

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 153602 Report

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

Pham number 153602 has 15 members, 1 are drafts.

Phages represented in each track:

- Track 1 : AinMach 28
- Track 2: Liebe 61, Maureen 61
- Track 3: VroomVroom\_57
- Track 4: YDN12 45
- Track 5: Piccadilly\_48, Eklok\_48, Cumberbatch\_49, Eastland\_48
- Track 6 : AxeJC 47
- Track 7: Vondra\_47, HFrancette\_48, Ignacio\_47
- Track 8 : BaileyBlu\_27
  Track 0 : Gilgamach 2
- Track 9 : Gilgamesh\_21

# 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 13 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• AxeJC\_47, Cumberbatch\_49, Eastland\_48, Eklok\_48, Gilgamesh\_21, HFrancette\_48, Ignacio\_47, Liebe\_61, Maureen\_61, Piccadilly\_48, Vondra\_47, VroomVroom\_57, YDN12\_45,

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

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

AinMach\_28, BaileyBlu\_27,

## Summary by start number:

#### Start 9:

- Found in 13 of 15 (86.7%) of genes in pham
- Manual Annotation's of this start: 13 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AxeJC\_47 (BP), Cumberbatch\_49 (BP), Eastland\_48 (BP), Eklok\_48 (BP), Gilgamesh\_21 (singleton), HFrancette\_48 (BP),

Ignacio\_47 (BP), Liebe\_61 (AZ2), Maureen\_61 (AZ2), Piccadilly\_48 (BP), Vondra\_47 (BP), VroomVroom\_57 (AZ4), YDN12\_45 (BG),

### Start 10:

- Found in 1 of 15 (6.7%) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BaileyBlu\_27 (FP),

### Start 11:

- Found in 1 of 15 (6.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AinMach\_28 (AZ),

## **Summary by clusters:**

There are 7 clusters represented in this pham: FP, singleton, BG, BP, AZ2, AZ, AZ4,

Info for manual annotations of cluster AZ2:

•Start number 9 was manually annotated 2 times for cluster AZ2.

Info for manual annotations of cluster AZ4:

•Start number 9 was manually annotated 1 time for cluster AZ4.

Info for manual annotations of cluster BG:

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

Info for manual annotations of cluster BP:

Start number 9 was manually annotated 8 times for cluster BP.

Info for manual annotations of cluster FP:

•Start number 10 was manually annotated 1 time for cluster FP.

#### Gene Information:

Gene: AinMach\_28 Start: 23053, Stop: 23250, Start Num: 11

Candidate Starts for AinMach 28:

(3, 22921), (6, 22969), (7, 22999), (11, 23053), (17, 23098),

Gene: AxeJC\_47 Start: 32027, Stop: 32236, Start Num: 9

Candidate Starts for AxeJC\_47: (Start: 9 @32027 has 13 MA's),

Gene: BaileyBlu\_27 Start: 21867, Stop: 22073, Start Num: 10

Candidate Starts for BaileyBlu 27:

(Start: 10 @21867 has 1 MA's), (14, 21897), (16, 21915), (18, 21948),

Gene: Cumberbatch 49 Start: 32249, Stop: 32467, Start Num: 9

Candidate Starts for Cumberbatch\_49:

(1, 31925), (2, 31949), (4, 32156), (Start: 9 @32249 has 13 MA's), (20, 32399),

Gene: Eastland\_48 Start: 32209, Stop: 32427, Start Num: 9

Candidate Starts for Eastland\_48:

(1, 31885), (2, 31909), (4, 32116), (Start: 9 @32209 has 13 MA's), (20, 32359),

Gene: Eklok\_48 Start: 32008, Stop: 32226, Start Num: 9

Candidate Starts for Eklok 48:

(1, 31684), (2, 31708), (4, 31915), (Start: 9 @32008 has 13 MA's), (20, 32158),

Gene: Gilgamesh\_21 Start: 13106, Stop: 12825, Start Num: 9

Candidate Starts for Gilgamesh 21:

(4, 13196), (8, 13109), (Start: 9 @13106 has 13 MA's), (12, 13088),

Gene: HFrancette\_48 Start: 32550, Stop: 32768, Start Num: 9

Candidate Starts for HFrancette\_48:

(Start: 9 @ 32550 has 13 MA's), (20, 32700),

Gene: Ignacio\_47 Start: 32453, Stop: 32671, Start Num: 9

Candidate Starts for Ignacio\_47:

(Start: 9 @32453 has 13 MA's), (20, 32603),

Gene: Liebe 61 Start: 42044, Stop: 42256, Start Num: 9

Candidate Starts for Liebe\_61:

(Start: 9 @ 42044 has 13 MA's), (13, 42065), (15, 42098),

Gene: Maureen\_61 Start: 42043, Stop: 42255, Start Num: 9

Candidate Starts for Maureen 61:

(Start: 9 @ 42043 has 13 MA's), (13, 42064), (15, 42097),

Gene: Piccadilly\_48 Start: 32208, Stop: 32426, Start Num: 9

Candidate Starts for Piccadilly 48:

(1, 31884), (2, 31908), (4, 32115), (Start: 9 @32208 has 13 MA's), (20, 32358),

Gene: Vondra\_47 Start: 31794, Stop: 32012, Start Num: 9

Candidate Starts for Vondra\_47:

(Start: 9 @31794 has 13 MA's), (20, 31944),

Gene: VroomVroom\_57 Start: 39455, Stop: 39667, Start Num: 9

Candidate Starts for VroomVroom\_57: (Start: 9 @39455 has 13 MA's), (21, 39608),

Gene: YDN12\_45 Start: 34681, Stop: 34436, Start Num: 9

Candidate Starts for YDN12 45:

(5, 34759), (Start: 9 @34681 has 13 MA's), (12, 34663), (14, 34645), (19, 34549), (22, 34498), (23,

34477), (24, 34462), (25, 34459), (26, 34447),