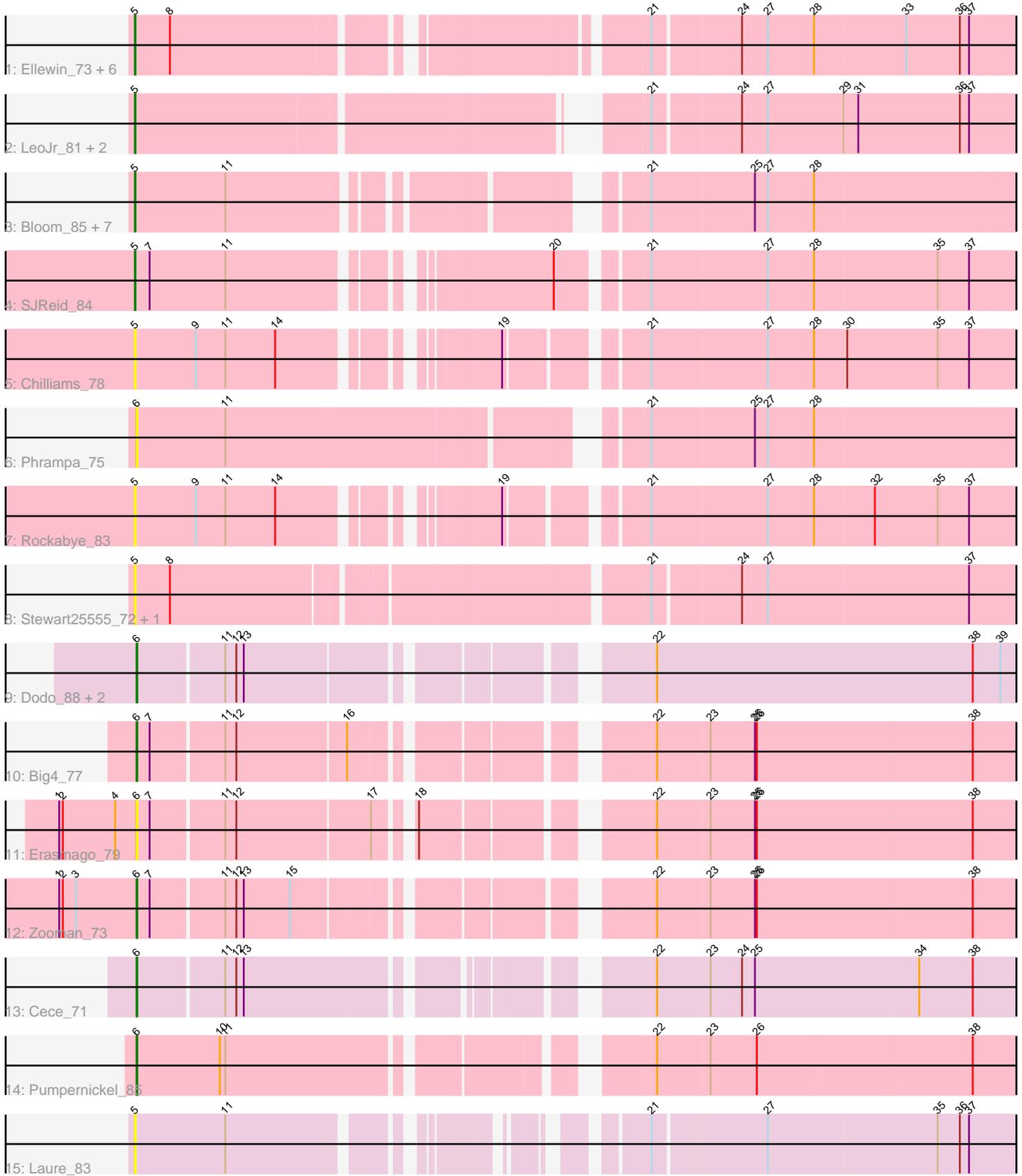


# Zoomed Pham 284033



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 284033 Report

This analysis was run 02/23/26 on database version 636.

Pham number 284033 has 33 members, 19 are drafts.

Phages represented in each track:

- Track 1 : Ellewin\_73, KSunshine22\_76, WaddleDee\_69, BooTeria\_78, Artu\_74, DunneganBoMo\_71, Emmetator\_74
- Track 2 : LeoJr\_81, Atuin\_76, ReginaGlobina\_81
- Track 3 : Bloom\_85, FrostedClock\_84, FloraSnap32\_81, GoldenEssence\_67, Racecar\_82, Talia1610\_81, Patbob\_82, Mimi\_81
- Track 4 : SJReid\_84
- Track 5 : Chilliams\_78
- Track 6 : Phrampa\_75
- Track 7 : Rockabye\_83
- Track 8 : Stewart25555\_72, Panchaali\_79
- Track 9 : Dodo\_88, A3Wally\_88, PauloDiaboli\_88
- Track 10 : Big4\_77
- Track 11 : Erasmago\_79
- Track 12 : Zooman\_73
- Track 13 : Cece\_71
- Track 14 : Pumpernickel\_85
- Track 15 : Laure\_83

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

The start number called the most often in the published annotations is 5, it was called in 8 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Artu\_74, Atuin\_76, Bloom\_85, BooTeria\_78, Chilliams\_78, DunneganBoMo\_71, Ellewin\_73, Emmetator\_74, FloraSnap32\_81, FrostedClock\_84, GoldenEssence\_67, KSunshine22\_76, Laure\_83, LeoJr\_81, Mimi\_81, Panchaali\_79, Patbob\_82, Racecar\_82, ReginaGlobina\_81, Rockabye\_83, SJReid\_84, Stewart25555\_72, Talia1610\_81, WaddleDee\_69,

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

- 

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

- A3Wally\_88, Big4\_77, Cece\_71, Dodo\_88, Erasmago\_79, PauloDiaboli\_88, Phrampa\_75, Pumpernickel\_85, Zooman\_73,

### Summary by start number:

#### Start 5:

- Found in 24 of 33 ( 72.7% ) of genes in pham
- Manual Annotations of this start: 8 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Artu\_74 (FC), Atuin\_76 (FC), Bloom\_85 (FC), BooTeria\_78 (FC), Chilliams\_78 (FC), DunneganBoMo\_71 (FC), Ellewin\_73 (FC), Emmetator\_74 (FC), FloraSnap32\_81 (FC), FrostedClock\_84 (FC), GoldenEssence\_67 (FC), KSunshine22\_76 (FC), Laure\_83 (UNK), LeoJr\_81 (FC), Mimi\_81 (FC), Panchaali\_79 (FC), Patbob\_82 (FC), Racecar\_82 (FC), ReginaGlobina\_81 (FC), Rockabye\_83 (FC), SJReid\_84 (FC), Stewart25555\_72 (FC), Talia1610\_81 (FC), WaddleDee\_69 (FC),

#### Start 6:

- Found in 9 of 33 ( 27.3% ) of genes in pham
- Manual Annotations of this start: 6 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: A3Wally\_88 (GD1), Big4\_77 (GD2), Cece\_71 (GD3), Dodo\_88 (GD1), Erasmago\_79 (GD2), PauloDiaboli\_88 (GD1), Phrampa\_75 (FC), Pumpernickel\_85 (GD4), Zooman\_73 (GD2),

### Summary by clusters:

There are 6 clusters represented in this pham: GD1, GD2, GD3, GD4, FC, UNK,

#### Info for manual annotations of cluster FC:

- Start number 5 was manually annotated 8 times for cluster FC.

#### Info for manual annotations of cluster GD1:

- Start number 6 was manually annotated 2 times for cluster GD1.

#### Info for manual annotations of cluster GD2:

- Start number 6 was manually annotated 2 times for cluster GD2.

#### Info for manual annotations of cluster GD3:

- Start number 6 was manually annotated 1 time for cluster GD3.

#### Info for manual annotations of cluster GD4:

- Start number 6 was manually annotated 1 time for cluster GD4.

### Gene Information:

Gene: A3Wally\_88 Start: 44936, Stop: 46945, Start Num: 6

Candidate Starts for A3Wally\_88:

(Start: 6 @44936 has 6 MA's), (11, 45071), (12, 45089), (13, 45101), (22, 45644), (38, 46154), (39, 46199), (43, 46565), (45, 46631), (46, 46640), (50, 46835),

Gene: Artu\_74 Start: 44186, Stop: 46189, Start Num: 5

Candidate Starts for Artu\_74:

(Start: 5 @44186 has 8 MA's), (8, 44240), (21, 44894), (24, 45029), (27, 45071), (28, 45146), (33, 45293), (36, 45380), (37, 45395), (40, 45575),

Gene: Atuin\_76 Start: 46811, Stop: 48820, Start Num: 5

Candidate Starts for Atuin\_76:

(Start: 5 @46811 has 8 MA's), (21, 47525), (24, 47660), (27, 47702), (29, 47825), (31, 47846), (36, 48011), (37, 48026), (40, 48206), (49, 48632),

Gene: Big4\_77 Start: 43780, Stop: 45789, Start Num: 6

Candidate Starts for Big4\_77:

(Start: 6 @43780 has 6 MA's), (7, 43801), (11, 43915), (12, 43933), (16, 44107), (22, 44488), (23, 44572), (25, 44644), (26, 44647), (38, 44995), (43, 45406), (50, 45676),

Gene: Bloom\_85 Start: 48235, Stop: 50229, Start Num: 5

Candidate Starts for Bloom\_85:

(Start: 5 @48235 has 8 MA's), (11, 48379), (21, 48925), (25, 49090), (27, 49111), (28, 49186), (40, 49615), (44, 49912),

Gene: BooTeria\_78 Start: 44254, Stop: 46257, Start Num: 5

Candidate Starts for BooTeria\_78:

(Start: 5 @44254 has 8 MA's), (8, 44308), (21, 44962), (24, 45097), (27, 45139), (28, 45214), (33, 45361), (36, 45448), (37, 45463), (40, 45643),

Gene: Cece\_71 Start: 39862, Stop: 41862, Start Num: 6

Candidate Starts for Cece\_71:

(Start: 6 @39862 has 6 MA's), (11, 39997), (12, 40015), (13, 40027), (22, 40564), (23, 40648), (24, 40699), (25, 40720), (34, 40984), (38, 41071), (43, 41482), (45, 41548), (50, 41752),

Gene: Chilliams\_78 Start: 50058, Stop: 52049, Start Num: 5

Candidate Starts for Chilliams\_78:

(Start: 5 @50058 has 8 MA's), (9, 50154), (11, 50202), (14, 50283), (19, 50559), (21, 50745), (27, 50931), (28, 51006), (30, 51057), (35, 51204), (37, 51255), (40, 51435), (47, 51747),

Gene: Dodo\_88 Start: 45258, Stop: 47267, Start Num: 6

Candidate Starts for Dodo\_88:

(Start: 6 @45258 has 6 MA's), (11, 45393), (12, 45411), (13, 45423), (22, 45966), (38, 46476), (39, 46521), (43, 46887), (45, 46953), (46, 46962), (50, 47157),

Gene: DunneganBoMo\_71 Start: 43679, Stop: 45682, Start Num: 5

Candidate Starts for DunneganBoMo\_71:

(Start: 5 @43679 has 8 MA's), (8, 43733), (21, 44387), (24, 44522), (27, 44564), (28, 44639), (33, 44786), (36, 44873), (37, 44888), (40, 45068),

Gene: Ellewin\_73 Start: 43274, Stop: 45277, Start Num: 5

Candidate Starts for Ellewin\_73:

(Start: 5 @43274 has 8 MA's), (8, 43328), (21, 43982), (24, 44117), (27, 44159), (28, 44234), (33, 44381), (36, 44468), (37, 44483), (40, 44663),

Gene: Emmetator\_74 Start: 44426, Stop: 46429, Start Num: 5

Candidate Starts for Emmetator\_74:

(Start: 5 @44426 has 8 MA's), (8, 44480), (21, 45134), (24, 45269), (27, 45311), (28, 45386), (33, 45533), (36, 45620), (37, 45635), (40, 45815),

Gene: Erasmago\_79 Start: 41432, Stop: 43444, Start Num: 6

Candidate Starts for Erasmago\_79:

(1, 41312), (2, 41318), (4, 41399), (Start: 6 @41432 has 6 MA's), (7, 41453), (11, 41567), (12, 41585), (17, 41795), (18, 41837), (22, 42146), (23, 42230), (25, 42302), (26, 42305), (38, 42653), (43, 43064), (48, 43169), (50, 43334),

Gene: FloraSnap32\_81 Start: 47272, Stop: 49266, Start Num: 5

Candidate Starts for FloraSnap32\_81:

(Start: 5 @47272 has 8 MA's), (11, 47416), (21, 47962), (25, 48127), (27, 48148), (28, 48223), (40, 48652), (44, 48949),

Gene: FrostedClock\_84 Start: 47723, Stop: 49717, Start Num: 5

Candidate Starts for FrostedClock\_84:

(Start: 5 @47723 has 8 MA's), (11, 47867), (21, 48413), (25, 48578), (27, 48599), (28, 48674), (40, 49103), (44, 49400),

Gene: GoldenEssence\_67 Start: 42028, Stop: 44022, Start Num: 5

Candidate Starts for GoldenEssence\_67:

(Start: 5 @42028 has 8 MA's), (11, 42172), (21, 42718), (25, 42883), (27, 42904), (28, 42979), (40, 43408), (44, 43705),

Gene: KSunshine22\_76 Start: 44913, Stop: 46916, Start Num: 5

Candidate Starts for KSunshine22\_76:

(Start: 5 @44913 has 8 MA's), (8, 44967), (21, 45621), (24, 45756), (27, 45798), (28, 45873), (33, 46020), (36, 46107), (37, 46122), (40, 46302),

Gene: Laure\_83 Start: 47867, Stop: 49807, Start Num: 5

Candidate Starts for Laure\_83:

(Start: 5 @47867 has 8 MA's), (11, 48011), (21, 48521), (27, 48695), (35, 48968), (36, 49004), (37, 49019), (40, 49199), (41, 49376),

Gene: LeoJr\_81 Start: 46939, Stop: 48948, Start Num: 5

Candidate Starts for LeoJr\_81:

(Start: 5 @46939 has 8 MA's), (21, 47653), (24, 47788), (27, 47830), (29, 47953), (31, 47974), (36, 48139), (37, 48154), (40, 48334), (49, 48760),

Gene: Mimi\_81 Start: 47582, Stop: 49576, Start Num: 5

Candidate Starts for Mimi\_81:

(Start: 5 @47582 has 8 MA's), (11, 47726), (21, 48272), (25, 48437), (27, 48458), (28, 48533), (40, 48962), (44, 49259),

Gene: Panchaali\_79 Start: 44604, Stop: 46667, Start Num: 5

Candidate Starts for Panchaali\_79:

(Start: 5 @44604 has 8 MA's), (8, 44658), (21, 45372), (24, 45507), (27, 45549), (37, 45873), (40, 46053),

Gene: Patbob\_82 Start: 48454, Stop: 50448, Start Num: 5

Candidate Starts for Patbob\_82:

(Start: 5 @48454 has 8 MA's), (11, 48598), (21, 49144), (25, 49309), (27, 49330), (28, 49405), (40, 49834), (44, 50131),

Gene: PauloDiaboli\_88 Start: 44293, Stop: 46302, Start Num: 6

Candidate Starts for PauloDiaboli\_88:

(Start: 6 @44293 has 6 MA's), (11, 44428), (12, 44446), (13, 44458), (22, 45001), (38, 45511), (39, 45556), (43, 45922), (45, 45988), (46, 45997), (50, 46192),

Gene: Phrampa\_75 Start: 45102, Stop: 47150, Start Num: 6

Candidate Starts for Phrampa\_75:

(Start: 6 @45102 has 6 MA's), (11, 45246), (21, 45846), (25, 46011), (27, 46032), (28, 46107), (40, 46536), (42, 46716),

Gene: Pumpernickel\_85 Start: 45481, Stop: 47517, Start Num: 6

Candidate Starts for Pumpernickel\_85:

(Start: 6 @45481 has 6 MA's), (10, 45616), (11, 45625), (22, 46213), (23, 46297), (26, 46372), (38, 46717), (43, 47128), (50, 47404),

Gene: Racecar\_82 Start: 48235, Stop: 50229, Start Num: 5

Candidate Starts for Racecar\_82:

(Start: 5 @48235 has 8 MA's), (11, 48379), (21, 48925), (25, 49090), (27, 49111), (28, 49186), (40, 49615), (44, 49912),

Gene: ReginaGlobina\_81 Start: 47691, Stop: 49700, Start Num: 5

Candidate Starts for ReginaGlobina\_81:

(Start: 5 @47691 has 8 MA's), (21, 48405), (24, 48540), (27, 48582), (29, 48705), (31, 48726), (36, 48891), (37, 48906), (40, 49086), (49, 49512),

Gene: Rockabye\_83 Start: 50410, Stop: 52398, Start Num: 5

Candidate Starts for Rockabye\_83:

(Start: 5 @50410 has 8 MA's), (9, 50506), (11, 50554), (14, 50635), (19, 50911), (21, 51094), (27, 51280), (28, 51355), (32, 51451), (35, 51553), (37, 51604), (40, 51784), (49, 52210),

Gene: SJReid\_84 Start: 49478, Stop: 51490, Start Num: 5

Candidate Starts for SJReid\_84:

(Start: 5 @49478 has 8 MA's), (7, 49499), (11, 49622), (20, 50066), (21, 50186), (27, 50372), (28, 50447), (35, 50645), (37, 50696), (40, 50876), (47, 51188),

Gene: Stewart25555\_72 Start: 44035, Stop: 46092, Start Num: 5

Candidate Starts for Stewart25555\_72:

(Start: 5 @44035 has 8 MA's), (8, 44089), (21, 44797), (24, 44932), (27, 44974), (37, 45298), (40, 45478),

Gene: Talia1610\_81 Start: 47600, Stop: 49594, Start Num: 5

Candidate Starts for Talia1610\_81:

(Start: 5 @47600 has 8 MA's), (11, 47744), (21, 48290), (25, 48455), (27, 48476), (28, 48551), (40, 48980), (44, 49277),

Gene: WaddleDee\_69 Start: 43531, Stop: 45537, Start Num: 5

Candidate Starts for WaddleDee\_69:

(Start: 5 @43531 has 8 MA's), (8, 43585), (21, 44242), (24, 44377), (27, 44419), (28, 44494), (33, 44641), (36, 44728), (37, 44743), (40, 44923),

Gene: Zooman\_73 Start: 42476, Stop: 44485, Start Num: 6

Candidate Starts for Zooman\_73:

(1, 42350), (2, 42356), (3, 42377), (Start: 6 @42476 has 6 MA's), (7, 42497), (11, 42611), (12, 42629), (13, 42641), (15, 42716), (22, 43187), (23, 43271), (25, 43343), (26, 43346), (38, 43694), (43, 44105), (50, 44375),