

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 6422 Report

This analysis was run 04/28/24 on database version 559.

Pham number 6422 has 8 members, 1 are drafts.

Phages represented in each track:

Track 1 : GodonK\_118Track 2 : Phendrix\_114

• Track 3: Boopy\_130, Mareelih\_128, BlueNGold\_129, Forza\_130

Track 4 : Sixama\_127Track 5 : GMA2\_56

### 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 7 of the 7 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• BlueNGold\_129, Boopy\_130, Forza\_130, GodonK\_118, Mareelih\_128, Phendrix\_114, Sixama\_127,

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

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

• GMA2\_56,

## Summary by start number:

#### Start 2:

- Found in 1 of 8 (12.5%) 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 56 (DS),

#### Start 3:

- Found in 7 of 8 (87.5%) of genes in pham
- Manual Annotations of this start: 7 of 7
- Called 100.0% of time when present

• Phage (with cluster) where this start called: BlueNGold\_129 (DS), Boopy\_130 (DS), Forza\_130 (DS), GodonK\_118 (DK), Mareelih\_128 (DS), Phendrix\_114 (DK), Sixama\_127 (DS),

### **Summary by clusters:**

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

Info for manual annotations of cluster DK:

•Start number 3 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\_129 Start: 83984, Stop: 82920, Start Num: 3

Candidate Starts for BlueNGold 129:

(Start: 3 @83984 has 7 MA's), (7, 83882), (9, 83855), (11, 83849), (14, 83810), (15, 83804), (22, 83708), (23, 83702), (24, 83681), (26, 83657), (28, 83621), (29, 83591), (30, 83573), (36, 83492), (43, 83306), (47, 83186), (48, 83183), (52, 83093),

Gene: Boopy\_130 Start: 83996, Stop: 82932, Start Num: 3

Candidate Starts for Boopy 130:

(Start: 3 @83996 has 7 MA's), (7, 83894), (9, 83867), (11, 83861), (14, 83822), (15, 83816), (22, 83720), (23, 83714), (24, 83693), (26, 83669), (28, 83633), (29, 83603), (30, 83585), (36, 83504), (43, 83318), (47, 83198), (48, 83195), (52, 83105),

Gene: Forza\_130 Start: 83912, Stop: 82848, Start Num: 3

Candidate Starts for Forza 130:

(Start: 3 @83912 has 7 MA's), (7, 83810), (9, 83783), (11, 83777), (14, 83738), (15, 83732), (22, 83636), (23, 83630), (24, 83609), (26, 83585), (28, 83549), (29, 83519), (30, 83501), (36, 83420), (43, 83234), (47, 83114), (48, 83111), (52, 83021),

Gene: GMA2\_56 Start: 57162, Stop: 56092, Start Num: 2

Candidate Starts for GMA2 56:

(2, 57162), (4, 57150), (6, 57072), (13, 56988), (15, 56979), (17, 56964), (18, 56955), (20, 56889), (27, 56829), (28, 56796), (32, 56727), (33, 56700), (37, 56670), (39, 56610), (40, 56544), (45, 56415), (51, 56268), (52, 56259),

Gene: GodonK 118 Start: 74325, Stop: 73246, Start Num: 3

Candidate Starts for GodonK\_118:

(Start: 3 @74325 has 7 MA's), (7, 74223), (9, 74196), (10, 74193), (14, 74151), (16, 74139), (19, 74085), (21, 74052), (23, 74043), (26, 73998), (30, 73914), (34, 73863), (35, 73857), (39, 73764), (41, 73701), (42, 73656), (44, 73590), (46, 73533), (48, 73515), (53, 73383),

Gene: Mareelih 128 Start: 83414, Stop: 82350, Start Num: 3

Candidate Starts for Mareelih 128:

(Start: 3 @83414 has 7 MA's), (7, 83312), (9, 83285), (11, 83279), (14, 83240), (15, 83234), (22, 83138), (23, 83132), (24, 83111), (26, 83087), (28, 83051), (29, 83021), (30, 83003), (36, 82922), (43, 82736), (47, 82616), (48, 82613), (52, 82523),

Gene: Phendrix\_114 Start: 74581, Stop: 73502, Start Num: 3 Candidate Starts for Phendrix\_114:

(1, 74695), (Start: 3 @74581 has 7 MA's), (5, 74512), (7, 74479), (9, 74452), (10, 74449), (12, 74425), (14, 74407), (19, 74341), (21, 74308), (23, 74299), (26, 74254), (30, 74170), (34, 74119), (35, 74113), (39, 74020), (41, 73957), (42, 73912), (44, 73846), (46, 73789), (48, 73771), (53, 73639),

Gene: Sixama\_127 Start: 82877, Stop: 81810, Start Num: 3 Candidate Starts for Sixama\_127:

(Start: 3 @82877 has 7 MA's), (5, 82808), (7, 82775), (8, 82751), (9, 82748), (14, 82703), (15, 82697), (22, 82601), (23, 82595), (24, 82574), (25, 82568), (26, 82550), (28, 82514), (31, 82457), (38, 82370), (48, 82073), (49, 82034), (50, 82013), (54, 81911),