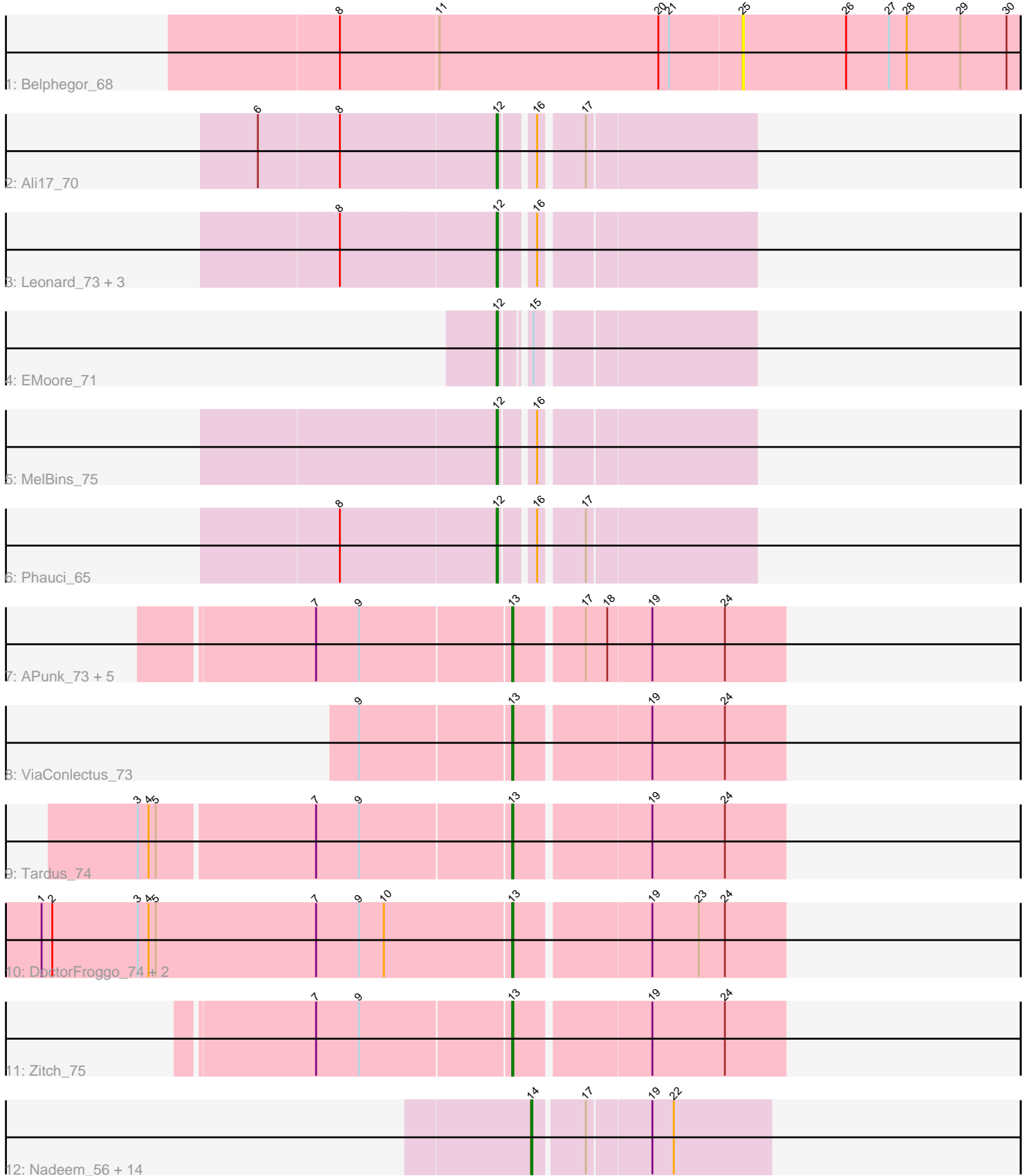


Pham 216364



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 216364 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216364 has 36 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Belphegor\_68
- Track 2 : Ali17\_70
- Track 3 : Leonard\_73, Hans\_74, Phinally\_73, Inspectinfecti\_74
- Track 4 : EMOore\_71
- Track 5 : MelBins\_75
- Track 6 : Phauci\_65
- Track 7 : APunk\_73, Scioto\_73, Sampson\_75, Zipp\_74, Natkenzie\_73, Abblin\_73
- Track 8 : ViaConlectus\_73
- Track 9 : Tardus\_74
- Track 10 : DoctorFroggo\_74, Delrey21\_74, Verity\_74
- Track 11 : Zitch\_75
- Track 12 : Nadeem\_56, WheatThin\_55, Parada\_56, Brylie\_56, Bock\_57, Hamood\_57, Francois\_56, Mulch\_56, Ayotoya\_57, Pimento\_58, NancyRae\_55, BetterKatz\_56, GrandSlam\_57, DelRio\_57, Chop\_57

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

The start number called the most often in the published annotations is 14, it was called in 15 of the 32 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ayotoya\_57, BetterKatz\_56, Bock\_57, Brylie\_56, Chop\_57, DelRio\_57, Francois\_56, GrandSlam\_57, Hamood\_57, Mulch\_56, Nadeem\_56, NancyRae\_55, Parada\_56, Pimento\_58, WheatThin\_55,

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

- 

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

- APunk\_73, Abblin\_73, Ali17\_70, Belphegor\_68, Delrey21\_74, DoctorFroggo\_74, EMOore\_71, Hans\_74, Inspectinfecti\_74, Leonard\_73, MelBins\_75, Natkenzie\_73, Phauci\_65, Phinally\_73, Sampson\_75, Scioto\_73, Tardus\_74, Verity\_74, ViaConlectus\_73, Zipp\_74, Zitch\_75,

## Summary by start number:

### Start 12:

- Found in 8 of 36 ( 22.2% ) of genes in pham
- Manual Annotations of this start: 8 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ali17\_70 (DE2), EMoore\_71 (DE2), Hans\_74 (DE2), Inspectinfecti\_74 (DE2), Leonard\_73 (DE2), MelBins\_75 (DE2), Phauci\_65 (DE2), Phinally\_73 (DE2),

### Start 13:

- Found in 12 of 36 ( 33.3% ) of genes in pham
- Manual Annotations of this start: 9 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: APunk\_73 (DE4), Abblin\_73 (DE4), Delrey21\_74 (DE4), DoctorFroggo\_74 (DE4), Natkenzie\_73 (DE4), Sampson\_75 (DE4), Scioto\_73 (DE4), Tardus\_74 (DE4), Verity\_74 (DE4), ViaConlectus\_73 (DE4), Zipp\_74 (DE4), Zitch\_75 (DE4),

### Start 14:

- Found in 15 of 36 ( 41.7% ) of genes in pham
- Manual Annotations of this start: 15 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ayotoya\_57 (DI), BetterKatz\_56 (DI), Bock\_57 (DI), Brylie\_56 (DI), Chop\_57 (DI), DelRio\_57 (DI), Francois\_56 (DI), GrandSlam\_57 (DI), Hamood\_57 (DI), Mulch\_56 (DI), Nadeem\_56 (DI), NancyRae\_55 (DI), Parada\_56 (DI), Pimento\_58 (DI), WheatThin\_55 (DI),

### Start 25:

- Found in 1 of 36 ( 2.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Belphegor\_68 (DE),

## Summary by clusters:

There are 4 clusters represented in this pham: DE2, DE, DE4, DI,

### Info for manual annotations of cluster DE2:

- Start number 12 was manually annotated 8 times for cluster DE2.

### Info for manual annotations of cluster DE4:

- Start number 13 was manually annotated 9 times for cluster DE4.

### Info for manual annotations of cluster DI:

- Start number 14 was manually annotated 15 times for cluster DI.

## Gene Information:

Gene: APunk\_73 Start: 53717, Stop: 53935, Start Num: 13

Candidate Starts for APunk\_73:

(7, 53558), (9, 53594), (Start: 13 @53717 has 9 MA's), (17, 53771), (18, 53789), (19, 53825), (24, 53885),

Gene: Abblin\_73 Start: 53875, Stop: 54093, Start Num: 13

Candidate Starts for Abblin\_73:

(7, 53716), (9, 53752), (Start: 13 @53875 has 9 MA's), (17, 53929), (18, 53947), (19, 53983), (24, 54043),

Gene: Ali17\_70 Start: 52881, Stop: 53075, Start Num: 12

Candidate Starts for Ali17\_70:

(6, 52686), (8, 52752), (Start: 12 @52881 has 8 MA's), (16, 52905), (17, 52938),

Gene: Ayotoya\_57 Start: 39666, Stop: 39851, Start Num: 14

Candidate Starts for Ayotoya\_57:

(Start: 14 @39666 has 15 MA's), (17, 39705), (19, 39756), (22, 39774),

Gene: Belphegor\_68 Start: 54091, Stop: 54324, Start Num: 25

Candidate Starts for Belphegor\_68:

(8, 53758), (11, 53839), (20, 54022), (21, 54031), (25, 54091), (26, 54178), (27, 54214), (28, 54229), (29, 54274), (30, 54313),

Gene: BetterKatz\_56 Start: 38865, Stop: 39053, Start Num: 14

Candidate Starts for BetterKatz\_56:

(Start: 14 @38865 has 15 MA's), (17, 38904), (19, 38955), (22, 38973),

Gene: Bock\_57 Start: 38898, Stop: 39083, Start Num: 14

Candidate Starts for Bock\_57:

(Start: 14 @38898 has 15 MA's), (17, 38937), (19, 38988), (22, 39006),

Gene: Brylie\_56 Start: 38646, Stop: 38834, Start Num: 14

Candidate Starts for Brylie\_56:

(Start: 14 @38646 has 15 MA's), (17, 38685), (19, 38736), (22, 38754),

Gene: Chop\_57 Start: 39417, Stop: 39602, Start Num: 14

Candidate Starts for Chop\_57:

(Start: 14 @39417 has 15 MA's), (17, 39456), (19, 39507), (22, 39525),

Gene: DelRio\_57 Start: 39828, Stop: 40013, Start Num: 14

Candidate Starts for DelRio\_57:

(Start: 14 @39828 has 15 MA's), (17, 39867), (19, 39918), (22, 39936),

Gene: Delrey21\_74 Start: 55666, Stop: 55884, Start Num: 13

Candidate Starts for Delrey21\_74:

(1, 55273), (2, 55282), (3, 55354), (4, 55363), (5, 55369), (7, 55504), (9, 55540), (10, 55561), (Start: 13 @55666 has 9 MA's), (19, 55774), (23, 55813), (24, 55834),

Gene: DoctorFroggo\_74 Start: 55666, Stop: 55884, Start Num: 13

Candidate Starts for DoctorFroggo\_74:

(1, 55273), (2, 55282), (3, 55354), (4, 55363), (5, 55369), (7, 55504), (9, 55540), (10, 55561), (Start: 13 @55666 has 9 MA's), (19, 55774), (23, 55813), (24, 55834),

Gene: EMoore\_71 Start: 54322, Stop: 54513, Start Num: 12

Candidate Starts for EMoore\_71:  
(Start: 12 @54322 has 8 MA's), (15, 54340),

Gene: Francois\_56 Start: 38904, Stop: 39092, Start Num: 14  
Candidate Starts for Francois\_56:  
(Start: 14 @38904 has 15 MA's), (17, 38943), (19, 38994), (22, 39012),

Gene: GrandSlam\_57 Start: 39417, Stop: 39602, Start Num: 14  
Candidate Starts for GrandSlam\_57:  
(Start: 14 @39417 has 15 MA's), (17, 39456), (19, 39507), (22, 39525),

Gene: Hamood\_57 Start: 39417, Stop: 39602, Start Num: 14  
Candidate Starts for Hamood\_57:  
(Start: 14 @39417 has 15 MA's), (17, 39456), (19, 39507), (22, 39525),

Gene: Hans\_74 Start: 53754, Stop: 53948, Start Num: 12  
Candidate Starts for Hans\_74:  
(8, 53625), (Start: 12 @53754 has 8 MA's), (16, 53778),

Gene: Inspectinfecti\_74 Start: 53728, Stop: 53922, Start Num: 12  
Candidate Starts for Inspectinfecti\_74:  
(8, 53599), (Start: 12 @53728 has 8 MA's), (16, 53752),

Gene: Leonard\_73 Start: 53791, Stop: 53985, Start Num: 12  
Candidate Starts for Leonard\_73:  
(8, 53662), (Start: 12 @53791 has 8 MA's), (16, 53815),

Gene: MelBins\_75 Start: 53996, Stop: 54190, Start Num: 12  
Candidate Starts for MelBins\_75:  
(Start: 12 @53996 has 8 MA's), (16, 54020),

Gene: Mulch\_56 Start: 38646, Stop: 38834, Start Num: 14  
Candidate Starts for Mulch\_56:  
(Start: 14 @38646 has 15 MA's), (17, 38685), (19, 38736), (22, 38754),

Gene: Nadeem\_56 Start: 38634, Stop: 38822, Start Num: 14  
Candidate Starts for Nadeem\_56:  
(Start: 14 @38634 has 15 MA's), (17, 38673), (19, 38724), (22, 38742),

Gene: NancyRae\_55 Start: 38632, Stop: 38817, Start Num: 14  
Candidate Starts for NancyRae\_55:  
(Start: 14 @38632 has 15 MA's), (17, 38671), (19, 38722), (22, 38740),

Gene: Natkenzie\_73 Start: 53875, Stop: 54093, Start Num: 13  
Candidate Starts for Natkenzie\_73:  
(7, 53716), (9, 53752), (Start: 13 @53875 has 9 MA's), (17, 53929), (18, 53947), (19, 53983), (24, 54043),

Gene: Parada\_56 Start: 38646, Stop: 38834, Start Num: 14  
Candidate Starts for Parada\_56:  
(Start: 14 @38646 has 15 MA's), (17, 38685), (19, 38736), (22, 38754),

Gene: Phauci\_65 Start: 50831, Stop: 51025, Start Num: 12

Candidate Starts for Phauci\_65:

(8, 50702), (Start: 12 @50831 has 8 MA's), (16, 50855), (17, 50888),

Gene: Phinally\_73 Start: 53788, Stop: 53982, Start Num: 12

Candidate Starts for Phinally\_73:

(8, 53659), (Start: 12 @53788 has 8 MA's), (16, 53812),

Gene: Pimento\_58 Start: 38545, Stop: 38730, Start Num: 14

Candidate Starts for Pimento\_58:

(Start: 14 @38545 has 15 MA's), (17, 38584), (19, 38635), (22, 38653),

Gene: Sampson\_75 Start: 54026, Stop: 54244, Start Num: 13

Candidate Starts for Sampson\_75:

(7, 53867), (9, 53903), (Start: 13 @54026 has 9 MA's), (17, 54080), (18, 54098), (19, 54134), (24, 54194),

Gene: Scioto\_73 Start: 53876, Stop: 54094, Start Num: 13

Candidate Starts for Scioto\_73:

(7, 53717), (9, 53753), (Start: 13 @53876 has 9 MA's), (17, 53930), (18, 53948), (19, 53984), (24, 54044),

Gene: Tardus\_74 Start: 54330, Stop: 54548, Start Num: 13

Candidate Starts for Tardus\_74:

(3, 54027), (4, 54036), (5, 54042), (7, 54171), (9, 54207), (Start: 13 @54330 has 9 MA's), (19, 54438), (24, 54498),

Gene: Verity\_74 Start: 55666, Stop: 55884, Start Num: 13

Candidate Starts for Verity\_74:

(1, 55273), (2, 55282), (3, 55354), (4, 55363), (5, 55369), (7, 55504), (9, 55540), (10, 55561), (Start: 13 @55666 has 9 MA's), (19, 55774), (23, 55813), (24, 55834),

Gene: ViaConlectus\_73 Start: 52827, Stop: 53045, Start Num: 13

Candidate Starts for ViaConlectus\_73:

(9, 52704), (Start: 13 @52827 has 9 MA's), (19, 52935), (24, 52995),

Gene: WheatThin\_55 Start: 38634, Stop: 38822, Start Num: 14

Candidate Starts for WheatThin\_55:

(Start: 14 @38634 has 15 MA's), (17, 38673), (19, 38724), (22, 38742),

Gene: Zipp\_74 Start: 55254, Stop: 55472, Start Num: 13

Candidate Starts for Zipp\_74:

(7, 55095), (9, 55131), (Start: 13 @55254 has 9 MA's), (17, 55308), (18, 55326), (19, 55362), (24, 55422),

Gene: Zitch\_75 Start: 53704, Stop: 53922, Start Num: 13

Candidate Starts for Zitch\_75:

(7, 53545), (9, 53581), (Start: 13 @53704 has 9 MA's), (19, 53812), (24, 53872),