

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 28070 Report

This analysis was run 04/05/24 on database version 557.

Pham number 28070 has 9 members, 2 are drafts.

Phages represented in each track:

• Track 1 : Puissant 47

• Track 2: Cborch11\_47, Oaker\_45, Thumb\_46, Damien\_46, Megatron06\_49

Track 3 : Konstantine\_49Track 4 : Beckerton 45

• Track 5 : Phreeze 44

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

Genes that call this "Most Annotated" start:

 Cborch11\_47, Damien\_46, Konstantine\_49, Megatron06\_49, Oaker\_45, Phreeze\_44, Puissant\_47, Thumb\_46,

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

Beckerton\_45,

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

## Summary by start number:

#### Start 3:

- Found in 9 of 9 (100.0%) of genes in pham
- Manual Annotations of this start: 6 of 7
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Cborch11\_47 (H1), Damien\_46 (H1), Konstantine\_49 (H1), Megatron06\_49 (H1), Oaker\_45 (H1), Phreeze\_44 (H1), Puissant\_47 (H1), Thumb\_46 (H1),

### Start 4:

- Found in 9 of 9 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 1 of 7

- Called 11.1% of time when present
- Phage (with cluster) where this start called: Beckerton\_45 (H1),

### **Summary by clusters:**

There is one cluster represented in this pham: H1

Info for manual annotations of cluster H1:

- •Start number 3 was manually annotated 6 times for cluster H1.
- •Start number 4 was manually annotated 1 time for cluster H1.

### Gene Information:

Gene: Beckerton 45 Start: 39869, Stop: 40258, Start Num: 4

Candidate Starts for Beckerton 45:

(1, 39728), (Start: 3 @39863 has 6 MA's), (Start: 4 @39869 has 1 MA's), (5, 39947), (6, 40052), (7, 40109), (9, 40139), (10, 40205), (11, 40226),

Gene: Cborch11 47 Start: 39379, Stop: 39774, Start Num: 3

Candidate Starts for Cborch11 47:

(1, 39241), (Start: 3 @39379 has 6 MA's), (Start: 4 @39385 has 1 MA's), (5, 39463), (6, 39568), (7, 39625), (9, 39655), (10, 39721), (11, 39742),

Gene: Damien\_46 Start: 39341, Stop: 39736, Start Num: 3

Candidate Starts for Damien 46:

(1, 39203), (Start: 3 @39341 has 6 MA's), (Start: 4 @39347 has 1 MA's), (5, 39425), (6, 39530), (7, 39587), (9, 39617), (10, 39683), (11, 39704),

Gene: Konstantine\_49 Start: 40173, Stop: 40568, Start Num: 3

Candidate Starts for Konstantine 49:

(1, 40038), (Start: 3 @40173 has 6 MA's), (Start: 4 @40179 has 1 MA's), (5, 40257), (6, 40362), (7, 40419), (9, 40449), (10, 40515), (11, 40536),

Gene: Megatron06\_49 Start: 39917, Stop: 40312, Start Num: 3

Candidate Starts for Megatron06\_49:

(1, 39779), (Start: 3 @39917 has 6 MA's), (Start: 4 @39923 has 1 MA's), (5, 40001), (6, 40106), (7, 40163), (9, 40193), (10, 40259), (11, 40280),

Gene: Oaker 45 Start: 39632, Stop: 40027, Start Num: 3

Candidate Starts for Oaker 45:

(1, 39494), (Start: 3 @39632 has 6 MA's), (Start: 4 @39638 has 1 MA's), (5, 39716), (6, 39821), (7, 39878), (9, 39908), (10, 39974), (11, 39995),

Gene: Phreeze\_44 Start: 38939, Stop: 39334, Start Num: 3

Candidate Starts for Phreeze 44:

(1, 38804), (2, 38927), (Start: 3 @38939 has 6 MA's), (Start: 4 @38945 has 1 MA's), (5, 39023), (6, 39128), (7, 39185), (9, 39215), (10, 39281), (11, 39302),

Gene: Puissant 47 Start: 39456, Stop: 39848, Start Num: 3

Candidate Starts for Puissant 47:

(Start: 3 @ 39456 has 6 MA's), (Start: 4 @ 39462 has 1 MA's), (5, 39540), (7, 39702), (8, 39711),

Gene: Thumb\_46 Start: 39374, Stop: 39769, Start Num: 3

Candidate Starts for Thumb\_46:

(1, 39236), (Start: 3 @39374 has 6 MA's), (Start: 4 @39380 has 1 MA's), (5, 39458), (6, 39563), (7, 39620), (9, 39650), (10, 39716), (11, 39737),