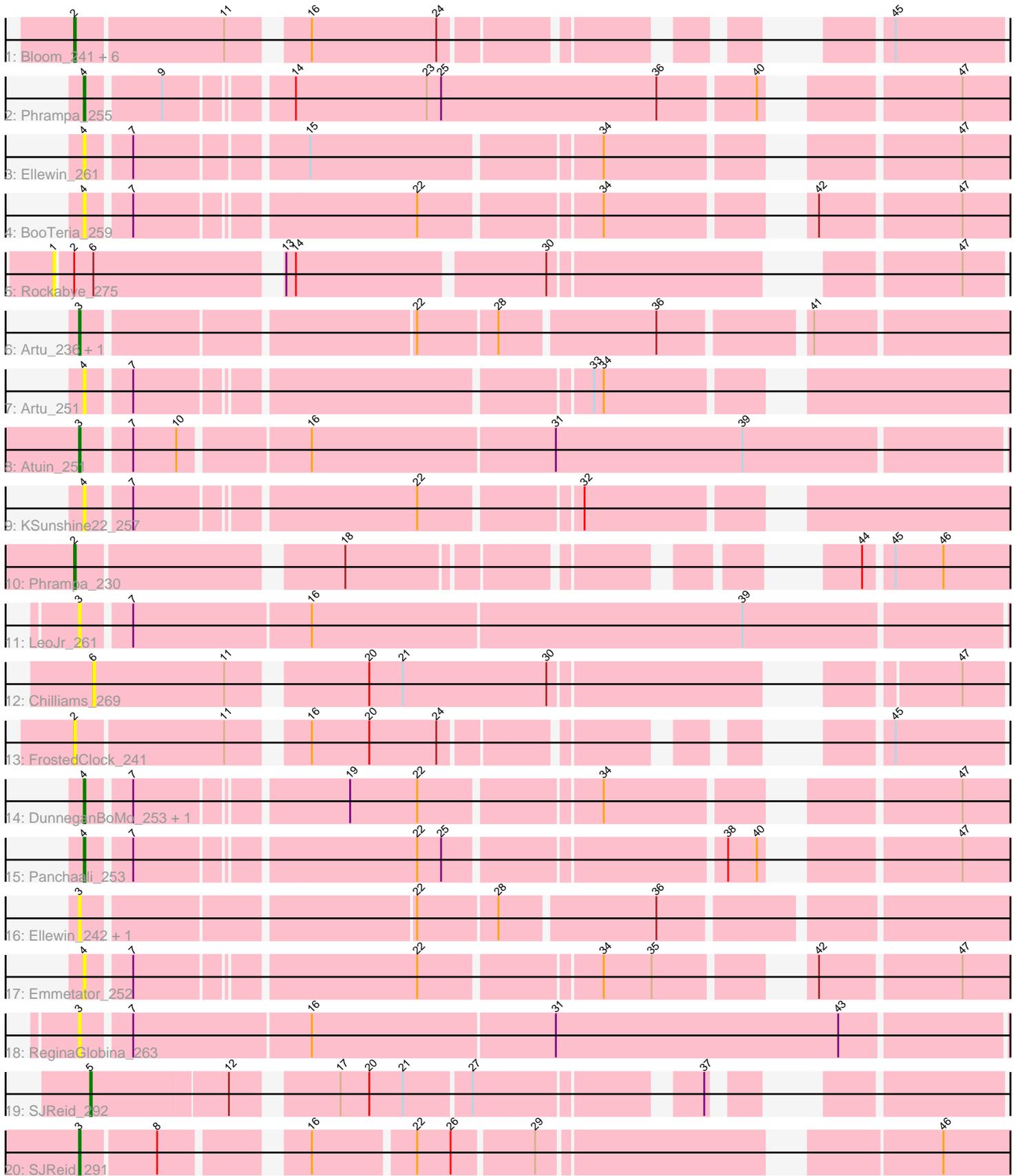


Pham 291420



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 291420 Report

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

Pham number 291420 has 29 members, 15 are drafts.

Phages represented in each track:

- Track 1 : Bloom\_241, Racecar\_239, Mimi\_237, Talia1610\_239, FloraSnap32\_234, Patbob\_235, GoldenEssence\_226
- Track 2 : Phrampa\_255
- Track 3 : Ellewin\_261
- Track 4 : BooTeria\_259
- Track 5 : Rockabye\_275
- Track 6 : Artu\_236, WaddleDee\_234
- Track 7 : Artu\_251
- Track 8 : Atuin\_251
- Track 9 : KSunshine22\_257
- Track 10 : Phrampa\_230
- Track 11 : LeoJr\_261
- Track 12 : Chilliams\_269
- Track 13 : FrostedClock\_241
- Track 14 : DunneganBoMo\_253, WaddleDee\_251
- Track 15 : Panchaali\_253
- Track 16 : Ellewin\_242, KSunshine22\_242
- Track 17 : Emmetator\_252
- Track 18 : ReginaGlobina\_263
- Track 19 : SJReid\_292
- Track 20 : 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 2, it was called in 6 of the 14 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:

- Rockabye\_275,

Genes that do not have the "Most Annotated" start:

- Artu\_236, Artu\_251, Atuin\_251, BooTeria\_259, Chilliams\_269, DunneganBoMo\_253, Ellewin\_242, Ellewin\_261, Emmetator\_252, KSunshine22\_242, KSunshine22\_257, LeoJr\_261, Panchaali\_253, Phrampa\_255, ReginaGlobina\_263, SJReid\_291, SJReid\_292, WaddleDee\_234, WaddleDee\_251,

### Summary by start number:

Start 1:

- Found in 1 of 29 ( 3.4% ) 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 10 of 29 ( 34.5% ) of genes in pham
- Manual Annotations of this start: 6 of 14
- Called 90.0% 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 3:

- Found in 8 of 29 ( 27.6% ) of genes in pham
- Manual Annotations of this start: 3 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Artu\_236 (FC), Atuin\_251 (FC), Ellewin\_242 (FC), KSunshine22\_242 (FC), LeoJr\_261 (FC), ReginaGlobina\_263 (FC), SJReid\_291 (FC), WaddleDee\_234 (FC),

Start 4:

- Found in 9 of 29 ( 31.0% ) of genes in pham
- Manual Annotations of this start: 4 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Artu\_251 (FC), BooTeria\_259 (FC), DunneganBoMo\_253 (FC), Ellewin\_261 (FC), Emmetator\_252 (FC), KSunshine22\_257 (FC), Panchaali\_253 (FC), Phrampa\_255 (FC), WaddleDee\_251 (FC),

Start 5:

- Found in 1 of 29 ( 3.4% ) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: SJReid\_292 (FC),

Start 6:

- Found in 2 of 29 ( 6.9% ) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Chilliams\_269 (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 6 times for cluster FC.
- Start number 3 was manually annotated 3 times for cluster FC.
- Start number 4 was manually annotated 4 times for cluster FC.
- Start number 5 was manually annotated 1 time for cluster FC.

**Gene Information:**

Gene: Artu\_236 Start: 160052, Stop: 160594, Start Num: 3

Candidate Starts for Artu\_236:

(Start: 3 @160052 has 3 MA's), (22, 160244), (28, 160292), (36, 160385), (41, 160469),

Gene: Artu\_251 Start: 166105, Stop: 166638, Start Num: 4

Candidate Starts for Artu\_251:

(Start: 4 @166105 has 4 MA's), (7, 166129), (33, 166390), (34, 166396),

Gene: Atuin\_251 Start: 160201, Stop: 160764, Start Num: 3

Candidate Starts for Atuin\_251:

(Start: 3 @160201 has 3 MA's), (7, 160228), (10, 160255), (16, 160330), (31, 160480), (39, 160597),

Gene: Bloom\_241 Start: 155102, Stop: 155584, Start Num: 2

Candidate Starts for Bloom\_241:

(Start: 2 @155102 has 6 MA's), (11, 155192), (16, 155231), (24, 155309), (45, 155507),

Gene: BooTeria\_259 Start: 164825, Stop: 165352, Start Num: 4

Candidate Starts for BooTeria\_259:

(Start: 4 @164825 has 4 MA's), (7, 164849), (22, 165011), (34, 165116), (42, 165218), (47, 165302),

Gene: Chilliams\_269 Start: 162893, Stop: 163402, Start Num: 6

Candidate Starts for Chilliams\_269:

(6, 162893), (11, 162974), (20, 163049), (21, 163070), (30, 163160), (47, 163367),

Gene: DunneganBoMo\_253 Start: 164781, Stop: 165308, Start Num: 4

Candidate Starts for DunneganBoMo\_253:

(Start: 4 @164781 has 4 MA's), (7, 164805), (19, 164925), (22, 164967), (34, 165072), (47, 165258),

Gene: Ellewin\_261 Start: 165533, Stop: 166063, Start Num: 4

Candidate Starts for Ellewin\_261:

(Start: 4 @165533 has 4 MA's), (7, 165557), (15, 165656), (34, 165827), (47, 166013),

Gene: Ellewin\_242 Start: 158200, Stop: 158742, Start Num: 3

Candidate Starts for Ellewin\_242:

(Start: 3 @158200 has 3 MA's), (22, 158392), (28, 158440), (36, 158533),

Gene: Emmetator\_252 Start: 163707, Stop: 164234, Start Num: 4

Candidate Starts for Emmetator\_252:

(Start: 4 @163707 has 4 MA's), (7, 163731), (22, 163893), (34, 163998), (35, 164028), (42, 164100), (47, 164184),

Gene: FloraSnap32\_234 Start: 153261, Stop: 153743, Start Num: 2  
Candidate Starts for FloraSnap32\_234:  
(Start: 2 @153261 has 6 MA's), (11, 153351), (16, 153390), (24, 153468), (45, 153666),

Gene: FrostedClock\_241 Start: 155246, Stop: 155728, Start Num: 2  
Candidate Starts for FrostedClock\_241:  
(Start: 2 @155246 has 6 MA's), (11, 155336), (16, 155375), (20, 155411), (24, 155453), (45, 155651),

Gene: GoldenEssence\_226 Start: 149079, Stop: 149561, Start Num: 2  
Candidate Starts for GoldenEssence\_226:  
(Start: 2 @149079 has 6 MA's), (11, 149169), (16, 149208), (24, 149286), (45, 149484),

Gene: KSunshine22\_257 Start: 164108, Stop: 164641, Start Num: 4  
Candidate Starts for KSunshine22\_257:  
(Start: 4 @164108 has 4 MA's), (7, 164132), (22, 164294), (32, 164387),

Gene: KSunshine22\_242 Start: 158057, Stop: 158599, Start Num: 3  
Candidate Starts for KSunshine22\_242:  
(Start: 3 @158057 has 3 MA's), (22, 158249), (28, 158297), (36, 158390),

Gene: LeoJr\_261 Start: 159582, Stop: 160151, Start Num: 3  
Candidate Starts for LeoJr\_261:  
(Start: 3 @159582 has 3 MA's), (7, 159609), (16, 159717), (39, 159984),

Gene: Mimi\_237 Start: 154477, Stop: 154959, Start Num: 2  
Candidate Starts for Mimi\_237:  
(Start: 2 @154477 has 6 MA's), (11, 154567), (16, 154606), (24, 154684), (45, 154882),

Gene: Panchaali\_253 Start: 165838, Stop: 166365, Start Num: 4  
Candidate Starts for Panchaali\_253:  
(Start: 4 @165838 has 4 MA's), (7, 165862), (22, 166024), (25, 166039), (38, 166201), (40, 166219),  
(47, 166315),

Gene: Patbob\_235 Start: 154874, Stop: 155356, Start Num: 2  
Candidate Starts for Patbob\_235:  
(Start: 2 @154874 has 6 MA's), (11, 154964), (16, 155003), (24, 155081), (45, 155279),

Gene: Phrampa\_255 Start: 165233, Stop: 165772, Start Num: 4  
Candidate Starts for Phrampa\_255:  
(Start: 4 @165233 has 4 MA's), (9, 165275), (14, 165344), (23, 165425), (25, 165434), (36, 165569),  
(40, 165626), (47, 165722),

Gene: Phrampa\_230 Start: 155986, Stop: 156474, Start Num: 2  
Candidate Starts for Phrampa\_230:  
(Start: 2 @155986 has 6 MA's), (18, 156136), (44, 156379), (45, 156394), (46, 156424),

Gene: Racecar\_239 Start: 154856, Stop: 155338, Start Num: 2  
Candidate Starts for Racecar\_239:  
(Start: 2 @154856 has 6 MA's), (11, 154946), (16, 154985), (24, 155063), (45, 155261),

Gene: ReginaGlobina\_263 Start: 160788, Stop: 161357, Start Num: 3  
Candidate Starts for ReginaGlobina\_263:  
(Start: 3 @160788 has 3 MA's), (7, 160815), (16, 160923), (31, 161073), (43, 161250),

Gene: Rockabye\_275 Start: 162884, Stop: 163408, Start Num: 1

Candidate Starts for Rockabye\_275:

(1, 162884), (Start: 2 @162893 has 6 MA's), (6, 162905), (13, 163010), (14, 163016), (30, 163163), (47, 163373),

Gene: SJReid\_292 Start: 165814, Stop: 166293, Start Num: 5

Candidate Starts for SJReid\_292:

(Start: 5 @165814 has 1 MA's), (12, 165898), (17, 165952), (20, 165970), (21, 165991), (27, 166030), (37, 166153),

Gene: SJReid\_291 Start: 165299, Stop: 165817, Start Num: 3

Candidate Starts for SJReid\_291:

(Start: 3 @165299 has 3 MA's), (8, 165344), (16, 165419), (22, 165479), (26, 165500), (29, 165548), (46, 165767),

Gene: Talia1610\_239 Start: 154886, Stop: 155368, Start Num: 2

Candidate Starts for Talia1610\_239:

(Start: 2 @154886 has 6 MA's), (11, 154976), (16, 155015), (24, 155093), (45, 155291),

Gene: WaddleDee\_234 Start: 158186, Stop: 158734, Start Num: 3

Candidate Starts for WaddleDee\_234:

(Start: 3 @158186 has 3 MA's), (22, 158384), (28, 158432), (36, 158525), (41, 158609),

Gene: WaddleDee\_251 Start: 164314, Stop: 164841, Start Num: 4

Candidate Starts for WaddleDee\_251:

(Start: 4 @164314 has 4 MA's), (7, 164338), (19, 164458), (22, 164500), (34, 164605), (47, 164791),