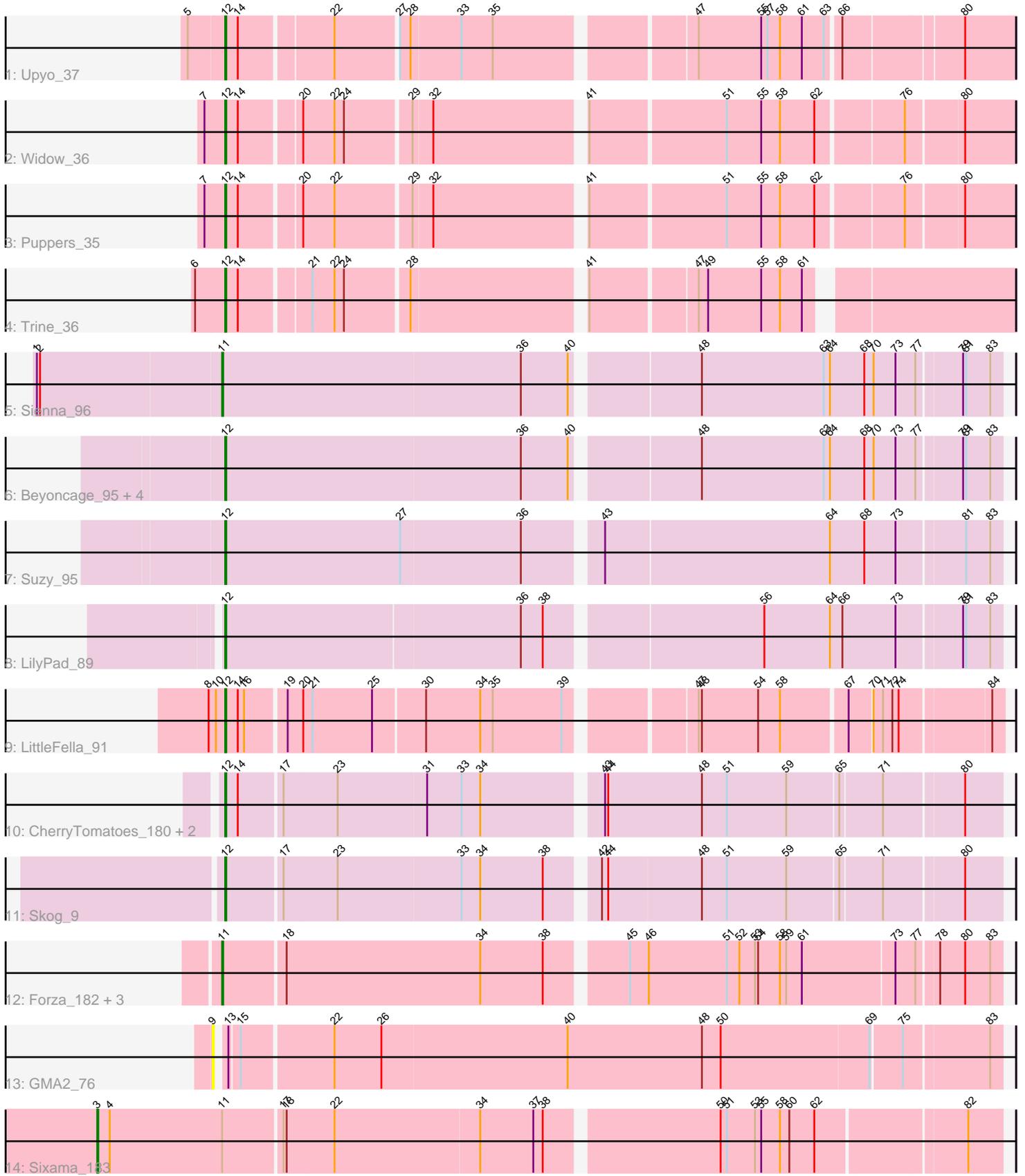# Pham 289736

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 289736 Report

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

Pham number 289736 has 23 members, 1 are drafts.

Phages represented in each track:
• Track 1 : Upyo_37
• Track 2 : Widow_36
• Track 3 : Puppers_35
• Track 4 : Trine_36
• Track 5 : Sienna_96
• Track 6 : Beyoncage_95, Djokovic_95, Terapin_96, Madi_94, BiteSize_95
• Track 7 : Suzy_95
• Track 8 : LilyPad_89
• Track 9 : LittleFella_91
• Track 10 : CherryTomatoes_180, Pupper_177, SCentae_176
• Track 11 : Skog_9
• Track 12 : Forza_182, BlueNGold_178, Mareelih_179, Boopy_181
• Track 13 : GMA2_76
• Track 14 : Sixama_183

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

The start number called the most often in the published annotations is 12, it was called in 16 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Beyoncage_95, BiteSize_95, CherryTomatoes_180, Djokovic_95, LilyPad_89, LittleFella_91, Madi_94, Pupper_177, Puppers_35, SCentae_176, Skog_9, Suzy_95, Terapin_96, Trine_36, Upyo_37, Widow_36,

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

Genes that do not have the "Most Annotated" start:
• BlueNGold_178, Boopy_181, Forza_182, GMA2_76, Mareelih_179, Sienna_96, Sixama_183,

Summary by start number:

Start 3:
• Found in 1 of 23 (4.3%) of genes in pham
• Manual Annotations of this start: 1 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Sixama_183 (DS),

Start 9:
• Found in 1 of 23 (4.3%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: GMA2_76 (DS),

Start 11:
• Found in 6 of 23 (26.1%) of genes in pham
• Manual Annotations of this start: 5 of 22
• Called 83.3% of time when present
• Phage (with cluster) where this start called: BlueNGold_178 (DS), Boopy_181 (DS), Forza_182 (DS), Mareelih_179 (DS), Sienna_96 (DG1),

Start 12:
• Found in 16 of 23 (69.6%) of genes in pham
• Manual Annotations of this start: 16 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Beyoncage_95 (DG1), BiteSize_95 (DG1), CherryTomatoes_180 (DO), Djokovic_95 (DG1), LilyPad_89 (DG1), LittleFella_91 (DG2), Madi_94 (DG1), Pupper_177 (DO), Puppers_35 (CD), SCentae_176 (DO), Skog_9 (DO), Suzy_95 (DG1), Terapin_96 (DG1), Trine_36 (CD), Upyo_37 (CD), Widow_36 (CD),

Summary by clusters:

There are 5 clusters represented in this pham: DG2, DO, DG1, DS, CD,

Info for manual annotations of cluster CD:
•Start number 12 was manually annotated 4 times for cluster CD.

Info for manual annotations of cluster DG1:
•Start number 11 was manually annotated 1 time for cluster DG1.
•Start number 12 was manually annotated 7 times for cluster DG1.

Info for manual annotations of cluster DG2:
•Start number 12 was manually annotated 1 time for cluster DG2.

Info for manual annotations of cluster DO:
•Start number 12 was manually annotated 4 times for cluster DO.

Info for manual annotations of cluster DS:
•Start number 3 was manually annotated 1 time for cluster DS.
•Start number 11 was manually annotated 4 times for cluster DS.

Gene Information:

Gene: Beyoncage_95 Start: 65472, Stop: 66188, Start Num: 12
Candidate Starts for Beyoncage_95:
(Start: 12 @65472 has 16 MA's), (36, 65754), (40, 65799), (48, 65910), (63, 66027), (64, 66033), (68, 66066), (70, 66075), (73, 66096), (77, 66114), (79, 66153), (81, 66156), (83, 66177),

Gene: BiteSize_95 Start: 65558, Stop: 66274, Start Num: 12
Candidate Starts for BiteSize_95:
(Start: 12 @65558 has 16 MA's), (36, 65840), (40, 65885), (48, 65996), (63, 66113), (64, 66119), (68, 66152), (70, 66161), (73, 66182), (77, 66200), (79, 66239), (81, 66242), (83, 66263),

Gene: BlueNGold_178 Start: 105490, Stop: 104774, Start Num: 11
Candidate Starts for BlueNGold_178:
(Start: 11 @105490 has 5 MA's), (18, 105433), (34, 105250), (38, 105190), (45, 105121), (46, 105103), (51, 105028), (52, 105016), (53, 105001), (54, 104998), (58, 104977), (59, 104971), (61, 104956), (73, 104869), (77, 104851), (78, 104833), (80, 104809), (83, 104785),

Gene: Boopy_181 Start: 105501, Stop: 104785, Start Num: 11
Candidate Starts for Boopy_181:
(Start: 11 @105501 has 5 MA's), (18, 105444), (34, 105261), (38, 105201), (45, 105132), (46, 105114), (51, 105039), (52, 105027), (53, 105012), (54, 105009), (58, 104988), (59, 104982), (61, 104967), (73, 104880), (77, 104862), (78, 104844), (80, 104820), (83, 104796),

Gene: CherryTomatoes_180 Start: 130016, Stop: 130726, Start Num: 12
Candidate Starts for CherryTomatoes_180:
(Start: 12 @130016 has 16 MA's), (14, 130028), (17, 130067), (23, 130118), (31, 130202), (33, 130235), (34, 130253), (43, 130358), (44, 130361), (48, 130451), (51, 130475), (59, 130532), (65, 130580), (71, 130619), (80, 130691),

Gene: Djokovic_95 Start: 65471, Stop: 66187, Start Num: 12
Candidate Starts for Djokovic_95:
(Start: 12 @65471 has 16 MA's), (36, 65753), (40, 65798), (48, 65909), (63, 66026), (64, 66032), (68, 66065), (70, 66074), (73, 66095), (77, 66113), (79, 66152), (81, 66155), (83, 66176),

Gene: Forza_182 Start: 105418, Stop: 104702, Start Num: 11
Candidate Starts for Forza_182:
(Start: 11 @105418 has 5 MA's), (18, 105361), (34, 105178), (38, 105118), (45, 105049), (46, 105031), (51, 104956), (52, 104944), (53, 104929), (54, 104926), (58, 104905), (59, 104899), (61, 104884), (73, 104797), (77, 104779), (78, 104761), (80, 104737), (83, 104713),

Gene: GMA2_76 Start: 77386, Stop: 76664, Start Num: 9
Candidate Starts for GMA2_76:
(9, 77386), (13, 77380), (15, 77371), (22, 77287), (26, 77242), (40, 77065), (48, 76936), (50, 76918), (69, 76777), (75, 76750), (83, 76675),

Gene: LilyPad_89 Start: 63022, Stop: 63735, Start Num: 12
Candidate Starts for LilyPad_89:
(Start: 12 @63022 has 16 MA's), (36, 63301), (38, 63322), (56, 63517), (64, 63580), (66, 63592), (73, 63643), (79, 63700), (81, 63703), (83, 63724),

Gene: LittleFella_91 Start: 63267, Stop: 63962, Start Num: 12
Candidate Starts for LittleFella_91:
(8, 63252), (10, 63258), (Start: 12 @63267 has 16 MA's), (14, 63279), (16, 63285), (19, 63321), (20, 63336), (21, 63345), (25, 63402), (30, 63450), (34, 63501), (35, 63513), (39, 63579), (47, 63687), (48,

63690), (54, 63744), (58, 63765), (67, 63825), (70, 63846), (71, 63855), (72, 63864), (74, 63870), (84, 63951),

Gene: Madi_94 Start: 65302, Stop: 66018, Start Num: 12
Candidate Starts for Madi_94:
(Start: 12 @65302 has 16 MA's), (36, 65584), (40, 65629), (48, 65740), (63, 65857), (64, 65863), (68, 65896), (70, 65905), (73, 65926), (77, 65944), (79, 65983), (81, 65986), (83, 66007),

Gene: Mareelih_179 Start: 104936, Stop: 104220, Start Num: 11
Candidate Starts for Mareelih_179:
(Start: 11 @104936 has 5 MA's), (18, 104879), (34, 104696), (38, 104636), (45, 104567), (46, 104549), (51, 104474), (52, 104462), (53, 104447), (54, 104444), (58, 104423), (59, 104417), (61, 104402), (73, 104315), (77, 104297), (78, 104279), (80, 104255), (83, 104231),

Gene: Pupper_177 Start: 129600, Stop: 130310, Start Num: 12
Candidate Starts for Pupper_177:
(Start: 12 @129600 has 16 MA's), (14, 129612), (17, 129651), (23, 129702), (31, 129786), (33, 129819), (34, 129837), (43, 129942), (44, 129945), (48, 130035), (51, 130059), (59, 130116), (65, 130164), (71, 130203), (80, 130275),

Gene: Puppers_35 Start: 26921, Stop: 27625, Start Num: 12
Candidate Starts for Puppers_35:
(7, 26903), (Start: 12 @26921 has 16 MA's), (14, 26933), (20, 26987), (22, 27017), (29, 27086), (32, 27104), (41, 27239), (51, 27365), (55, 27398), (58, 27416), (62, 27449), (76, 27527), (80, 27578),

Gene: SCentae_176 Start: 129792, Stop: 130502, Start Num: 12
Candidate Starts for SCentae_176:
(Start: 12 @129792 has 16 MA's), (14, 129804), (17, 129843), (23, 129894), (31, 129978), (33, 130011), (34, 130029), (43, 130134), (44, 130137), (48, 130227), (51, 130251), (59, 130308), (65, 130356), (71, 130395), (80, 130467),

Gene: Sienna_96 Start: 65667, Stop: 66386, Start Num: 11
Candidate Starts for Sienna_96:
(1, 65493), (2, 65496), (Start: 11 @65667 has 5 MA's), (36, 65952), (40, 65997), (48, 66108), (63, 66225), (64, 66231), (68, 66264), (70, 66273), (73, 66294), (77, 66312), (79, 66351), (81, 66354), (83, 66375),

Gene: Sixama_183 Start: 106329, Stop: 105496, Start Num: 3
Candidate Starts for Sixama_183:
(Start: 3 @106329 has 1 MA's), (4, 106317), (Start: 11 @106209 has 5 MA's), (17, 106155), (18, 106152), (22, 106107), (34, 105969), (37, 105918), (38, 105909), (50, 105753), (51, 105747), (53, 105720), (55, 105714), (58, 105696), (60, 105687), (62, 105663), (82, 105528),

Gene: Skog_9 Start: 6153, Stop: 6860, Start Num: 12
Candidate Starts for Skog_9:
(Start: 12 @6153 has 16 MA's), (17, 6204), (23, 6255), (33, 6372), (34, 6390), (38, 6450), (42, 6492), (44, 6498), (48, 6585), (51, 6609), (59, 6666), (65, 6714), (71, 6753), (80, 6825),

Gene: Suzy_95 Start: 65979, Stop: 66695, Start Num: 12
Candidate Starts for Suzy_95:
(Start: 12 @65979 has 16 MA's), (27, 66147), (36, 66261), (43, 66327), (64, 66540), (68, 66573), (73, 66603), (81, 66663), (83, 66684),

Gene: Terapin_96 Start: 65473, Stop: 66189, Start Num: 12
Candidate Starts for Terapin_96:
(Start: 12 @65473 has 16 MA's), (36, 65755), (40, 65800), (48, 65911), (63, 66028), (64, 66034), (68, 66067), (70, 66076), (73, 66097), (77, 66115), (79, 66154), (81, 66157), (83, 66178),

Gene: Trine_36 Start: 27342, Stop: 28031, Start Num: 12
Candidate Starts for Trine_36:
(6, 27315), (Start: 12 @27342 has 16 MA's), (14, 27354), (21, 27417), (22, 27438), (24, 27447), (28, 27504), (41, 27657), (47, 27753), (49, 27762), (55, 27813), (58, 27831), (61, 27852),

Gene: Upyo_37 Start: 28484, Stop: 29182, Start Num: 12
Candidate Starts for Upyo_37:
(5, 28451), (Start: 12 @28484 has 16 MA's), (14, 28496), (22, 28580), (27, 28637), (28, 28646), (33, 28691), (35, 28721), (47, 28895), (55, 28955), (57, 28961), (58, 28973), (61, 28994), (63, 29015), (66, 29027), (80, 29135),

Gene: Widow_36 Start: 28002, Stop: 28706, Start Num: 12
Candidate Starts for Widow_36:
(7, 27984), (Start: 12 @28002 has 16 MA's), (14, 28014), (20, 28068), (22, 28098), (24, 28107), (29, 28167), (32, 28185), (41, 28320), (51, 28446), (55, 28479), (58, 28497), (62, 28530), (76, 28608), (80, 28659),