

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 27941 Report

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

Pham number 27941 has 10 members, 1 are drafts.

Phages represented in each track:

Track 1 : NiceHouse\_286, NiceHouse\_5

• Track 2 : Oaker\_48, Megatron06\_52, Damien\_49, Thumb\_49

• Track 3 : Cborch11\_50

Track 4: Konstantine\_52, Beckerton\_48, Phreeze\_47

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

The start number called the most often in the published annotations is 2, it was called in 8 of the 9 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Beckerton\_48, Damien\_49, Konstantine\_52, Megatron06\_52, NiceHouse\_286, NiceHouse\_5, Oaker\_48, Phreeze\_47, Thumb\_49,

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

• Cborch11\_50,

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

Summary by start number:

#### Start 1:

- Found in 8 of 10 (80.0%) of genes in pham
- Manual Annotations of this start: 1 of 9
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Cborch11\_50 (H1),

### Start 2:

- Found in 10 of 10 (100.0%) of genes in pham
- Manual Annotations of this start: 8 of 9
- Called 90.0% of time when present
- Phage (with cluster) where this start called: Beckerton\_48 (H1), Damien\_49 (H1), Konstantine\_52 (H1), Megatron06\_52 (H1), NiceHouse\_286 (CE), NiceHouse\_5

(CE), Oaker\_48 (H1), Phreeze\_47 (H1), Thumb\_49 (H1),

# Summary by clusters:

There are 2 clusters represented in this pham: H1, CE,

Info for manual annotations of cluster CE:

•Start number 2 was manually annotated 2 times for cluster CE.

Info for manual annotations of cluster H1:

- •Start number 1 was manually annotated 1 time for cluster H1.
- •Start number 2 was manually annotated 6 times for cluster H1.

### Gene Information:

Gene: Beckerton\_48 Start: 40960, Stop: 41316, Start Num: 2

Candidate Starts for Beckerton 48:

(Start: 1 @40927 has 1 MA's), (Start: 2 @40960 has 8 MA's), (4, 41017), (6, 41059), (7, 41080), (8, 41092), (10, 41242), (11, 41251), (12, 41293),

Gene: Cborch11\_50 Start: 40443, Stop: 40832, Start Num: 1

Candidate Starts for Cborch11\_50:

(Start: 1 @40443 has 1 MA's), (Start: 2 @40476 has 8 MA's), (4, 40533), (6, 40575), (7, 40596), (8, 40608), (10, 40758), (11, 40767), (12, 40809),

Gene: Damien\_49 Start: 40439, Stop: 40795, Start Num: 2

Candidate Starts for Damien\_49:

(Start: 1 @40406 has 1 MA's), (Start: 2 @40439 has 8 MA's), (4, 40496), (6, 40538), (7, 40559), (8, 40571), (10, 40721), (11, 40730), (12, 40772),

Gene: Konstantine 52 Start: 41270, Stop: 41626, Start Num: 2

Candidate Starts for Konstantine 52:

(Start: 1 @41237 has 1 MA's), (Start: 2 @41270 has 8 MA's), (4, 41327), (6, 41369), (7, 41390), (8, 41402), (10, 41552), (11, 41561), (12, 41603),

Gene: Megatron06 52 Start: 41015, Stop: 41371, Start Num: 2

Candidate Starts for Megatron06 52:

(Start: 1 @40982 has 1 MA's), (Start: 2 @41015 has 8 MA's), (4, 41072), (6, 41114), (7, 41135), (8, 41147), (10, 41297), (11, 41306), (12, 41348),

Gene: NiceHouse 286 Start: 139872, Stop: 140222, Start Num: 2

Candidate Starts for NiceHouse\_286:

(Start: 2 @139872 has 8 MA's), (3, 139911), (5, 139935), (9, 140097),

Gene: NiceHouse\_5 Start: 2577, Stop: 2927, Start Num: 2

Candidate Starts for NiceHouse 5:

(Start: 2 @2577 has 8 MA's), (3, 2616), (5, 2640), (9, 2802),

Gene: Oaker\_48 Start: 40730, Stop: 41086, Start Num: 2

Candidate Starts for Oaker 48:

(Start: 1 @40697 has 1 MA's), (Start: 2 @40730 has 8 MA's), (4, 40787), (6, 40829), (7, 40850), (8, 40862), (10, 41012), (11, 41021), (12, 41063),

Gene: Phreeze\_47 Start: 40036, Stop: 40392, Start Num: 2

Candidate Starts for Phreeze\_47:

(Start: 1 @40003 has 1 MA's), (Start: 2 @40036 has 8 MA's), (4, 40093), (6, 40135), (7, 40156), (8, 40168), (10, 40318), (11, 40327), (12, 40369),

Gene: Thumb\_49 Start: 40471, Stop: 40827, Start Num: 2

Candidate Starts for Thumb\_49:

(Start: 1 @40438 has 1 MA's), (Start: 2 @40471 has 8 MA's), (4, 40528), (6, 40570), (7, 40591), (8, 40603), (10, 40753), (11, 40762), (12, 40804),