

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 220416 Report

This analysis was run 03/28/25 on database version 593.

Pham number 220416 has 8 members, 1 are drafts.

Phages represented in each track:

• Track 1: Phendrix 74, GodonK 76

• Track 2 : Boopy_87, Forza_87, Mareelih_85, BlueNGold_86

Track 3 : GMA2_16Track 4 : Sixama_81

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

The start number called the most often in the published annotations is 3, it was called in 5 of the 7 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• BlueNGold_86, Boopy_87, Forza_87, GMA2_16, Mareelih_85, Sixama_81,

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

•

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

GodonK_76, Phendrix_74,

Summary by start number:

Start 2:

- Found in 2 of 8 (25.0%) of genes in pham
- Manual Annotations of this start: 2 of 7
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GodonK_76 (DK), Phendrix_74 (DK),

Start 3:

- Found in 6 of 8 (75.0%) of genes in pham
- Manual Annotations of this start: 5 of 7
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BlueNGold_86 (DS), Boopy_87 (DS), Forza_87 (DS), GMA2_16 (DS), Mareelih_85 (DS), Sixama_81 (DS),

Summary by clusters:

There are 2 clusters represented in this pham: DS, DK,

Info for manual annotations of cluster DK:

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

Info for manual annotations of cluster DS:

•Start number 3 was manually annotated 5 times for cluster DS.

Gene Information:

Gene: BlueNGold 86 Start: 42025, Stop: 43677, Start Num: 3

Candidate Starts for BlueNGold 86:

(Start: 3 @ 42025 has 5 MA's), (7, 42172), (8, 42184), (14, 42451), (17, 42664), (20, 42739), (22, 42790), (23, 42832), (25, 42979), (27, 43030), (28, 43051), (29, 43054), (34, 43285), (36, 43333), (37, 43348), (41, 43486), (43, 43579),

Gene: Boopy_87 Start: 42037, Stop: 43689, Start Num: 3

Candidate Starts for Boopy 87:

(Start: 3 @42037 has 5 MA's), (7, 42184), (8, 42196), (14, 42463), (17, 42676), (20, 42751), (22, 42802), (23, 42844), (25, 42991), (27, 43042), (28, 43063), (29, 43066), (34, 43297), (36, 43345), (37, 43360), (41, 43498), (43, 43591),

Gene: Forza_87 Start: 41953, Stop: 43605, Start Num: 3

Candidate Starts for Forza_87:

(Start: 3 @41953 has 5 MA's), (7, 42100), (8, 42112), (14, 42379), (17, 42592), (20, 42667), (22, 42718), (23, 42760), (25, 42907), (27, 42958), (28, 42979), (29, 42982), (34, 43213), (36, 43261), (37, 43276), (41, 43414), (43, 43507),

Gene: GMA2 16 Start: 15295, Stop: 16959, Start Num: 3

Candidate Starts for GMA2 16:

(1, 15280), (Start: 3 @15295 has 5 MA's), (5, 15349), (7, 15442), (8, 15454), (10, 15481), (13, 15718), (14, 15724), (15, 15781), (23, 16114), (29, 16336), (38, 16636), (39, 16696), (43, 16861),

Gene: GodonK_76 Start: 36704, Stop: 38413, Start Num: 2

Candidate Starts for GodonK_76:

(Start: 2 @36704 has 2 MA's), (4, 36731), (6, 36851), (7, 36860), (9, 36881), (11, 36911), (12, 37100), (14, 37178), (15, 37241), (16, 37319), (19, 37454), (22, 37526), (24, 37712), (26, 37760), (29, 37790), (30, 37811), (31, 37814), (32, 37922), (33, 37940), (35, 38042), (36, 38069), (40, 38189), (42, 38243), (45, 38384),

Gene: Mareelih_85 Start: 41455, Stop: 43107, Start Num: 3

Candidate Starts for Mareelih_85:

(Start: 3 @41455 has 5 MA's), (7, 41602), (8, 41614), (14, 41881), (17, 42094), (20, 42169), (22, 42220), (23, 42262), (25, 42409), (27, 42460), (28, 42481), (29, 42484), (34, 42715), (36, 42763), (37, 42778), (41, 42916), (43, 43009),

Gene: Phendrix_74 Start: 36572, Stop: 38281, Start Num: 2

Candidate Starts for Phendrix 74:

(Start: 2 @36572 has 2 MA's), (4, 36599), (6, 36719), (7, 36728), (9, 36749), (11, 36779), (12, 36968), (14, 37046), (15, 37109), (16, 37187), (19, 37322), (22, 37394), (24, 37580), (26, 37628), (27, 37634), (29, 37658), (30, 37679), (31, 37682), (32, 37790), (33, 37808), (35, 37910), (36, 37937), (40, 38057), (42, 38111), (45, 38252),

Gene: Sixama_81 Start: 41770, Stop: 43428, Start Num: 3
Candidate Starts for Sixama_81:
(1, 41755), (Start: 3 @41770 has 5 MA's), (7, 41917), (8, 41929), (14, 42202), (16, 42331), (17, 42415), (18, 42439), (20, 42490), (21, 42535), (23, 42583), (26, 42775), (27, 42781), (29, 42805), (34, 43036), (40, 43204), (43, 43330), (44, 43339),