

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 170346 Report

This analysis was run 07/09/24 on database version 566.

Pham number 170346 has 18 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Aikoy\_100, Leopard\_98, Onyinye\_99
- Track 2 : Wocket\_9
- Track 3 : Archis\_9
- Track 4 : Pipp\_9
- Track 5 : BritBrat 35
- Track 6 : BearBQ\_46
- Track 7 : BearBQ\_45
- Track 8 : BENtherdunthat\_46
- Track 9: BENtherdunthat 49
- Track 10 : Asapag\_46, Frickyeah\_51, Periwinkle\_56, Phistory\_50
- Track 11 : LitninMcQueen\_40, Kamaru\_41
- Track 12 : Kuwabara\_43

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

The start number called the most often in the published annotations is 22, it was called in 7 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Asapag\_46, BENtherdunthat\_46, Frickyeah\_51, Kamaru\_41, Kuwabara\_43, LitninMcQueen\_40, Periwinkle\_56, Phistory\_50,

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:

• Aikoy\_100, Archis\_9, BENtherdunthat\_49, BearBQ\_45, BearBQ\_46, BritBrat\_35, Leopard\_98, Onyinye\_99, Pipp\_9, Wocket\_9,

## Summary by start number:

#### Start 6:

- Found in 1 of 18 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 17

- Called 100.0% of time when present
- Phage (with cluster) where this start called: BearBQ\_45 (DN),

### Start 11:

- Found in 3 of 18 (16.7%) of genes in pham
- Manual Annotations of this start: 3 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aikoy\_100 (AE), Leopard\_98 (AE), Onyinye\_99 (AE),

## Start 18:

- Found in 3 of 18 (16.7%) of genes in pham
- Manual Annotations of this start: 3 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Archis\_9 (CV), Pipp\_9 (CV), Wocket\_9 (CV),

## Start 21:

- Found in 2 of 18 (11.1%) of genes in pham
- Manual Annotations of this start: 2 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BENtherdunthat\_49 (DN1), BritBrat\_35 (CY2),

#### Start 22:

- Found in 8 of 18 (44.4%) of genes in pham
- Manual Annotations of this start: 7 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Asapag\_46 (DN1), BENtherdunthat\_46 (DN1), Frickyeah\_51 (DN1), Kamaru\_41 (DN1), Kuwabara\_43 (DN4), LitninMcQueen\_40 (DN1), Periwinkle\_56 (DN1), Phistory\_50 (DN1),

## Start 32:

- Found in 1 of 18 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BearBQ\_46 (DN),

### Summary by clusters:

There are 6 clusters represented in this pham: DN, CY2, AE, DN4, DN1, CV,

Info for manual annotations of cluster AE:

•Start number 11 was manually annotated 3 times for cluster AE.

Info for manual annotations of cluster CV:

•Start number 18 was manually annotated 3 times for cluster CV.

Info for manual annotations of cluster CY2:

•Start number 21 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster DN:

•Start number 6 was manually annotated 1 time for cluster DN.

•Start number 32 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:

- •Start number 21 was manually annotated 1 time for cluster DN1.
- •Start number 22 was manually annotated 6 times for cluster DN1.

Info for manual annotations of cluster DN4:

•Start number 22 was manually annotated 1 time for cluster DN4.

#### Gene Information:

Gene: Aikoy\_100 Start: 65760, Stop: 66008, Start Num: 11

Candidate Starts for Aikoy\_100:

(3, 65658), (8, 65718), (Start: 11 @65760 has 3 MA's), (12, 65778), (38, 65925), (42, 65967), (43, 65970), (44, 65976), (46, 65985),

Gene: Archis\_9 Start: 6959, Stop: 7171, Start Num: 18

Candidate Starts for Archis 9:

(1, 6623), (14, 6932), (Start: 18 @6959 has 3 MA's), (20, 6971), (28, 7010), (30, 7025), (33, 7049), (35, 7067), (39, 7091), (40, 7106),

Gene: Asapag\_46 Start: 32313, Stop: 32537, Start Num: 22

Candidate Starts for Asapag\_46:

(17, 32286), (Start: 22 @32313 has 7 MA's), (23, 32328), (27, 32340), (29, 32346), (45, 32466), (50, 32508),

Gene: BENtherdunthat\_46 Start: 30492, Stop: 30647, Start Num: 22

Candidate Starts for BENtherdunthat\_46:

(4, 30348), (15, 30450), (17, 30471), (Start: 22 @30492 has 7 MA's), (23, 30507), (27, 30519), (33, 30543), (47, 30630),

Gene: BENtherdunthat 49 Start: 31546, Stop: 31782, Start Num: 21

Candidate Starts for BENtherdunthat 49:

(2, 31252), (5, 31405), (10, 31465), (Start: 21 @31546 has 2 MA's), (23, 31564), (29, 31582), (34, 31627), (48, 31717), (49, 31744), (51, 31765),

Gene: BearBQ 46 Start: 33455, Stop: 33640, Start Num: 32

Candidate Starts for BearBQ 46:

(16, 33353), (25, 33413), (26, 33416), (Start: 32 @33455 has 1 MA's), (36, 33482),

Gene: BearBQ\_45 Start: 33255, Stop: 33455, Start Num: 6

Candidate Starts for BearBQ\_45:

(Start: 6 @ 33255 has 1 MA's), (7, 33276), (9, 33288), (13, 33348), (19, 33381), (24, 33411), (31, 33438),

Gene: BritBrat\_35 Start: 30625, Stop: 30804, Start Num: 21

Candidate Starts for BritBrat 35:

(Start: 21 @ 30625 has 2 MA's), (23, 30640), (27, 30652), (37, 30715), (41, 30751),

Gene: Frickyeah 51 Start: 31788, Stop: 32012, Start Num: 22

Candidate Starts for Frickyeah\_51:

(17, 31761), (Start: 22 @31788 has 7 MA's), (23, 31803), (27, 31815), (29, 31821), (45, 31941), (50, 31983),

Gene: Kamaru\_41 Start: 30059, Stop: 30214, Start Num: 22

Candidate Starts for Kamaru\_41:

(Start: 22 @30059 has 7 MA's), (23, 30074), (27, 30086), (30, 30095), (33, 30110), (47, 30197),

Gene: Kuwabara 43 Start: 30891, Stop: 31046, Start Num: 22

Candidate Starts for Kuwabara\_43:

(Start: 22 @ 30891 has 7 MA's), (23, 30906), (27, 30918), (47, 31029),

Gene: Leopard 98 Start: 65692, Stop: 65940, Start Num: 11

Candidate Starts for Leopard 98:

(3, 65590), (8, 65650), (Start: 11 @65692 has 3 MA's), (12, 65710), (38, 65857), (42, 65899), (43, 65902), (44, 65908), (46, 65917),

Gene: LitninMcQueen\_40 Start: 29808, Stop: 29963, Start Num: 22

Candidate Starts for LitninMcQueen\_40:

(Start: 22 @29808 has 7 MA's), (23, 29823), (27, 29835), (30, 29844), (33, 29859), (47, 29946),

Gene: Onyinye\_99 Start: 65553, Stop: 65801, Start Num: 11

Candidate Starts for Onyinye\_99:

(3, 65451), (8, 65511), (Start: 11 @65553 has 3 MA's), (12, 65571), (38, 65718), (42, 65760), (43, 65763), (44, 65769), (46, 65778),

Gene: Periwinkle\_56 Start: 34613, Stop: 34837, Start Num: 22

Candidate Starts for Periwinkle\_56:

(17, 34586), (Start: 22 @34613 has 7 MA's), (23, 34628), (27, 34640), (29, 34646), (45, 34766), (50, 34808),

Gene: Phistory\_50 Start: 32872, Stop: 33096, Start Num: 22

Candidate Starts for Phistory\_50:

(17, 32845), (Start: 22 @32872 has 7 MA's), (23, 32887), (27, 32899), (29, 32905), (45, 33025), (50, 33067),

Gene: Pipp\_9 Start: 6983, Stop: 7195, Start Num: 18

Candidate Starts for Pipp\_9:

(1, 6647), (14, 6956), (Start: 18 @6983 has 3 MA's), (20, 6995), (30, 7049), (33, 7073), (35, 7091), (39, 7115),

Gene: Wocket\_9 Start: 7024, Stop: 7236, Start Num: 18

Candidate Starts for Wocket\_9:

(14, 6997), (Start: 18 @7024 has 3 MA's), (20, 7036), (28, 7075), (30, 7090), (33, 7114), (39, 7156), (40, 7171),