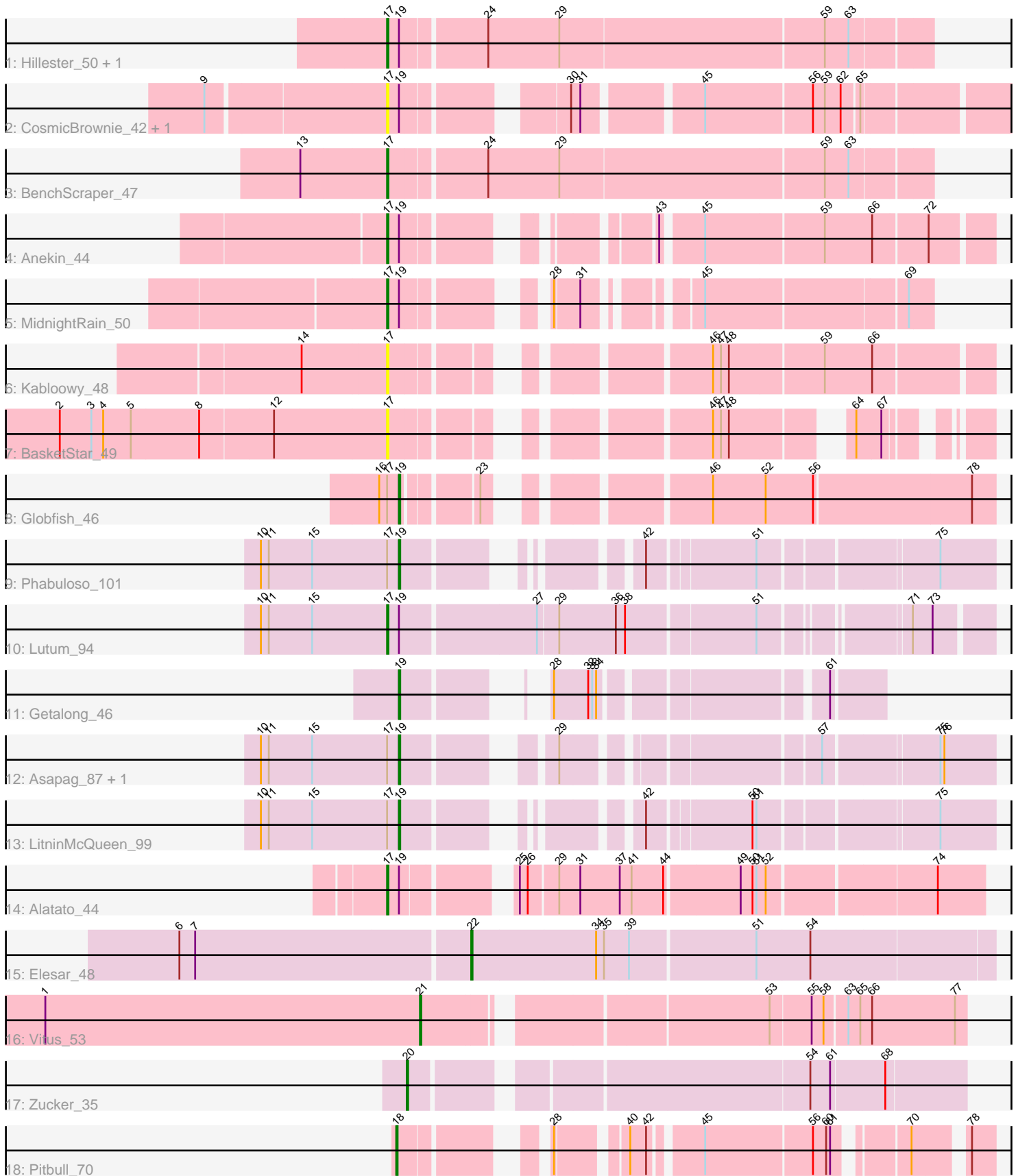


Pham 295091



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 295091 Report

This analysis was run 04/18/26 on database version 643.

Pham number 295091 has 21 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Hillester\_50, RadFad\_50
- Track 2 : CosmicBrownie\_42, GumGum\_45
- Track 3 : BenchScraper\_47
- Track 4 : Anekin\_44
- Track 5 : MidnightRain\_50
- Track 6 : Kabloowy\_48
- Track 7 : BasketStar\_49
- Track 8 : Globfish\_46
- Track 9 : Phabuloso\_101
- Track 10 : Lutum\_94
- Track 11 : Getalong\_46
- Track 12 : Asapag\_87, ShawBrad\_98
- Track 13 : LitninMcQueen\_99
- Track 14 : Alatato\_44
- Track 15 : Elesar\_48
- Track 16 : Vitus\_53
- Track 17 : Zucker\_35
- Track 18 : Pitbull\_70

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

The start number called the most often in the published annotations is 17, it was called in 7 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alatato\_44, Anekin\_44, BasketStar\_49, BenchScraper\_47, CosmicBrownie\_42, GumGum\_45, Hillester\_50, Kabloowy\_48, Lutum\_94, MidnightRain\_50, RadFad\_50,

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

- Asapag\_87, Globfish\_46, LitninMcQueen\_99, Phabuloso\_101, ShawBrad\_98,

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

- Elesar\_48, Getalong\_46, Pitbull\_70, Vitus\_53, Zucker\_35,

## Summary by start number:

### Start 17:

- Found in 16 of 21 ( 76.2% ) of genes in pham
- Manual Annotations of this start: 7 of 16
- Called 68.8% of time when present
- Phage (with cluster) where this start called: Alatato\_44 (FB), Anekin\_44 (AY), BasketStar\_49 (AY), BenchScraper\_47 (AY), CosmicBrownie\_42 (AY), GumGum\_45 (AY), Hillester\_50 (AY), Kabloowy\_48 (AY), Lutum\_94 (DN1), MidnightRain\_50 (AY), RadFad\_50 (AY),

### Start 18:

- Found in 1 of 21 ( 4.8% ) 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: Pitbull\_70 (FQ),

### Start 19:

- Found in 14 of 21 ( 66.7% ) of genes in pham
- Manual Annotations of this start: 5 of 16
- Called 42.9% of time when present
- Phage (with cluster) where this start called: Asapag\_87 (DN1), Getalong\_46 (DN1), Globfish\_46 (AY), LitninMcQueen\_99 (DN1), Phabuloso\_101 (DN1), ShawBrad\_98 (DN1),

### Start 20:

- Found in 1 of 21 ( 4.8% ) 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: Zucker\_35 (FN),

### Start 21:

- Found in 1 of 21 ( 4.8% ) 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: Vitus\_53 (FL),

### Start 22:

- Found in 1 of 21 ( 4.8% ) 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: Elesar\_48 (FF),

## Summary by clusters:

There are 7 clusters represented in this pham: FQ, FB, DN1, FF, AY, FL, FN,

### Info for manual annotations of cluster AY:

- Start number 17 was manually annotated 5 times for cluster AY.
- Start number 19 was manually annotated 1 time for cluster AY.

### Info for manual annotations of cluster DN1:

- Start number 17 was manually annotated 1 time for cluster DN1.

- Start number 19 was manually annotated 4 times for cluster DN1.

Info for manual annotations of cluster FB:

- Start number 17 was manually annotated 1 time for cluster FB.

Info for manual annotations of cluster FF:

- Start number 22 was manually annotated 1 time for cluster FF.

Info for manual annotations of cluster FL:

- Start number 21 was manually annotated 1 time for cluster FL.

Info for manual annotations of cluster FN:

- Start number 20 was manually annotated 1 time for cluster FN.

Info for manual annotations of cluster FQ:

- Start number 18 was manually annotated 1 time for cluster FQ.

### **Gene Information:**

Gene: Alatato\_44 Start: 28004, Stop: 28411, Start Num: 17

Candidate Starts for Alatato\_44:

(Start: 17 @28004 has 7 MA's), (Start: 19 @28013 has 5 MA's), (25, 28079), (26, 28085), (29, 28106), (31, 28121), (37, 28151), (41, 28160), (44, 28184), (49, 28238), (50, 28247), (51, 28250), (52, 28256), (74, 28376),

Gene: Anekin\_44 Start: 29811, Stop: 30191, Start Num: 17

Candidate Starts for Anekin\_44:

(Start: 17 @29811 has 7 MA's), (Start: 19 @29820 has 5 MA's), (43, 29958), (45, 29985), (59, 30072), (66, 30108), (72, 30147),

Gene: Asapag\_87 Start: 50042, Stop: 50416, Start Num: 19

Candidate Starts for Asapag\_87:

(10, 49937), (11, 49943), (15, 49976), (Start: 17 @50033 has 7 MA's), (Start: 19 @50042 has 5 MA's), (29, 50129), (57, 50294), (75, 50375), (76, 50378),

Gene: BasketStar\_49 Start: 30508, Stop: 30852, Start Num: 17

Candidate Starts for BasketStar\_49:

(2, 30265), (3, 30289), (4, 30298), (5, 30319), (8, 30370), (12, 30424), (Start: 17 @30508 has 7 MA's), (46, 30697), (47, 30703), (48, 30709), (64, 30778), (67, 30796),

Gene: BenchScraper\_47 Start: 29609, Stop: 30001, Start Num: 17

Candidate Starts for BenchScraper\_47:

(13, 29546), (Start: 17 @29609 has 7 MA's), (24, 29678), (29, 29732), (59, 29927), (63, 29945),

Gene: CosmicBrownie\_42 Start: 28661, Stop: 29080, Start Num: 17

Candidate Starts for CosmicBrownie\_42:

(9, 28532), (Start: 17 @28661 has 7 MA's), (Start: 19 @28670 has 5 MA's), (30, 28769), (31, 28775), (45, 28853), (56, 28931), (59, 28940), (62, 28952), (65, 28964),

Gene: Elesar\_48 Start: 36967, Stop: 37350, Start Num: 22

Candidate Starts for Elesar\_48:

(6, 36751), (7, 36763), (Start: 22 @36967 has 1 MA's), (34, 37060), (35, 37066), (39, 37084), (51, 37177), (54, 37216),

Gene: Getalong\_46 Start: 32723, Stop: 33001, Start Num: 19

Candidate Starts for Getalong\_46:

(Start: 19 @32723 has 5 MA's), (28, 32789), (32, 32813), (33, 32816), (34, 32819), (61, 32963),

Gene: Globfish\_46 Start: 29462, Stop: 29848, Start Num: 19

Candidate Starts for Globfish\_46:

(16, 29447), (Start: 17 @29453 has 7 MA's), (Start: 19 @29462 has 5 MA's), (23, 29510), (46, 29639), (52, 29678), (56, 29714), (78, 29831),

Gene: GumGum\_45 Start: 29081, Stop: 29500, Start Num: 17

Candidate Starts for GumGum\_45:

(9, 28952), (Start: 17 @29081 has 7 MA's), (Start: 19 @29090 has 5 MA's), (30, 29189), (31, 29195), (45, 29273), (56, 29351), (59, 29360), (62, 29372), (65, 29384),

Gene: Hillester\_50 Start: 30882, Stop: 31274, Start Num: 17

Candidate Starts for Hillester\_50:

(Start: 17 @30882 has 7 MA's), (Start: 19 @30891 has 5 MA's), (24, 30951), (29, 31005), (59, 31200), (63, 31218),

Gene: Kabloowy\_48 Start: 30785, Stop: 31174, Start Num: 17

Candidate Starts for Kabloowy\_48:

(14, 30722), (Start: 17 @30785 has 7 MA's), (46, 30974), (47, 30980), (48, 30986), (59, 31055), (66, 31091),

Gene: LitninMcQueen\_99 Start: 52545, Stop: 52913, Start Num: 19

Candidate Starts for LitninMcQueen\_99:

(10, 52440), (11, 52446), (15, 52479), (Start: 17 @52536 has 7 MA's), (Start: 19 @52545 has 5 MA's), (42, 52674), (50, 52746), (51, 52749), (75, 52872),

Gene: Lutum\_94 Start: 50678, Stop: 51094, Start Num: 17

Candidate Starts for Lutum\_94:

(10, 50582), (11, 50588), (15, 50621), (Start: 17 @50678 has 7 MA's), (Start: 19 @50687 has 5 MA's), (27, 50786), (29, 50801), (36, 50843), (38, 50849), (51, 50942), (71, 51038), (73, 51053),

Gene: MidnightRain\_50 Start: 31295, Stop: 31621, Start Num: 17

Candidate Starts for MidnightRain\_50:

(Start: 17 @31295 has 7 MA's), (Start: 19 @31304 has 5 MA's), (28, 31382), (31, 31397), (45, 31460), (69, 31604),

Gene: Phabuloso\_101 Start: 52179, Stop: 52547, Start Num: 19

Candidate Starts for Phabuloso\_101:

(10, 52074), (11, 52080), (15, 52113), (Start: 17 @52170 has 7 MA's), (Start: 19 @52179 has 5 MA's), (42, 52308), (51, 52383), (75, 52506),

Gene: Pitbull\_70 Start: 37588, Stop: 37938, Start Num: 18

Candidate Starts for Pitbull\_70:

(Start: 18 @37588 has 1 MA's), (28, 37669), (40, 37711), (42, 37723), (45, 37756), (56, 37834), (60, 37843), (61, 37846), (70, 37888), (78, 37921),

Gene: RadFad\_50 Start: 30882, Stop: 31274, Start Num: 17

Candidate Starts for RadFad\_50:

(Start: 17 @30882 has 7 MA's), (Start: 19 @30891 has 5 MA's), (24, 30951), (29, 31005), (59, 31200), (63, 31218),

Gene: ShawBrad\_98 Start: 50296, Stop: 50670, Start Num: 19

Candidate Starts for ShawBrad\_98:

(10, 50191), (11, 50197), (15, 50230), (Start: 17 @50287 has 7 MA's), (Start: 19 @50296 has 5 MA's), (29, 50383), (57, 50548), (75, 50629), (76, 50632),

Gene: Vitus\_53 Start: 37944, Stop: 38321, Start Num: 21

Candidate Starts for Vitus\_53:

(1, 37659), (Start: 21 @37944 has 1 MA's), (53, 38178), (55, 38208), (58, 38217), (63, 38232), (65, 38241), (66, 38250), (77, 38313),

Gene: Zucker\_35 Start: 27460, Stop: 27846, Start Num: 20

Candidate Starts for Zucker\_35:

(Start: 20 @27460 has 1 MA's), (54, 27733), (61, 27748), (68, 27787),