	ზ	 × <-	_
1: Circinus_	10 . 1		
i. Circinus	19 + 1		

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2: Muntaha	234 + 1		

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 155496 Report

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

Pham number 155496 has 4 members, 0 are drafts.

Phages represented in each track:

• Track 1 : Circinus\_219, BillNye\_219

Track 2: Muntaha 234, Wakanda 230

### 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 2 of the 4 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Muntaha\_234, Wakanda\_230,

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

Genes that do not have the "Most Annotated" start: • BillNye\_219, Circinus\_219,

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## Summary by start number:

#### Start 1:

- Found in 2 of 4 (50.0%) of genes in pham
- Manual Annotations of this start: 2 of 4
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Muntaha\_234 (BK2), Wakanda\_230 (BK2),

#### Start 2:

- Found in 2 of 4 (50.0%) of genes in pham
- Manual Annotations of this start: 2 of 4
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BillNye\_219 (BK2), Circinus\_219 (BK2),

#### Summary by clusters:

There is one cluster represented in this pham: BK2

Info for manual annotations of cluster BK2:

- •Start number 1 was manually annotated 2 times for cluster BK2.
- •Start number 2 was manually annotated 2 times for cluster BK2.

### Gene Information:

Gene: BillNye\_219 Start: 112845, Stop: 113219, Start Num: 2

Candidate Starts for BillNye\_219:

(Start: 2 @112845 has 2 MA's), (3, 112899), (4, 113067), (5, 113121),

Gene: Circinus\_219 Start: 112435, Stop: 112809, Start Num: 2

Candidate Starts for Circinus 219:

(Start: 2 @112435 has 2 MA's), (3, 112489), (4, 112657), (5, 112711),

Gene: Muntaha\_234 Start: 113002, Stop: 113388, Start Num: 1

Candidate Starts for Muntaha\_234:

(Start: 1 @113002 has 2 MA's), (3, 113056), (4, 113227), (6, 113335),

Gene: Wakanda\_230 Start: 111989, Stop: 112375, Start Num: 1

Candidate Starts for Wakanda\_230:

(Start: 1 @111989 has 2 MA's), (3, 112043), (4, 112214), (6, 112322),