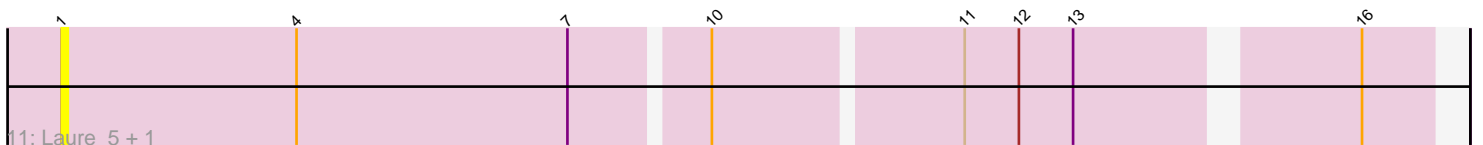
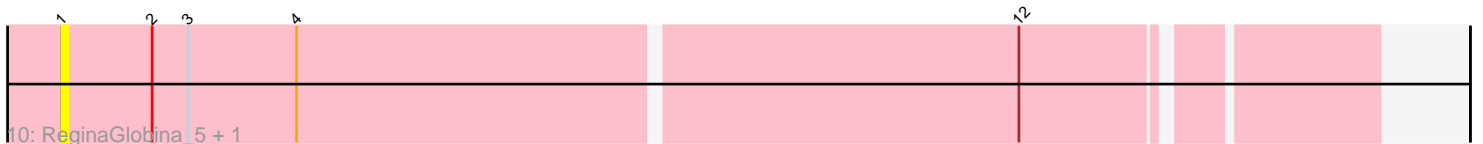
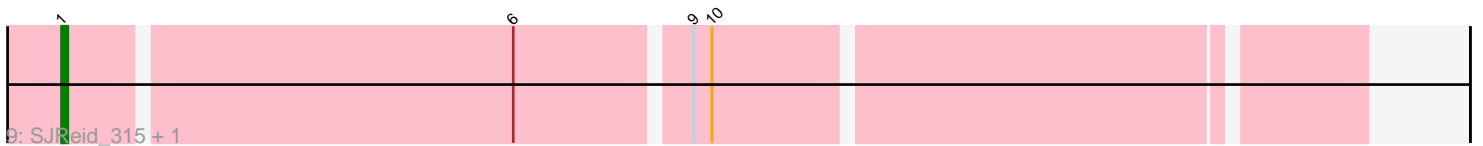
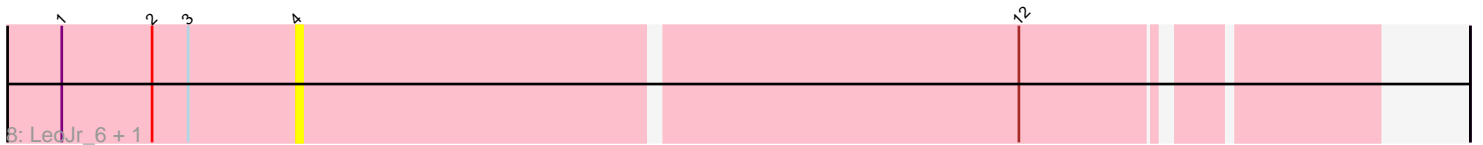
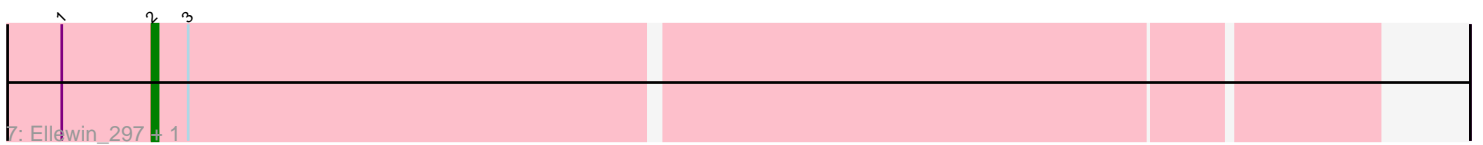
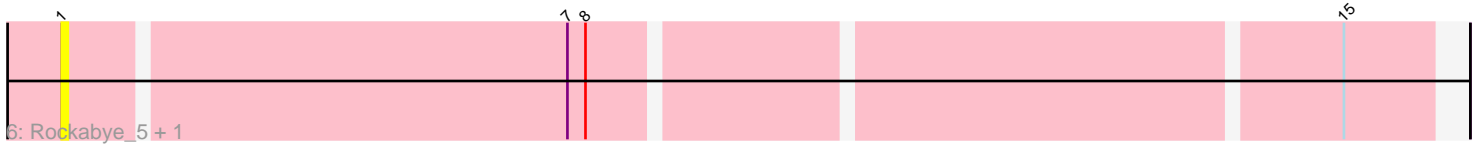
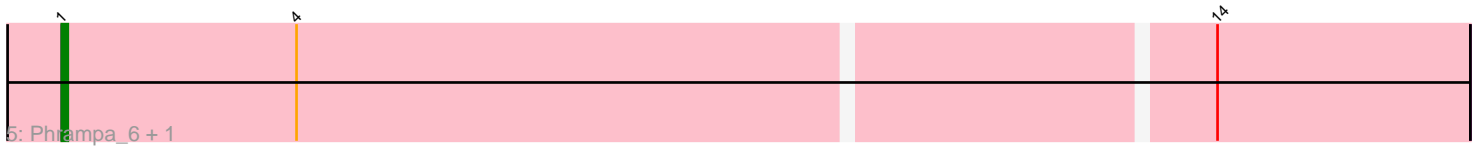
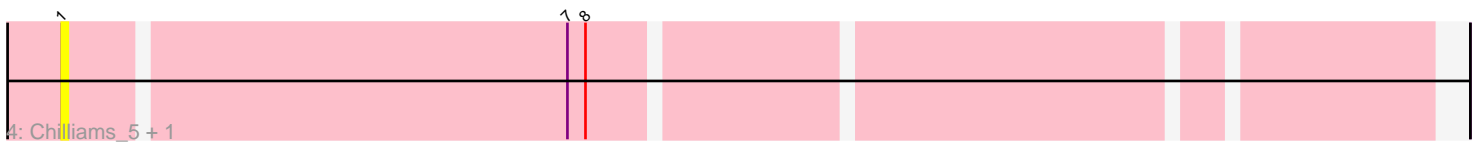
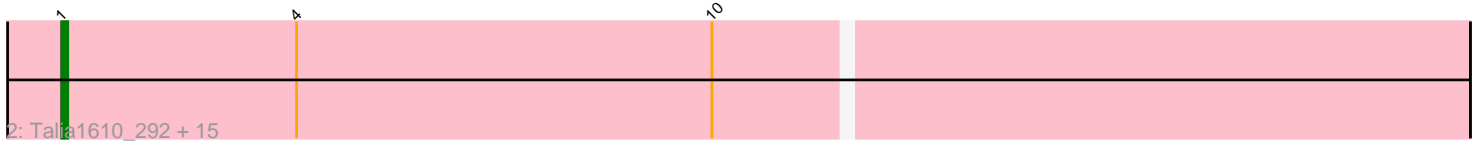
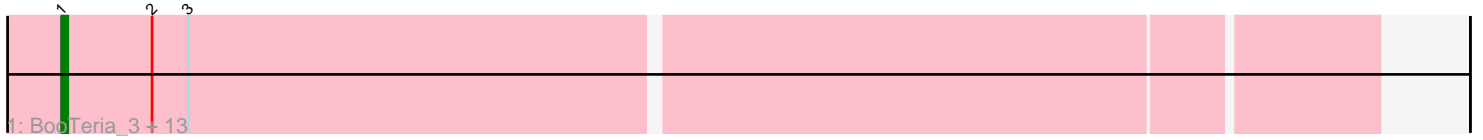


Pham 305105



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 305105 Report

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

Pham number 305105 has 47 members, 25 are drafts.

Phages represented in each track:

- Track 1 : BooTeria\_3, WaddleDee\_3, Panchaali\_292, Artu\_291, Emmetator\_297, Artu\_4, KSunshine22\_297, KSunshine22\_5, Emmetator\_3, BooTeria\_302, DunneganBoMo\_298, DunneganBoMo\_3, WaddleDee\_294, Panchaali\_5
- Track 2 : Talia1610\_292, FloraSnap32\_291, Mimi\_6, Patbob\_6, FloraSnap32\_6, GoldenEssence\_6, Racecar\_6, GoldenEssence\_287, Bloom\_293, Racecar\_295, Talia1610\_6, FrostedClock\_6, Mimi\_291, FrostedClock\_291, Bloom\_6, Patbob\_292
- Track 3 : Stewart25555\_4
- Track 4 : Chilliams\_5, Chilliams\_296
- Track 5 : Phrampa\_6, Phrampa\_290
- Track 6 : Rockabye\_5, Rockabye\_304
- Track 7 : Ellewin\_297, Ellewin\_4
- Track 8 : LeoJr\_6, LeoJr\_319
- Track 9 : SJReid\_315, SJReid\_6
- Track 10 : ReginaGlobina\_5, ReginaGlobina\_316
- Track 11 : Laure\_5, Laure\_323

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

The start number called the most often in the published annotations is 1, it was called in 20 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Artu\_291, Artu\_4, Bloom\_293, Bloom\_6, BooTeria\_3, BooTeria\_302, Chilliams\_296, Chilliams\_5, DunneganBoMo\_298, DunneganBoMo\_3, Emmetator\_297, Emmetator\_3, FloraSnap32\_291, FloraSnap32\_6, FrostedClock\_291, FrostedClock\_6, GoldenEssence\_287, GoldenEssence\_6, KSunshine22\_297, KSunshine22\_5, Laure\_323, Laure\_5, Mimi\_291, Mimi\_6, Panchaali\_292, Panchaali\_5, Patbob\_292, Patbob\_6, Phrampa\_290, Phrampa\_6, Racecar\_295, Racecar\_6, ReginaGlobina\_316, ReginaGlobina\_5, Rockabye\_304, Rockabye\_5, SJReid\_315, SJReid\_6, Talia1610\_292, Talia1610\_6, WaddleDee\_294, WaddleDee\_3,

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

- Ellewin\_297, Ellewin\_4, LeoJr\_319, LeoJr\_6, Stewart25555\_4,

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

- 

### Summary by start number:

Start 1:

- Found in 47 of 47 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 20 of 22
- Called 89.4% of time when present
- Phage (with cluster) where this start called: Artu\_291 (FC), Artu\_4 (FC), Bloom\_293 (FC), Bloom\_6 (FC), BooTeria\_3 (FC), BooTeria\_302 (FC), Chilliams\_296 (FC), Chilliams\_5 (FC), DunneganBoMo\_298 (FC), DunneganBoMo\_3 (FC), Emmetator\_297 (FC), Emmetator\_3 (FC), FloraSnap32\_291 (FC), FloraSnap32\_6 (FC), FrostedClock\_291 (FC), FrostedClock\_6 (FC), GoldenEssence\_287 (FC), GoldenEssence\_6 (FC), KSunshine22\_297 (FC), KSunshine22\_5 (FC), Laure\_323 (UNK), Laure\_5 (UNK), Mimi\_291 (FC), Mimi\_6 (FC), Panchaali\_292 (FC), Panchaali\_5 (FC), Patbob\_292 (FC), Patbob\_6 (FC), Phrampa\_290 (FC), Phrampa\_6 (FC), Racecar\_295 (FC), Racecar\_6 (FC), ReginaGlobina\_316 (FC), ReginaGlobina\_5 (FC), Rockabye\_304 (FC), Rockabye\_5 (FC), SJReid\_315 (FC), SJReid\_6 (FC), Talia1610\_292 (FC), Talia1610\_6 (FC), WaddleDee\_294 (FC), WaddleDee\_3 (FC),

Start 2:

- Found in 21 of 47 ( 44.7% ) of genes in pham
- Manual Annotations of this start: 2 of 22
- Called 9.5% of time when present
- Phage (with cluster) where this start called: Ellewin\_297 (FC), Ellewin\_4 (FC),

Start 4:

- Found in 24 of 47 ( 51.1% ) of genes in pham
- No Manual Annotations of this start.
- Called 8.3% of time when present
- Phage (with cluster) where this start called: LeoJr\_319 (FC), LeoJr\_6 (FC),

Start 5:

- Found in 1 of 47 ( 2.1% ) 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\_4 (FC),

### Summary by clusters:

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

Info for manual annotations of cluster FC:

- Start number 1 was manually annotated 20 times for cluster FC.
- Start number 2 was manually annotated 2 times for cluster FC.

### Gene Information:

Gene: Artu\_291 Start: 181738, Stop: 181950, Start Num: 1  
Candidate Starts for Artu\_291:  
(Start: 1 @181738 has 20 MA's), (Start: 2 @181753 has 2 MA's), (3, 181759),

Gene: Artu\_4 Start: 2584, Stop: 2796, Start Num: 1  
Candidate Starts for Artu\_4:  
(Start: 1 @2584 has 20 MA's), (Start: 2 @2599 has 2 MA's), (3, 2605),

Gene: Bloom\_293 Start: 177165, Stop: 177395, Start Num: 1  
Candidate Starts for Bloom\_293:  
(Start: 1 @177165 has 20 MA's), (4, 177204), (10, 177273),

Gene: Bloom\_6 Start: 3690, Stop: 3920, Start Num: 1  
Candidate Starts for Bloom\_6:  
(Start: 1 @3690 has 20 MA's), (4, 3729), (10, 3798),

Gene: BooTeria\_3 Start: 2610, Stop: 2822, Start Num: 1  
Candidate Starts for BooTeria\_3:  
(Start: 1 @2610 has 20 MA's), (Start: 2 @2625 has 2 MA's), (3, 2631),

Gene: BooTeria\_302 Start: 181519, Stop: 181731, Start Num: 1  
Candidate Starts for BooTeria\_302:  
(Start: 1 @181519 has 20 MA's), (Start: 2 @181534 has 2 MA's), (3, 181540),

Gene: Chilliams\_5 Start: 3407, Stop: 3619, Start Num: 1  
Candidate Starts for Chilliams\_5:  
(Start: 1 @3407 has 20 MA's), (7, 3488), (8, 3491),

Gene: Chilliams\_296 Start: 176141, Stop: 176353, Start Num: 1  
Candidate Starts for Chilliams\_296:  
(Start: 1 @176141 has 20 MA's), (7, 176222), (8, 176225),

Gene: DunneganBoMo\_298 Start: 182022, Stop: 182234, Start Num: 1  
Candidate Starts for DunneganBoMo\_298:  
(Start: 1 @182022 has 20 MA's), (Start: 2 @182037 has 2 MA's), (3, 182043),

Gene: DunneganBoMo\_3 Start: 2610, Stop: 2822, Start Num: 1  
Candidate Starts for DunneganBoMo\_3:  
(Start: 1 @2610 has 20 MA's), (Start: 2 @2625 has 2 MA's), (3, 2631),

Gene: Ellewin\_297 Start: 181669, Stop: 181866, Start Num: 2  
Candidate Starts for Ellewin\_297:  
(Start: 1 @181654 has 20 MA's), (Start: 2 @181669 has 2 MA's), (3, 181675),

Gene: Ellewin\_4 Start: 2555, Stop: 2752, Start Num: 2  
Candidate Starts for Ellewin\_4:  
(Start: 1 @2540 has 20 MA's), (Start: 2 @2555 has 2 MA's), (3, 2561),

Gene: Emmetator\_297 Start: 181069, Stop: 181281, Start Num: 1  
Candidate Starts for Emmetator\_297:  
(Start: 1 @181069 has 20 MA's), (Start: 2 @181084 has 2 MA's), (3, 181090),

Gene: Emmetator\_3 Start: 2769, Stop: 2981, Start Num: 1

Candidate Starts for Emmetator\_3:

(Start: 1 @2769 has 20 MA's), (Start: 2 @2784 has 2 MA's), (3, 2790),

Gene: FloraSnap32\_291 Start: 177823, Stop: 178053, Start Num: 1

Candidate Starts for FloraSnap32\_291:

(Start: 1 @177823 has 20 MA's), (4, 177862), (10, 177931),

Gene: FloraSnap32\_6 Start: 3685, Stop: 3915, Start Num: 1

Candidate Starts for FloraSnap32\_6:

(Start: 1 @3685 has 20 MA's), (4, 3724), (10, 3793),

Gene: FrostedClock\_6 Start: 3629, Stop: 3859, Start Num: 1

Candidate Starts for FrostedClock\_6:

(Start: 1 @3629 has 20 MA's), (4, 3668), (10, 3737),

Gene: FrostedClock\_291 Start: 177429, Stop: 177659, Start Num: 1

Candidate Starts for FrostedClock\_291:

(Start: 1 @177429 has 20 MA's), (4, 177468), (10, 177537),

Gene: GoldenEssence\_6 Start: 3684, Stop: 3914, Start Num: 1

Candidate Starts for GoldenEssence\_6:

(Start: 1 @3684 has 20 MA's), (4, 3723), (10, 3792),

Gene: GoldenEssence\_287 Start: 174237, Stop: 174467, Start Num: 1

Candidate Starts for GoldenEssence\_287:

(Start: 1 @174237 has 20 MA's), (4, 174276), (10, 174345),

Gene: KSunshine22\_297 Start: 180101, Stop: 180313, Start Num: 1

Candidate Starts for KSunshine22\_297:

(Start: 1 @180101 has 20 MA's), (Start: 2 @180116 has 2 MA's), (3, 180122),

Gene: KSunshine22\_5 Start: 3200, Stop: 3412, Start Num: 1

Candidate Starts for KSunshine22\_5:

(Start: 1 @3200 has 20 MA's), (Start: 2 @3215 has 2 MA's), (3, 3221),

Gene: Laure\_5 Start: 3499, Stop: 3714, Start Num: 1

Candidate Starts for Laure\_5:

(Start: 1 @3499 has 20 MA's), (4, 3538), (7, 3583), (10, 3604), (11, 3643), (12, 3652), (13, 3661), (16, 3703),

Gene: Laure\_323 Start: 171847, Stop: 172062, Start Num: 1

Candidate Starts for Laure\_323:

(Start: 1 @171847 has 20 MA's), (4, 171886), (7, 171931), (10, 171952), (11, 171991), (12, 172000), (13, 172009), (16, 172051),

Gene: LeoJr\_6 Start: 3533, Stop: 3703, Start Num: 4

Candidate Starts for LeoJr\_6:

(Start: 1 @3494 has 20 MA's), (Start: 2 @3509 has 2 MA's), (3, 3515), (4, 3533), (12, 3650),

Gene: LeoJr\_319 Start: 180836, Stop: 181006, Start Num: 4

Candidate Starts for LeoJr\_319:

(Start: 1 @180797 has 20 MA's), (Start: 2 @180812 has 2 MA's), (3, 180818), (4, 180836), (12, 180953),

Gene: Mimi\_6 Start: 3626, Stop: 3856, Start Num: 1  
Candidate Starts for Mimi\_6:  
(Start: 1 @3626 has 20 MA's), (4, 3665), (10, 3734),

Gene: Mimi\_291 Start: 176286, Stop: 176516, Start Num: 1  
Candidate Starts for Mimi\_291:  
(Start: 1 @176286 has 20 MA's), (4, 176325), (10, 176394),

Gene: Panchaali\_292 Start: 181753, Stop: 181965, Start Num: 1  
Candidate Starts for Panchaali\_292:  
(Start: 1 @181753 has 20 MA's), (Start: 2 @181768 has 2 MA's), (3, 181774),

Gene: Panchaali\_5 Start: 2695, Stop: 2907, Start Num: 1  
Candidate Starts for Panchaali\_5:  
(Start: 1 @2695 has 20 MA's), (Start: 2 @2710 has 2 MA's), (3, 2716),

Gene: Patbob\_6 Start: 3732, Stop: 3962, Start Num: 1  
Candidate Starts for Patbob\_6:  
(Start: 1 @3732 has 20 MA's), (4, 3771), (10, 3840),

Gene: Patbob\_292 Start: 179191, Stop: 179421, Start Num: 1  
Candidate Starts for Patbob\_292:  
(Start: 1 @179191 has 20 MA's), (4, 179230), (10, 179299),

Gene: Phrampa\_6 Start: 3743, Stop: 3970, Start Num: 1  
Candidate Starts for Phrampa\_6:  
(Start: 1 @3743 has 20 MA's), (4, 3782), (14, 3929),

Gene: Phrampa\_290 Start: 180114, Stop: 180341, Start Num: 1  
Candidate Starts for Phrampa\_290:  
(Start: 1 @180114 has 20 MA's), (4, 180153), (14, 180300),

Gene: Racecar\_6 Start: 3687, Stop: 3917, Start Num: 1  
Candidate Starts for Racecar\_6:  
(Start: 1 @3687 has 20 MA's), (4, 3726), (10, 3795),

Gene: Racecar\_295 Start: 177396, Stop: 177626, Start Num: 1  
Candidate Starts for Racecar\_295:  
(Start: 1 @177396 has 20 MA's), (4, 177435), (10, 177504),

Gene: ReginaGlobina\_5 Start: 3341, Stop: 3550, Start Num: 1  
Candidate Starts for ReginaGlobina\_5:  
(Start: 1 @3341 has 20 MA's), (Start: 2 @3356 has 2 MA's), (3, 3362), (4, 3380), (12, 3497),

Gene: ReginaGlobina\_316 Start: 180788, Stop: 180997, Start Num: 1  
Candidate Starts for ReginaGlobina\_316:  
(Start: 1 @180788 has 20 MA's), (Start: 2 @180803 has 2 MA's), (3, 180809), (4, 180827), (12, 180944),

Gene: Rockabye\_5 Start: 3638, Stop: 3853, Start Num: 1  
Candidate Starts for Rockabye\_5:  
(Start: 1 @3638 has 20 MA's), (7, 3719), (8, 3722), (15, 3839),

Gene: Rockabye\_304 Start: 176251, Stop: 176466, Start Num: 1  
Candidate Starts for Rockabye\_304:  
(Start: 1 @176251 has 20 MA's), (7, 176332), (8, 176335), (15, 176452),

Gene: SJReid\_315 Start: 176749, Stop: 176952, Start Num: 1  
Candidate Starts for SJReid\_315:  
(Start: 1 @176749 has 20 MA's), (6, 176821), (9, 176848), (10, 176851),

Gene: SJReid\_6 Start: 3910, Stop: 4113, Start Num: 1  
Candidate Starts for SJReid\_6:  
(Start: 1 @3910 has 20 MA's), (6, 3982), (9, 4009), (10, 4012),

Gene: Stewart25555\_4 Start: 3266, Stop: 3433, Start Num: 5  
Candidate Starts for Stewart25555\_4:  
(Start: 1 @3224 has 20 MA's), (Start: 2 @3239 has 2 MA's), (3, 3245), (5, 3266), (12, 3377),

Gene: Talia1610\_292 Start: 178113, Stop: 178343, Start Num: 1  
Candidate Starts for Talia1610\_292:  
(Start: 1 @178113 has 20 MA's), (4, 178152), (10, 178221),

Gene: Talia1610\_6 Start: 3641, Stop: 3871, Start Num: 1  
Candidate Starts for Talia1610\_6:  
(Start: 1 @3641 has 20 MA's), (4, 3680), (10, 3749),

Gene: WaddleDee\_3 Start: 2610, Stop: 2822, Start Num: 1  
Candidate Starts for WaddleDee\_3:  
(Start: 1 @2610 has 20 MA's), (Start: 2 @2625 has 2 MA's), (3, 2631),

Gene: WaddleDee\_294 Start: 180805, Stop: 181017, Start Num: 1  
Candidate Starts for WaddleDee\_294:  
(Start: 1 @180805 has 20 MA's), (Start: 2 @180820 has 2 MA's), (3, 180826),