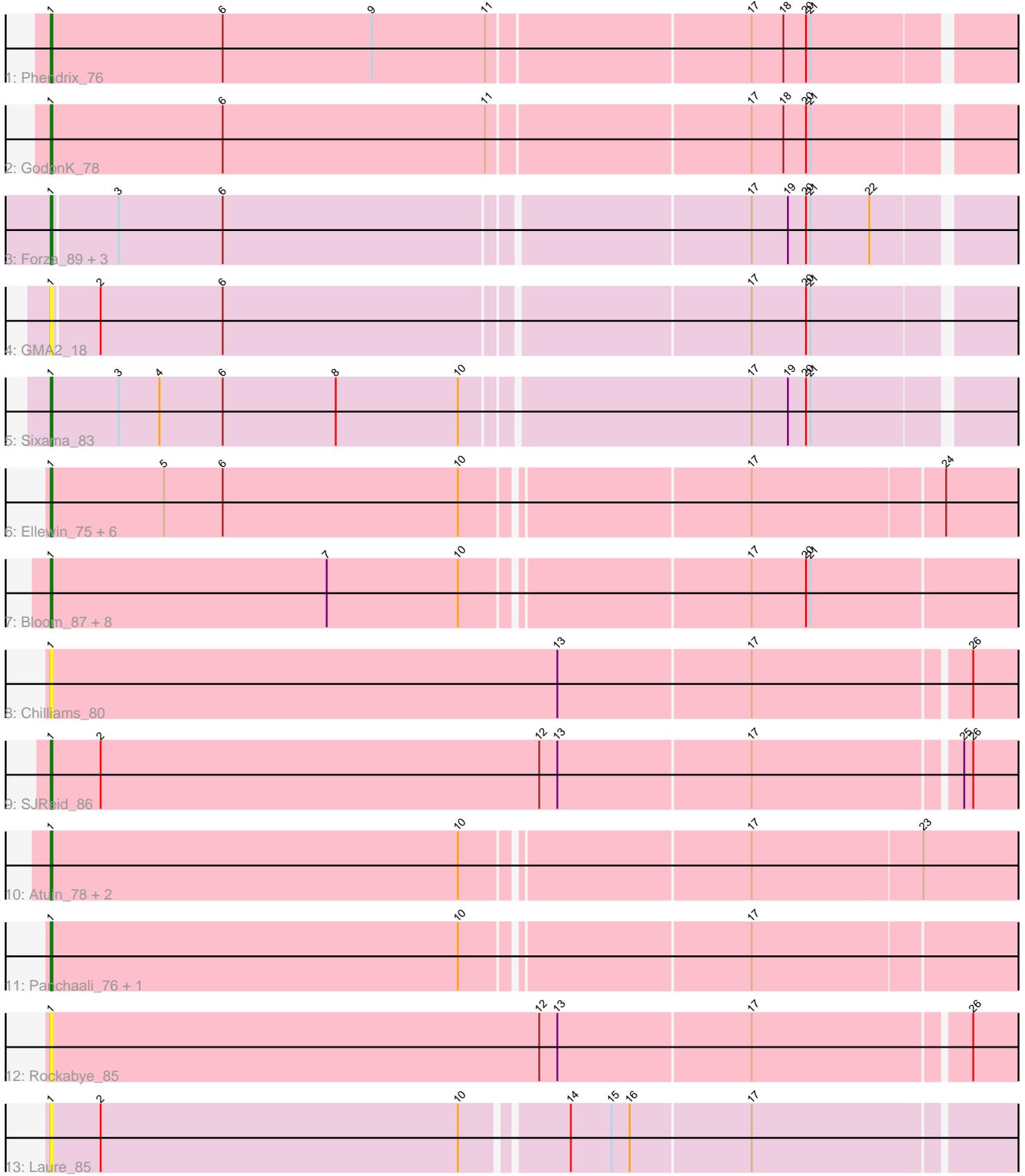


Pham 289605



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 289605 Report

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

Pham number 289605 has 33 members, 15 are drafts.

Phages represented in each track:

- Track 1 : Phendrix\_76
- Track 2 : GodonK\_78
- Track 3 : Forza\_89, Mareelih\_87, BlueNGold\_88, Boopy\_89
- Track 4 : GMA2\_18
- Track 5 : Sixama\_83
- Track 6 : Ellewin\_75, Emmetator\_76, KSunshine22\_78, Artu\_76, BooTeria\_80, WaddleDee\_71, DunneganBoMo\_73
- Track 7 : Bloom\_87, Mimi\_83, FrostedClock\_86, Patbob\_82, Phrampa\_75, FloraSnap32\_83, GoldenEssence\_69, Racecar\_84, Talia1610\_83
- Track 8 : Chilliams\_80
- Track 9 : SJReid\_86
- Track 10 : Atuin\_78, LeoJr\_83, ReginaGlobina\_83
- Track 11 : Panchaali\_76, Stewart25555\_74
- Track 12 : Rockabye\_85
- Track 13 : Laure\_85

### ***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 18 of the 18 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Artu\_76, Atuin\_78, Bloom\_87, BlueNGold\_88, BooTeria\_80, Boopy\_89, Chilliams\_80, DunneganBoMo\_73, Ellewin\_75, Emmetator\_76, FloraSnap32\_83, Forza\_89, FrostedClock\_86, GMA2\_18, GodonK\_78, GoldenEssence\_69, KSunshine22\_78, Laure\_85, LeoJr\_83, Mareelih\_87, Mimi\_83, Panchaali\_76, Patbob\_82, Phendrix\_76, Phrampa\_75, Racecar\_84, ReginaGlobina\_83, Rockabye\_85, SJReid\_86, Sixama\_83, Stewart25555\_74, Talia1610\_83, WaddleDee\_71,

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

- 

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

•

### Summary by start number:

Start 1:

- Found in 33 of 33 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 18 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Artu\_76 (FC), Atuin\_78 (FC), Bloom\_87 (FC), BlueNGold\_88 (DS), BooTeria\_80 (FC), Boopy\_89 (DS), Chilliams\_80 (FC), DunneganBoMo\_73 (FC), Ellewin\_75 (FC), Emmetator\_76 (FC), FloraSnap32\_83 (FC), Forza\_89 (DS), FrostedClock\_86 (FC), GMA2\_18 (DS), GodonK\_78 (DK), GoldenEssence\_69 (FC), KSunshine22\_78 (FC), Laure\_85 (UNK), LeoJr\_83 (FC), Mareelih\_87 (DS), Mimi\_83 (FC), Panchaali\_76 (FC), Patbob\_82 (FC), Phendrix\_76 (DK), Phrampa\_75 (FC), Racecar\_84 (FC), ReginaGlobina\_83 (FC), Rockabye\_85 (FC), SJReid\_86 (FC), Sixama\_83 (DS), Stewart25555\_74 (FC), Talia1610\_83 (FC), WaddleDee\_71 (FC),

### Summary by clusters:

There are 4 clusters represented in this pham: UNK, FC, DS, DK,

Info for manual annotations of cluster DK:

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

Info for manual annotations of cluster DS:

- Start number 1 was manually annotated 5 times for cluster DS.

Info for manual annotations of cluster FC:

- Start number 1 was manually annotated 11 times for cluster FC.

### Gene Information:

Gene: Artu\_76 Start: 47130, Stop: 47774, Start Num: 1

Candidate Starts for Artu\_76:

(Start: 1 @47130 has 18 MA's), (5, 47205), (6, 47244), (10, 47400), (17, 47580), (24, 47703),

Gene: Atuin\_78 Start: 49765, Stop: 50412, Start Num: 1

Candidate Starts for Atuin\_78:

(Start: 1 @49765 has 18 MA's), (10, 50035), (17, 50215), (23, 50326),

Gene: Bloom\_87 Start: 51166, Stop: 51822, Start Num: 1

Candidate Starts for Bloom\_87:

(Start: 1 @51166 has 18 MA's), (7, 51349), (10, 51436), (17, 51616), (20, 51652), (21, 51655),

Gene: BlueNGold\_88 Start: 44419, Stop: 45063, Start Num: 1

Candidate Starts for BlueNGold\_88:

(Start: 1 @44419 has 18 MA's), (3, 44461), (6, 44530), (17, 44866), (19, 44890), (20, 44902), (21, 44905), (22, 44944),

Gene: BooTeria\_80 Start: 47198, Stop: 47842, Start Num: 1  
Candidate Starts for BooTeria\_80:  
(Start: 1 @47198 has 18 MA's), (5, 47273), (6, 47312), (10, 47468), (17, 47648), (24, 47771),

Gene: Boopy\_89 Start: 44431, Stop: 45075, Start Num: 1  
Candidate Starts for Boopy\_89:  
(Start: 1 @44431 has 18 MA's), (3, 44473), (6, 44542), (17, 44878), (19, 44902), (20, 44914), (21, 44917), (22, 44956),

Gene: Chilliams\_80 Start: 52992, Stop: 53651, Start Num: 1  
Candidate Starts for Chilliams\_80:  
(Start: 1 @52992 has 18 MA's), (13, 53328), (17, 53454), (26, 53592),

Gene: DunneganBoMo\_73 Start: 46623, Stop: 47267, Start Num: 1  
Candidate Starts for DunneganBoMo\_73:  
(Start: 1 @46623 has 18 MA's), (5, 46698), (6, 46737), (10, 46893), (17, 47073), (24, 47196),

Gene: Ellewin\_75 Start: 46218, Stop: 46862, Start Num: 1  
Candidate Starts for Ellewin\_75:  
(Start: 1 @46218 has 18 MA's), (5, 46293), (6, 46332), (10, 46488), (17, 46668), (24, 46791),

Gene: Emmetator\_76 Start: 47370, Stop: 48014, Start Num: 1  
Candidate Starts for Emmetator\_76:  
(Start: 1 @47370 has 18 MA's), (5, 47445), (6, 47484), (10, 47640), (17, 47820), (24, 47943),

Gene: FloraSnap32\_83 Start: 50203, Stop: 50859, Start Num: 1  
Candidate Starts for FloraSnap32\_83:  
(Start: 1 @50203 has 18 MA's), (7, 50386), (10, 50473), (17, 50653), (20, 50689), (21, 50692),

Gene: Forza\_89 Start: 44347, Stop: 44991, Start Num: 1  
Candidate Starts for Forza\_89:  
(Start: 1 @44347 has 18 MA's), (3, 44389), (6, 44458), (17, 44794), (19, 44818), (20, 44830), (21, 44833), (22, 44872),

Gene: FrostedClock\_86 Start: 50654, Stop: 51310, Start Num: 1  
Candidate Starts for FrostedClock\_86:  
(Start: 1 @50654 has 18 MA's), (7, 50837), (10, 50924), (17, 51104), (20, 51140), (21, 51143),

Gene: GMA2\_18 Start: 17722, Stop: 18366, Start Num: 1  
Candidate Starts for GMA2\_18:  
(Start: 1 @17722 has 18 MA's), (2, 17752), (6, 17833), (17, 18169), (20, 18205), (21, 18208),

Gene: GodonK\_78 Start: 39164, Stop: 39817, Start Num: 1  
Candidate Starts for GodonK\_78:  
(Start: 1 @39164 has 18 MA's), (6, 39278), (11, 39452), (17, 39620), (18, 39641), (20, 39656), (21, 39659),

Gene: GoldenEssence\_69 Start: 44959, Stop: 45615, Start Num: 1  
Candidate Starts for GoldenEssence\_69:  
(Start: 1 @44959 has 18 MA's), (7, 45142), (10, 45229), (17, 45409), (20, 45445), (21, 45448),

Gene: KSunshine22\_78 Start: 47857, Stop: 48501, Start Num: 1  
Candidate Starts for KSunshine22\_78:

(Start: 1 @47857 has 18 MA's), (5, 47932), (6, 47971), (10, 48127), (17, 48307), (24, 48430),

Gene: Laure\_85 Start: 50750, Stop: 51394, Start Num: 1

Candidate Starts for Laure\_85:

(Start: 1 @50750 has 18 MA's), (2, 50783), (10, 51020), (14, 51083), (15, 51110), (16, 51122), (17, 51200),

Gene: LeoJr\_83 Start: 49893, Stop: 50540, Start Num: 1

Candidate Starts for LeoJr\_83:

(Start: 1 @49893 has 18 MA's), (10, 50163), (17, 50343), (23, 50454),

Gene: Mareelih\_87 Start: 43849, Stop: 44493, Start Num: 1

Candidate Starts for Mareelih\_87:

(Start: 1 @43849 has 18 MA's), (3, 43891), (6, 43960), (17, 44296), (19, 44320), (20, 44332), (21, 44335), (22, 44374),

Gene: Mimi\_83 Start: 50513, Stop: 51169, Start Num: 1

Candidate Starts for Mimi\_83:

(Start: 1 @50513 has 18 MA's), (7, 50696), (10, 50783), (17, 50963), (20, 50999), (21, 51002),

Gene: Panchaali\_76 Start: 47609, Stop: 48253, Start Num: 1

Candidate Starts for Panchaali\_76:

(Start: 1 @47609 has 18 MA's), (10, 47879), (17, 48059),

Gene: Patbob\_82 Start: 51385, Stop: 52041, Start Num: 1

Candidate Starts for Patbob\_82:

(Start: 1 @51385 has 18 MA's), (7, 51568), (10, 51655), (17, 51835), (20, 51871), (21, 51874),

Gene: Phendrix\_76 Start: 39032, Stop: 39685, Start Num: 1

Candidate Starts for Phendrix\_76:

(Start: 1 @39032 has 18 MA's), (6, 39146), (9, 39245), (11, 39320), (17, 39488), (18, 39509), (20, 39524), (21, 39527),

Gene: Phrampa\_75 Start: 48087, Stop: 48746, Start Num: 1

Candidate Starts for Phrampa\_75:

(Start: 1 @48087 has 18 MA's), (7, 48270), (10, 48357), (17, 48540), (20, 48576), (21, 48579),

Gene: Racecar\_84 Start: 51166, Stop: 51822, Start Num: 1

Candidate Starts for Racecar\_84:

(Start: 1 @51166 has 18 MA's), (7, 51349), (10, 51436), (17, 51616), (20, 51652), (21, 51655),

Gene: ReginaGlobina\_83 Start: 50645, Stop: 51292, Start Num: 1

Candidate Starts for ReginaGlobina\_83:

(Start: 1 @50645 has 18 MA's), (10, 50915), (17, 51095), (23, 51206),

Gene: Rockabye\_85 Start: 53344, Stop: 54003, Start Num: 1

Candidate Starts for Rockabye\_85:

(Start: 1 @53344 has 18 MA's), (12, 53668), (13, 53680), (17, 53806), (26, 53944),

Gene: SJReid\_86 Start: 52426, Stop: 53082, Start Num: 1

Candidate Starts for SJReid\_86:

(Start: 1 @52426 has 18 MA's), (2, 52459), (12, 52750), (13, 52762), (17, 52888), (25, 53020), (26, 53026),

Gene: Sixama\_83 Start: 44174, Stop: 44824, Start Num: 1

Candidate Starts for Sixama\_83:

(Start: 1 @44174 has 18 MA's), (3, 44219), (4, 44246), (6, 44288), (8, 44363), (10, 44444), (17, 44627), (19, 44651), (20, 44663), (21, 44666),

Gene: Stewart25555\_74 Start: 47034, Stop: 47678, Start Num: 1

Candidate Starts for Stewart25555\_74:

(Start: 1 @47034 has 18 MA's), (10, 47304), (17, 47484),

Gene: Talia1610\_83 Start: 50531, Stop: 51187, Start Num: 1

Candidate Starts for Talia1610\_83:

(Start: 1 @50531 has 18 MA's), (7, 50714), (10, 50801), (17, 50981), (20, 51017), (21, 51020),

Gene: WaddleDee\_71 Start: 46478, Stop: 47122, Start Num: 1

Candidate Starts for WaddleDee\_71:

(Start: 1 @46478 has 18 MA's), (5, 46553), (6, 46592), (10, 46748), (17, 46928), (24, 47051),