

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 162497 Report

This analysis was run 05/04/24 on database version 560.

Pham number 162497 has 7 members, 1 are drafts.

Phages represented in each track:

Track 1 : BritBrat\_35Track 2 : BearBQ\_46Track 3 : BearBQ\_45

• Track 4 : BENtherdunthat 46

Track 5 : LitninMcQueen\_40, Kamaru\_41

Track 6 : Kuwabara\_43

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

The start number called the most often in the published annotations is 9, it was called in 4 of the 6 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

BENtherdunthat\_46, BritBrat\_35, Kamaru\_41, Kuwabara\_43, LitninMcQueen\_40,

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

•

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

BearBQ\_45, BearBQ\_46,

## Summary by start number:

#### Start 2:

- Found in 1 of 7 (14.3%) of genes in pham
- Manual Annotations of this start: 1 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BearBQ\_45 (DN),

#### Start 9:

- Found in 5 of 7 (71.4%) of genes in pham
- Manual Annotations of this start: 4 of 6
- Called 100.0% of time when present

• Phage (with cluster) where this start called: BENtherdunthat\_46 (DN1), BritBrat\_35 (CY2), Kamaru\_41 (DN1), Kuwabara\_43 (DN4), LitninMcQueen\_40 (DN1),

#### Start 16:

- Found in 4 of 7 (57.1%) of genes in pham
- Manual Annotations of this start: 1 of 6
- Called 25.0% of time when present
- Phage (with cluster) where this start called: BearBQ\_46 (DN),

### **Summary by clusters:**

There are 4 clusters represented in this pham: DN, CY2, DN1, DN4,

Info for manual annotations of cluster CY2:

•Start number 9 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster DN:

- •Start number 2 was manually annotated 1 time for cluster DN.
- •Start number 16 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:

•Start number 9 was manually annotated 2 times for cluster DN1.

Info for manual annotations of cluster DN4:

•Start number 9 was manually annotated 1 time for cluster DN4.

#### Gene Information:

Gene: BENtherdunthat\_46 Start: 30492, Stop: 30647, Start Num: 9

Candidate Starts for BENtherdunthat 46:

(1, 30348), (5, 30450), (7, 30471), (Start: 9 @30492 has 4 MA's), (10, 30507), (14, 30519), (Start: 16 @30543 has 1 MA's), (20, 30630),

Gene: BearBQ\_46 Start: 33455, Stop: 33640, Start Num: 16

Candidate Starts for BearBQ\_46:

(6, 33353), (12, 33413), (13, 33416), (Start: 16 @33455 has 1 MA's), (17, 33482),

Gene: BearBQ 45 Start: 33255, Stop: 33455, Start Num: 2

Candidate Starts for BearBQ 45:

(Start: 2 @ 33255 has 1 MA's), (3, 33276), (4, 33288), (5, 33348), (8, 33381), (11, 33411), (15, 33438),

Gene: BritBrat\_35 Start: 30625, Stop: 30804, Start Num: 9

Candidate Starts for BritBrat\_35:

(Start: 9 @ 30625 has 4 MA's), (10, 30640), (14, 30652), (18, 30715), (19, 30751),

Gene: Kamaru\_41 Start: 30059, Stop: 30214, Start Num: 9

Candidate Starts for Kamaru 41:

(Start: 9 @30059 has 4 MA's), (10, 30074), (14, 30086), (15, 30095), (Start: 16 @30110 has 1 MA's), (20, 30197),

Gene: Kuwabara\_43 Start: 30891, Stop: 31046, Start Num: 9

Candidate Starts for Kuwabara\_43:

(Start: 9 @30891 has 4 MA's), (10, 30906), (14, 30918), (20, 31029),

Gene: LitninMcQueen\_40 Start: 29808, Stop: 29963, Start Num: 9

Candidate Starts for LitninMcQueen\_40:

(Start: 9 @29808 has 4 MA's), (10, 29823), (14, 29835), (15, 29844), (Start: 16 @29859 has 1 MA's),

(20, 29946),