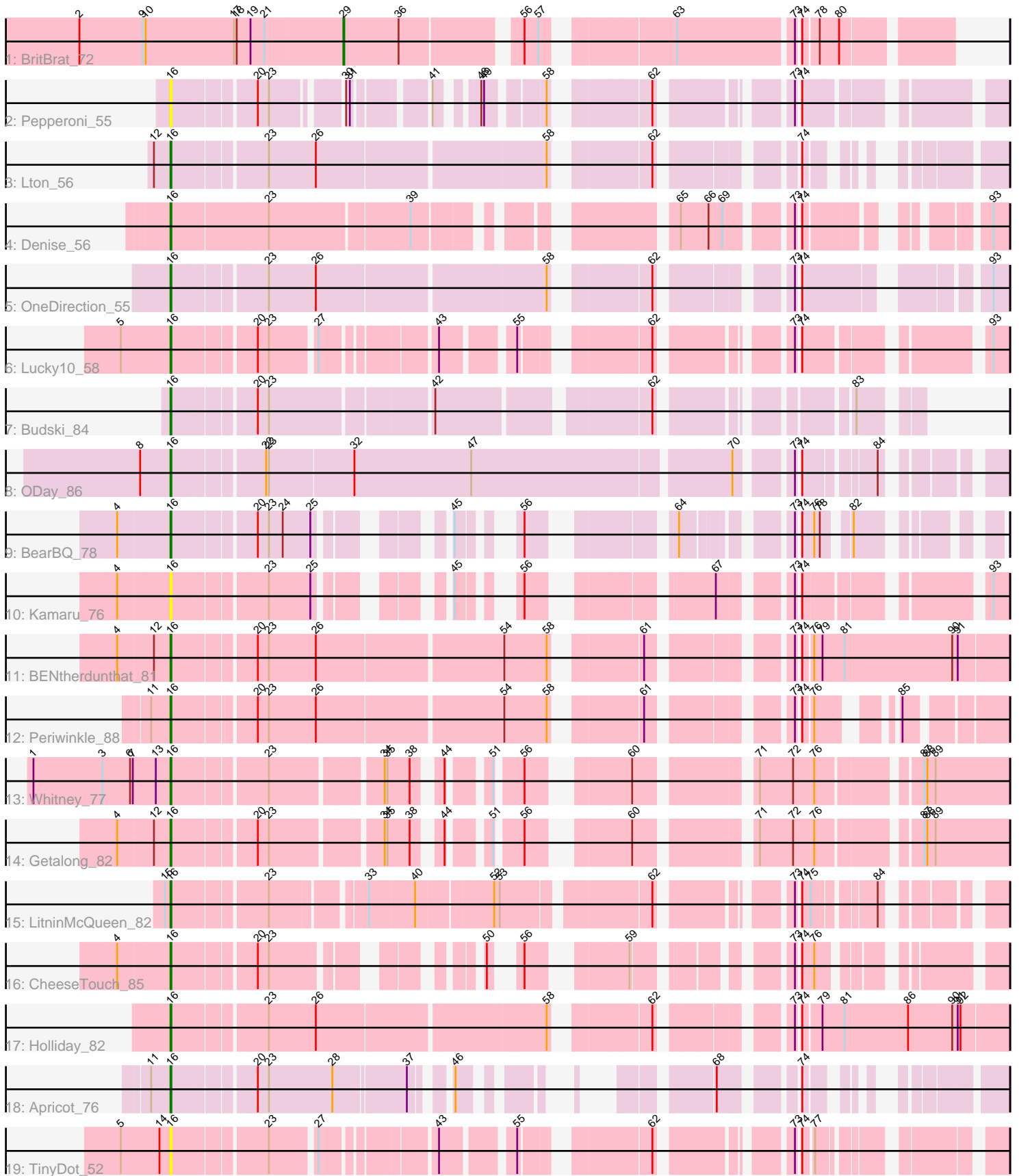


Pham 158204



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 158204 Report

This analysis was run 04/13/24 on database version 558.

Pham number 158204 has 19 members, 3 are drafts.

Phages represented in each track:

- Track 1 : BritBrat\_72
- Track 2 : Pepperoni\_55
- Track 3 : Lton\_56
- Track 4 : Denise\_56
- Track 5 : OneDirection\_55
- Track 6 : Lucky10\_58
- Track 7 : Budski\_84
- Track 8 : ODay\_86
- Track 9 : BearBQ\_78
- Track 10 : Kamaru\_76
- Track 11 : BENtherdunthat\_81
- Track 12 : Periwinkle\_88
- Track 13 : Whitney\_77
- Track 14 : Getalong\_82
- Track 15 : LitninMcQueen\_82
- Track 16 : CheeseTouch\_85
- Track 17 : Holliday\_82
- Track 18 : Apricot\_76
- Track 19 : TinyDot\_52

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

The start number called the most often in the published annotations is 16, it was called in 15 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Apricot\_76, BENtherdunthat\_81, BearBQ\_78, Budski\_84, CheeseTouch\_85, Denise\_56, Getalong\_82, Holliday\_82, Kamaru\_76, LitninMcQueen\_82, Lton\_56, Lucky10\_58, ODay\_86, OneDirection\_55, Pepperoni\_55, Periwinkle\_88, TinyDot\_52, Whitney\_77,

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

-

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

- BritBrat\_72,

### Summary by start number:

Start 16:

- Found in 18 of 19 ( 94.7% ) of genes in pham
- Manual Annotations of this start: 15 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Apricot\_76 (DN3), BENtherdunthat\_81 (DN1), BearBQ\_78 (DN), Budski\_84 (DN), CheeseTouch\_85 (DN1), Denise\_56 (CZ5), Getalong\_82 (DN1), Holliday\_82 (DN1), Kamaru\_76 (DN1), LitninMcQueen\_82 (DN1), Lton\_56 (CZ), Lucky10\_58 (DH), ODay\_86 (DN), OneDirection\_55 (CZ6), Pepperoni\_55 (CZ), Periwinkle\_88 (DN1), TinyDot\_52 (singleton), Whitney\_77 (DN1),

Start 29:

- Found in 1 of 19 ( 5.3% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BritBrat\_72 (CY2),

### Summary by clusters:

There are 9 clusters represented in this pham: DN, CY2, singleton, DH, CZ6, CZ5, CZ, DN1, DN3,

Info for manual annotations of cluster CY2:

- Start number 29 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CZ:

- Start number 16 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ5:

- Start number 16 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster CZ6:

- Start number 16 was manually annotated 1 time for cluster CZ6.

Info for manual annotations of cluster DH:

- Start number 16 was manually annotated 1 time for cluster DH.

Info for manual annotations of cluster DN:

- Start number 16 was manually annotated 3 times for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 16 was manually annotated 7 times for cluster DN1.

Info for manual annotations of cluster DN3:

- Start number 16 was manually annotated 1 time for cluster DN3.

### **Gene Information:**

Gene: Apricot\_76 Start: 43822, Stop: 44436, Start Num: 16

Candidate Starts for Apricot\_76:

(11, 43801), (Start: 16 @43822 has 15 MA's), (20, 43900), (23, 43912), (28, 43981), (37, 44053), (46, 44080), (68, 44233), (74, 44296),

Gene: BENtherdunthat\_81 Start: 45571, Stop: 46362, Start Num: 16

Candidate Starts for BENtherdunthat\_81:

(4, 45517), (12, 45553), (Start: 16 @45571 has 15 MA's), (20, 45649), (23, 45661), (26, 45712), (54, 45901), (58, 45946), (61, 46021), (73, 46141), (74, 46144), (76, 46153), (79, 46162), (81, 46186), (90, 46303), (91, 46309),

Gene: BearBQ\_78 Start: 46707, Stop: 47315, Start Num: 16

Candidate Starts for BearBQ\_78:

(4, 46653), (Start: 16 @46707 has 15 MA's), (20, 46785), (23, 46797), (24, 46812), (25, 46842), (45, 46932), (56, 46968), (64, 47082), (73, 47169), (74, 47172), (76, 47181), (78, 47187), (82, 47208),

Gene: BritBrat\_72 Start: 45785, Stop: 46360, Start Num: 29

Candidate Starts for BritBrat\_72:

(2, 45500), (9, 45569), (10, 45572), (17, 45668), (18, 45671), (19, 45686), (21, 45701), (Start: 29 @45785 has 1 MA's), (36, 45845), (56, 45959), (57, 45974), (63, 46094), (73, 46214), (74, 46217), (78, 46232), (80, 46253),

Gene: Budski\_84 Start: 46675, Stop: 47340, Start Num: 16

Candidate Starts for Budski\_84:

(Start: 16 @46675 has 15 MA's), (20, 46753), (23, 46765), (42, 46927), (62, 47131), (83, 47287),

Gene: CheeseTouch\_85 Start: 42327, Stop: 42953, Start Num: 16

Candidate Starts for CheeseTouch\_85:

(4, 42273), (Start: 16 @42327 has 15 MA's), (20, 42405), (23, 42417), (50, 42573), (56, 42588), (59, 42669), (73, 42789), (74, 42792), (76, 42801),

Gene: Denise\_56 Start: 35910, Stop: 36626, Start Num: 16

Candidate Starts for Denise\_56:

(Start: 16 @35910 has 15 MA's), (23, 36009), (39, 36150), (65, 36363), (66, 36393), (69, 36408), (73, 36465), (74, 36468), (93, 36609),

Gene: Getalong\_82 Start: 46997, Stop: 47734, Start Num: 16

Candidate Starts for Getalong\_82:

(4, 46943), (12, 46979), (Start: 16 @46997 has 15 MA's), (20, 47075), (23, 47087), (34, 47195), (35, 47198), (38, 47222), (44, 47243), (51, 47276), (56, 47300), (60, 47384), (71, 47489), (72, 47525), (76, 47546), (87, 47642), (88, 47645), (89, 47654),

Gene: Holliday\_82 Start: 48542, Stop: 49330, Start Num: 16

Candidate Starts for Holliday\_82:

(Start: 16 @48542 has 15 MA's), (23, 48632), (26, 48683), (58, 48917), (62, 49001), (73, 49109), (74, 49112), (79, 49130), (81, 49154), (86, 49223), (90, 49271), (91, 49277), (92, 49280),

Gene: Kamaru\_76 Start: 44161, Stop: 44814, Start Num: 16

Candidate Starts for Kamaru\_76:

(4, 44107), (Start: 16 @44161 has 15 MA's), (23, 44251), (25, 44296), (45, 44386), (56, 44422), (67, 44575), (73, 44635), (74, 44638), (93, 44797),

Gene: LitninMcQueen\_82 Start: 45874, Stop: 46599, Start Num: 16

Candidate Starts for LitninMcQueen\_82:

(15, 45868), (Start: 16 @45874 has 15 MA's), (23, 45964), (33, 46054), (40, 46102), (52, 46180), (53, 46186), (62, 46327), (73, 46435), (74, 46438), (75, 46447), (84, 46504),

Gene: Lton\_56 Start: 33761, Stop: 34471, Start Num: 16

Candidate Starts for Lton\_56:

(12, 33743), (Start: 16 @33761 has 15 MA's), (23, 33851), (26, 33902), (58, 34136), (62, 34220), (74, 34331),

Gene: Lucky10\_58 Start: 36978, Stop: 37679, Start Num: 16

Candidate Starts for Lucky10\_58:

(5, 36924), (Start: 16 @36978 has 15 MA's), (20, 37056), (23, 37068), (27, 37113), (43, 37218), (55, 37284), (62, 37392), (73, 37500), (74, 37503), (93, 37662),

Gene: ODay\_86 Start: 47792, Stop: 48577, Start Num: 16

Candidate Starts for ODay\_86:

(8, 47759), (Start: 16 @47792 has 15 MA's), (22, 47879), (23, 47882), (32, 47972), (47, 48098), (70, 48365), (73, 48413), (74, 48416), (84, 48482),

Gene: OneDirection\_55 Start: 33949, Stop: 34695, Start Num: 16

Candidate Starts for OneDirection\_55:

(Start: 16 @33949 has 15 MA's), (23, 34039), (26, 34090), (58, 34324), (62, 34408), (73, 34516), (74, 34519), (93, 34678),

Gene: Pepperoni\_55 Start: 35253, Stop: 35927, Start Num: 16

Candidate Starts for Pepperoni\_55:

(Start: 16 @35253 has 15 MA's), (20, 35331), (23, 35343), (30, 35406), (31, 35409), (41, 35472), (48, 35502), (49, 35505), (58, 35556), (62, 35640), (73, 35748), (74, 35751),

Gene: Periwinkle\_88 Start: 47628, Stop: 48359, Start Num: 16

Candidate Starts for Periwinkle\_88:

(11, 47607), (Start: 16 @47628 has 15 MA's), (20, 47703), (23, 47715), (26, 47766), (54, 47955), (58, 48000), (61, 48075), (73, 48195), (74, 48198), (76, 48207), (85, 48264),

Gene: TinyDot\_52 Start: 33073, Stop: 33759, Start Num: 16

Candidate Starts for TinyDot\_52:

(5, 33019), (14, 33061), (Start: 16 @33073 has 15 MA's), (23, 33163), (27, 33208), (43, 33313), (55, 33379), (62, 33487), (73, 33595), (74, 33598), (77, 33607),

Gene: Whitney\_77 Start: 46318, Stop: 47055, Start Num: 16

Candidate Starts for Whitney\_77:

(1, 46171), (3, 46246), (6, 46276), (7, 46279), (13, 46303), (Start: 16 @46318 has 15 MA's), (23, 46408), (34, 46516), (35, 46519), (38, 46543), (44, 46564), (51, 46597), (56, 46621), (60, 46705), (71, 46810), (72, 46846), (76, 46867), (87, 46963), (88, 46966), (89, 46975),