

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 171823 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171823 has 18 members, 5 are drafts.

Phages represented in each track:

Track 1 : Belphegor\_16

Track 2 : Phauci\_12, Hans\_21

• Track 3: MelBins 20

Track 4 : Leonard\_19, Phinally\_19

Track 5 : EMoore\_14

Track 6 : Inspectinfecti\_20

Track 7 : Ali17 17

 Track 8: Scioto\_19, Delrey21\_19, Verity\_19, DoctorFroggo\_19, Sampson\_19, Abblin\_19, Natkenzie\_19

• Track 9 : Zipp\_19

• Track 10 : ViaConlectus 20

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

The start number called the most often in the published annotations is 19, it was called in 12 of the 13 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Abblin\_19, Ali17\_17, Delrey21\_19, DoctorFroggo\_19, Hans\_21, Leonard\_19, MelBins\_20, Natkenzie\_19, Phauci\_12, Phinally\_19, Sampson\_19, Scioto\_19, Verity\_19, ViaConlectus\_20, Zipp\_19,

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

Belphegor\_16, EMoore\_14, Inspectinfecti\_20,

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

### Summary by start number:

#### Start 17:

- Found in 9 of 18 (50.0%) of genes in pham
- No Manual Annotations of this start.
- Called 22.2% of time when present

• Phage (with cluster) where this start called: Belphegor\_16 (DE), Inspectinfecti\_20 (DE2),

#### Start 18:

- Found in 9 of 18 (50.0%) of genes in pham
- Manual Annotations of this start: 1 of 13
- Called 11.1% of time when present
- Phage (with cluster) where this start called: EMoore\_14 (DE2),

### Start 19:

- Found in 18 of 18 (100.0%) of genes in pham
- Manual Annotations of this start: 12 of 13
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Abblin\_19 (DE4), Ali17\_17 (DE2), Delrey21\_19 (DE4), DoctorFroggo\_19 (DE4), Hans\_21 (DE2), Leonard\_19 (DE2), MelBins\_20 (DE2), Natkenzie\_19 (DE4), Phauci\_12 (DE2), Phinally\_19 (DE2), Sampson\_19 (DE4), Scioto\_19 (DE4), Verity\_19 (DE4), ViaConlectus\_20 (DE4), Zipp\_19 (DE4),

## **Summary by clusters:**

There are 3 clusters represented in this pham: DE2, DE, DE4,

Info for manual annotations of cluster DE2:

- •Start number 18 was manually annotated 1 time for cluster DE2.
- •Start number 19 was manually annotated 6 times for cluster DE2.

Info for manual annotations of cluster DE4:

•Start number 19 was manually annotated 6 times for cluster DE4.

#### Gene Information:

Gene: Abblin\_19 Start: 15094, Stop: 15276, Start Num: 19

Candidate Starts for Abblin\_19:

(12, 14902), (Start: 19 @15094 has 12 MA's), (20, 15115), (21, 15130), (23, 15265),

Gene: Ali17\_17 Start: 14222, Stop: 14404, Start Num: 19

Candidate Starts for Ali17 17:

(7, 13871), (10, 13958), (11, 13964), (13, 14066), (17, 14168), (Start: 18 @14183 has 1 MA's), (Start: 19 @14222 has 12 MA's), (22, 14288),

Gene: Belphegor\_16 Start: 13276, Stop: 13509, Start Num: 17

Candidate Starts for Belphegor\_16:

(3, 12718), (5, 12937), (8, 13009), (15, 13225), (16, 13258), (17, 13276), (Start: 18 @13291 has 1

MA's), (Start: 19 @13327 has 12 MA's), (21, 13363), (22, 13393),

Gene: Delrey21 19 Start: 14557, Stop: 14739, Start Num: 19

Candidate Starts for Delrey21 19:

(12, 14365), (Start: 19 @14557 has 12 MA's), (20, 14578), (21, 14593), (23, 14728),

Gene: DoctorFroggo\_19 Start: 14557, Stop: 14739, Start Num: 19

Candidate Starts for DoctorFroggo\_19:

(12, 14365), (Start: 19 @14557 has 12 MA's), (20, 14578), (21, 14593), (23, 14728),

Gene: EMoore\_14 Start: 12548, Stop: 12766, Start Num: 18

Candidate Starts for EMoore 14:

(1, 11762), (2, 11876), (4, 11981), (7, 12233), (16, 12515), (17, 12533), (Start: 18 @ 12548 has 1 MA's), (Start: 19 @ 12584 has 12 MA's), (22, 12650), (23, 12755),

Gene: Hans\_21 Start: 14883, Stop: 15065, Start Num: 19

Candidate Starts for Hans 21:

(6, 14520), (7, 14532), (9, 14589), (10, 14619), (17, 14829), (Start: 18 @ 14844 has 1 MA's), (Start: 19 @ 14883 has 12 MA's), (22, 14949),

Gene: Inspectinfecti\_20 Start: 15251, Stop: 15487, Start Num: 17

Candidate Starts for Inspectinfecti\_20:

(7, 14954), (10, 15041), (14, 15167), (17, 15251), (Start: 18 @15266 has 1 MA's), (Start: 19 @15305 has 12 MA's), (22, 15371),

Gene: Leonard\_19 Start: 14900, Stop: 15082, Start Num: 19

Candidate Starts for Leonard\_19:

(7, 14549), (10, 14636), (14, 14762), (17, 14846), (Start: 18 @14861 has 1 MA's), (Start: 19 @14900 has 12 MA's), (22, 14966),

Gene: MelBins\_20 Start: 15104, Stop: 15286, Start Num: 19

Candidate Starts for MelBins\_20:

(7, 14753), (10, 14840), (17, 15050), (Start: 18 @15065 has 1 MA's), (Start: 19 @15104 has 12 MA's), (22, 15170),

Gene: Natkenzie\_19 Start: 15094, Stop: 15276, Start Num: 19

Candidate Starts for Natkenzie\_19:

(12, 14902), (Start: 19 @15094 has 12 MA's), (20, 15115), (21, 15130), (23, 15265),

Gene: Phauci 12 Start: 11467, Stop: 11649, Start Num: 19

Candidate Starts for Phauci 12:

(6, 11104), (7, 11116), (9, 11173), (10, 11203), (17, 11413), (Start: 18 @ 11428 has 1 MA's), (Start: 19 @ 11467 has 12 MA's), (22, 11533),

Gene: Phinally\_19 Start: 14897, Stop: 15079, Start Num: 19

Candidate Starts for Phinally\_19:

(7, 14546), (10, 14633), (14, 14759), (17, 14843), (Start: 18 @14858 has 1 MA's), (Start: 19 @14897 has 12 MA's), (22, 14963),

Gene: Sampson\_19 Start: 15039, Stop: 15221, Start Num: 19

Candidate Starts for Sampson 19:

(12, 14847), (Start: 19 @15039 has 12 MA's), (20, 15060), (21, 15075), (23, 15210),

Gene: Scioto\_19 Start: 15094, Stop: 15276, Start Num: 19

Candidate Starts for Scioto\_19:

(12, 14902), (Start: 19 @15094 has 12 MA's), (20, 15115), (21, 15130), (23, 15265),

Gene: Verity\_19 Start: 14557, Stop: 14739, Start Num: 19

Candidate Starts for Verity\_19:

(12, 14365), (Start: 19 @14557 has 12 MA's), (20, 14578), (21, 14593), (23, 14728),

Gene: ViaConlectus\_20 Start: 15109, Stop: 15291, Start Num: 19

Candidate Starts for ViaConlectus\_20:

(Start: 19 @15109 has 12 MA's), (20, 15130), (21, 15145), (23, 15280),

Gene: Zipp\_19 Start: 15206, Stop: 15388, Start Num: 19

Candidate Starts for Zipp\_19:

(Start: 19 @15206 has 12 MA's), (20, 15227), (21, 15242), (23, 15377),