

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 190420 Report

This analysis was run 11/02/24 on database version 579.

Pham number 190420 has 6 members, 0 are drafts.

Phages represented in each track:

Track 1 : BearBQ\_49Track 2 : Lutum\_56Track 3 : Whitney\_51

Track 4: LunaStella\_43, MooMoo\_42

Track 5 : TChen\_45

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

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

Genes that call this "Most Annotated" start:

BearBQ\_49, LunaStella\_43, MooMoo\_42, Whitney\_51,

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

• TChen\_45,

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

Lutum 56.

## Summary by start number:

### Start 1:

- Found in 3 of 6 (50.0%) of genes in pham
- Manual Annotations of this start: 1 of 6
- Called 33.3% of time when present
- Phage (with cluster) where this start called: TChen\_45 (F4),

### Start 4:

- Found in 5 of 6 (83.3%) of genes in pham
- Manual Annotations of this start: 4 of 6
- Called 80.0% of time when present
- Phage (with cluster) where this start called: BearBQ\_49 (DN), LunaStella\_43 (F4), MooMoo 42 (singleton), Whitney 51 (DN1),

#### Start 5:

- Found in 1 of 6 (16.7%) 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: Lutum\_56 (DN1),

# Summary by clusters:

There are 4 clusters represented in this pham: DN, DN1, singleton, F4,

Info for manual annotations of cluster DN:

•Start number 4 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:

- •Start number 4 was manually annotated 1 time for cluster DN1.
- •Start number 5 was manually annotated 1 time for cluster DN1.

Info for manual annotations of cluster F4:

- •Start number 1 was manually annotated 1 time for cluster F4.
- •Start number 4 was manually annotated 1 time for cluster F4.

#### Gene Information:

Gene: BearBQ\_49 Start: 36610, Stop: 36059, Start Num: 4

Candidate Starts for BearBQ\_49:

(Start: 4 @36610 has 4 MA's), (6, 36571), (7, 36520), (9, 36409), (11, 36316), (12, 36277), (15, 36253), (17, 36139),

Gene: LunaStella 43 Start: 33572, Stop: 33000, Start Num: 4

Candidate Starts for LunaStella 43:

(Start: 1 @33644 has 1 MA's), (2, 33617), (Start: 4 @33572 has 4 MA's), (6, 33533), (7, 33482), (9, 33371), (12, 33239), (13, 33224), (14, 33218),

Gene: Lutum\_56 Start: 36721, Stop: 36059, Start Num: 5

Candidate Starts for Lutum 56:

(3, 36730), (Start: 5 @36721 has 1 MA's), (6, 36685), (8, 36562), (9, 36520), (10, 36487), (13, 36367), (16, 36247),

Gene: MooMoo\_42 Start: 33848, Stop: 33276, Start Num: 4

Candidate Starts for MooMoo 42:

(Start: 1 @33920 has 1 MA's), (2, 33893), (Start: 4 @33848 has 4 MA's), (6, 33809), (7, 33758), (9, 33647), (12, 33515), (13, 33500), (14, 33494),

Gene: TChen\_45 Start: 35595, Stop: 34951, Start Num: 1

Candidate Starts for TChen\_45:

(Start: 1 @35595 has 1 MA's), (2, 35568), (Start: 4 @35523 has 4 MA's), (6, 35484), (7, 35433), (9, 35322), (12, 35190), (13, 35175), (14, 35169),

Gene: Whitney\_51 Start: 36847, Stop: 36284, Start Num: 4

Candidate Starts for Whitney\_51:

(Start: 4 @ 36847 has 4 MA's), (6, 36808), (7, 36757), (9, 36646), (11, 36553), (12, 36514), (14, 36493), (15, 36490),