

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 27980 Report

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

Pham number 27980 has 10 members, 2 are drafts.

Phages represented in each track:

Track 1 : Cborch11\_54

Track 2 : Oaker\_52, Konstantine\_56, Beckerton\_52

Track 3 : Puissant\_52

Track 4 : Megatron06\_56

Track 5: Thumb\_53, Damien\_53

Track 6 : Predator\_51Track 7 : Phreeze 51

# 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 7 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Beckerton\_52, Damien\_53, Konstantine\_56, Megatron06\_56, Oaker\_52, Phreeze\_51, Predator\_51, Puissant\_52, Thumb\_53,

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

Cborch11 54,

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

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# Summary by start number:

#### Start 3:

- Found in 8 of 10 (80.0%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Cborch11\_54 (H1),

#### Start 4:

- Found in 10 of 10 (100.0%) of genes in pham
- Manual Annotations of this start: 7 of 8

- Called 90.0% of time when present
- Phage (with cluster) where this start called: Beckerton\_52 (H1), Damien\_53 (H1), Konstantine\_56 (H1), Megatron06\_56 (H1), Oaker\_52 (H1), Phreeze\_51 (H1), Predator\_51 (H1), Puissant\_52 (H1), Thumb\_53 (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 1 time for cluster H1.
- •Start number 4 was manually annotated 7 times for cluster H1.

#### Gene Information:

Gene: Beckerton 52 Start: 42627, Stop: 43061, Start Num: 4

Candidate Starts for Beckerton 52:

(Start: 3 @ 42621 has 1 MA's), (Start: 4 @ 42627 has 7 MA's), (5, 42633), (7, 42648), (8, 42666), (9, 42675), (12, 42798), (15, 42837),

Gene: Cborch11\_54 Start: 42137, Stop: 42577, Start Num: 3

Candidate Starts for Cborch11\_54:

(Start: 3 @42137 has 1 MA's), (Start: 4 @42143 has 7 MA's), (5, 42149), (7, 42164), (8, 42182), (9, 42191), (12, 42314), (16, 42386), (17, 42470),

Gene: Damien\_53 Start: 42106, Stop: 42540, Start Num: 4

Candidate Starts for Damien\_53:

(Start: 3 @42100 has 1 MA's), (Start: 4 @42106 has 7 MA's), (5, 42112), (8, 42145), (9, 42154), (12, 42277), (15, 42316),

Gene: Konstantine 56 Start: 42937, Stop: 43371, Start Num: 4

Candidate Starts for Konstantine 56:

(Start: 3 @42931 has 1 MA's), (Start: 4 @42937 has 7 MA's), (5, 42943), (7, 42958), (8, 42976), (9, 42985), (12, 43108), (15, 43147),

Gene: Megatron06 56 Start: 42683, Stop: 43117, Start Num: 4

Candidate Starts for Megatron06 56:

(Start: 3 @ 42677 has 1 MA's), (Start: 4 @ 42683 has 7 MA's), (5, 42689), (8, 42722), (9, 42731), (11, 42812), (12, 42854), (16, 42926), (17, 43010),

Gene: Oaker 52 Start: 42398, Stop: 42832, Start Num: 4

Candidate Starts for Oaker\_52:

(Start: 3 @42392 has 1 MA's), (Start: 4 @42398 has 7 MA's), (5, 42404), (7, 42419), (8, 42437), (9, 42446), (12, 42569), (15, 42608),

Gene: Phreeze 51 Start: 41703, Stop: 42137, Start Num: 4

Candidate Starts for Phreeze 51:

(Start: 3 @41697 has 1 MA's), (Start: 4 @41703 has 7 MA's), (5, 41709), (8, 41742), (9, 41751), (12, 41874), (16, 41946), (17, 42030),

Gene: Predator\_51 Start: 40021, Stop: 40395, Start Num: 4

Candidate Starts for Predator\_51:

(1, 39832), (Start: 4 @40021 has 7 MA's), (6, 40030), (8, 40060), (9, 40069), (10, 40111), (13, 40168), (14, 40186),

Gene: Puissant\_52 Start: 41772, Stop: 42212, Start Num: 4

Candidate Starts for Puissant\_52:

(2, 41688), (Start: 4 @41772 has 7 MA's), (5, 41778), (7, 41793), (8, 41811), (9, 41820), (12, 41943), (18, 42120), (19, 42123),

Gene: Thumb\_53 Start: 42138, Stop: 42572, Start Num: 4

Candidate Starts for Thumb\_53:

(Start: 3 @42132 has 1 MA's), (Start: 4 @42138 has 7 MA's), (5, 42144), (8, 42177), (9, 42186), (12, 42309), (15, 42348),