

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 87570 Report

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

Pham number 87570 has 13 members, 7 are drafts.

Phages represented in each track:

 Track 1: Cursive\_229, PacManQ\_227, Lululemon\_226, Watermoore\_225, Cross\_225, HangryHippo\_227, BlueOtter\_227

Track 2 : Gibbi\_246Track 3 : Elmer\_254Track 4 : Mugiwara 250

• Track 5 : Francob\_177, Gilson\_180

• Track 6 : Moab\_178

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

The start number called the most often in the published annotations is 7, it was called in 3 of the 6 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Francob\_177, Gilson\_180, Moab\_178,

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:

 BlueOtter\_227, Cross\_225, Cursive\_229, Elmer\_254, Gibbi\_246, HangryHippo\_227, Lululemon\_226, Mugiwara\_250, PacManQ\_227, Watermoore\_225,

## Summary by start number:

### Start 2:

- Found in 2 of 13 (15.4%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Gibbi\_246 (BE2),

### Start 4:

• Found in 10 of 13 (76.9%) of genes in pham

- Manual Annotations of this start: 3 of 6
- Called 90.0% of time when present
- Phage (with cluster) where this start called: BlueOtter 227 (BE1), Cross 225 (BE1), Cursive\_229 (BE1), Elmer\_254 (BE2), HangryHippo\_227 (BE1), Lululemon\_226 (BE1), Mugiwara 250 (BE2), PacManQ 227 (BE1), Watermoore 225 (BE1),

#### Start 7:

- Found in 3 of 13 (23.1%) of genes in pham
- Manual Annotations of this start: 3 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Francob 177 (BK1), Gilson 180 (BK1), Moab 178 (BK1),

## Summary by clusters:

There are 3 clusters represented in this pham: BE2, BE1, BK1,

Info for manual annotations of cluster BE1:

•Start number 4 was manually annotated 3 times for cluster BE1.

Info for manual annotations of cluster BK1:

Gene: Gilson\_180 Start: 94021, Stop: 94143, Start Num: 7

•Start number 7 was manually annotated 3 times for cluster BK1.

Gene Information: Gene: BlueOtter 227 Start: 113515, Stop: 113667, Start Num: 4 Candidate Starts for BlueOtter 227: (1, 113437), (Start: 4 @113515 has 3 MA's), (8, 113578), (13, 113659), Gene: Cross 225 Start: 114160, Stop: 114312, Start Num: 4 Candidate Starts for Cross 225: (1, 114082), (Start: 4 @ 114160 has 3 MA's), (8, 114223), (13, 114304), Gene: Cursive\_229 Start: 114267, Stop: 114419, Start Num: 4 Candidate Starts for Cursive 229: (1, 114189), (Start: 4 @114267 has 3 MA's), (8, 114330), (13, 114411), Gene: Elmer 254 Start: 115404, Stop: 115556, Start Num: 4 Candidate Starts for Elmer 254: (1, 115326), (Start: 4 @115404 has 3 MA's), (5, 115413), (9, 115470), (10, 115491), (13, 115548), Gene: Francob 177 Start: 94050, Stop: 94172, Start Num: 7 Candidate Starts for Francob 177: (1, 93933), (3, 93999), (6, 94023), (Start: 7 @94050 has 3 MA's), (13, 94164), Gene: Gibbi 246 Start: 112069, Stop: 112251, Start Num: 2 Candidate Starts for Gibbi 246: (1, 112021), (2, 112069), (Start: 4 @112099 has 3 MA's), (5, 112108), (9, 112165), (13, 112243),

Candidate Starts for Gilson\_180:

(1, 93904), (3, 93970), (6, 93994), (Start: 7 @94021 has 3 MA's), (13, 94135),

Gene: HangryHippo\_227 Start: 113515, Stop: 113667, Start Num: 4

Candidate Starts for HangryHippo\_227:

(1, 113437), (Start: 4 @113515 has 3 MA's), (8, 113578), (13, 113659),

Gene: Lululemon\_226 Start: 113320, Stop: 113472, Start Num: 4

Candidate Starts for Lululemon\_226:

(1, 113242), (Start: 4 @113320 has 3 MA's), (8, 113383), (13, 113464),

Gene: Moab\_178 Start: 96530, Stop: 96652, Start Num: 7

Candidate Starts for Moab\_178:

(1, 96413), (3, 96479), (6, 96503), (Start: 7 @96530 has 3 MA's), (11, 96629), (12, 96641), (13, 96644),

Gene: Mugiwara\_250 Start: 114313, Stop: 114465, Start Num: 4

Candidate Starts for Mugiwara\_250:

(1, 114235), (2, 114283), (Start: 4 @114313 has 3 MA's), (5, 114322), (9, 114379), (13, 114457),

Gene: PacManQ\_227 Start: 113320, Stop: 113472, Start Num: 4

Candidate Starts for PacManQ\_227:

(1, 113242), (Start: 4 @113320 has 3 MA's), (8, 113383), (13, 113464),

Gene: Watermoore\_225 Start: 115158, Stop: 115310, Start Num: 4

Candidate Starts for Watermoore\_225:

(1, 115080), (Start: 4 @115158 has 3 MA's), (8, 115221), (13, 115302),