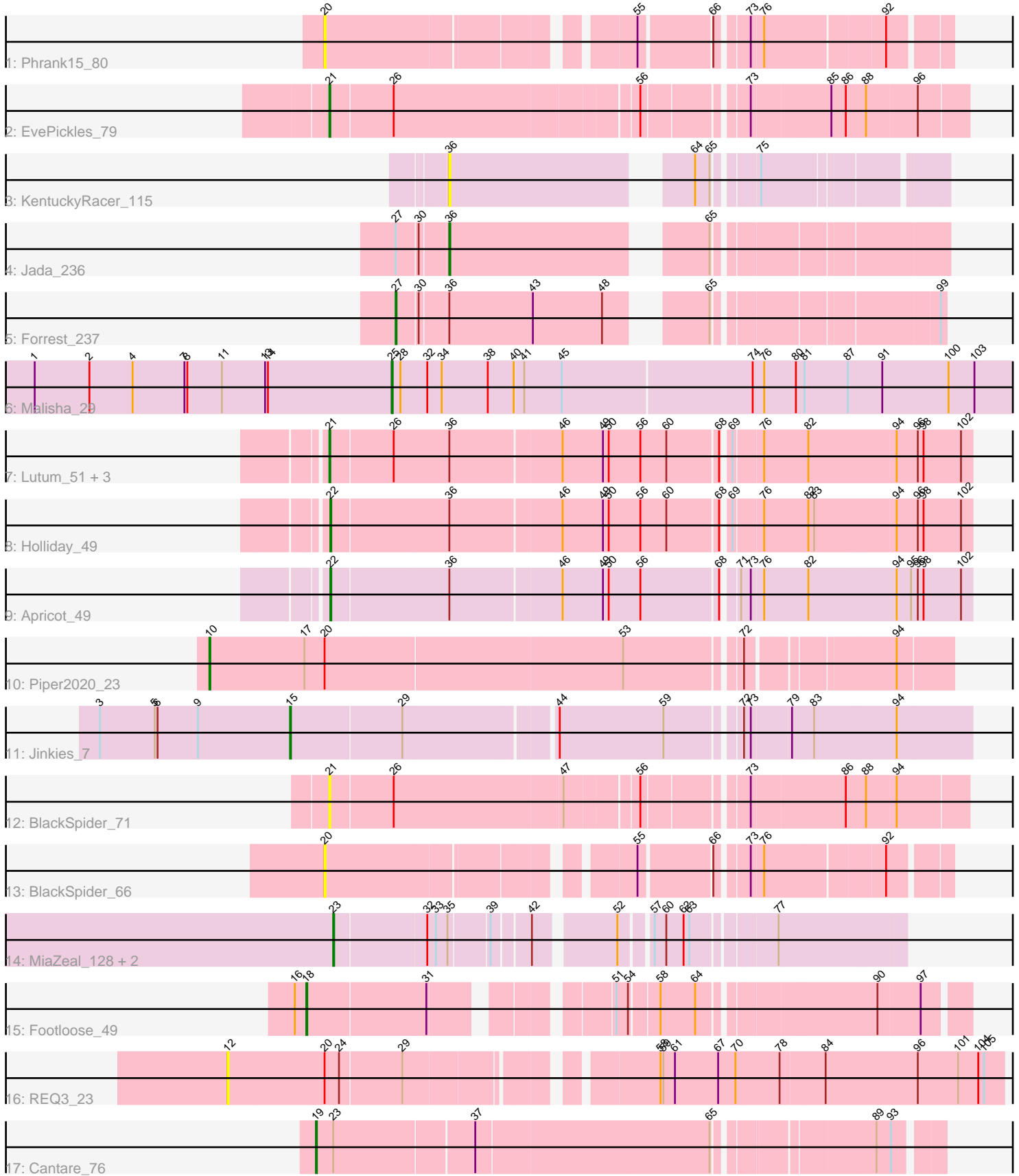


Pham 171761



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 171761 Report

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

Pham number 171761 has 22 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Phrank15\_80
- Track 2 : EvePickles\_79
- Track 3 : KentuckyRacer\_115
- Track 4 : Jada\_236
- Track 5 : Forrest\_237
- Track 6 : Malisha\_29
- Track 7 : Lutum\_51, Kenna\_50, Getalong\_54, BENtherdunthat\_51
- Track 8 : Holliday\_49
- Track 9 : Apricot\_49
- Track 10 : Piper2020\_23
- Track 11 : Jinkies\_7
- Track 12 : BlackSpider\_71
- Track 13 : BlackSpider\_66
- Track 14 : MiaZeal\_128, Gonephishing\_122, Squint\_126
- Track 15 : Footloose\_49
- Track 16 : REQ3\_23
- Track 17 : Cantare\_76

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

The start number called the most often in the published annotations is 21, it was called in 5 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BENtherdunthat\_51, BlackSpider\_71, EvePickles\_79, Getalong\_54, Kenna\_50, Lutum\_51,

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

- 

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

- Apricot\_49, BlackSpider\_66, Cantare\_76, Footloose\_49, Forrest\_237, Gonephishing\_122, Holliday\_49, Jada\_236, Jinkies\_7, KentuckyRacer\_115, Malisha\_29, MiaZeal\_128, Phrank15\_80, Piper2020\_23, REQ3\_23, Squint\_126,

## Summary by start number:

### Start 10:

- Found in 1 of 22 ( 4.5% ) 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: Piper2020\_23 (F1),

### Start 12:

- Found in 1 of 22 ( 4.5% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: REQ3\_23 (singleton),

### Start 15:

- Found in 1 of 22 ( 4.5% ) 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: Jinkies\_7 (FL),

### Start 18:

- Found in 1 of 22 ( 4.5% ) 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: Footloose\_49 (singleton),

### Start 19:

- Found in 1 of 22 ( 4.5% ) 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: Cantare\_76 (singleton),

### Start 20:

- Found in 4 of 22 ( 18.2% ) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: BlackSpider\_66 (FN), Phrank15\_80 (AY),

### Start 21:

- Found in 6 of 22 ( 27.3% ) of genes in pham
- Manual Annotations of this start: 5 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BENtherdunthat\_51 (DN1), BlackSpider\_71 (FN), EvePickles\_79 (AY), Getalong\_54 (DN1), Kenna\_50 (DN1), Lutum\_51 (DN1),

### Start 22:

- Found in 2 of 22 ( 9.1% ) of genes in pham
- Manual Annotations of this start: 2 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Apricot\_49 (DN3), Holliday\_49 (DN1),

Start 23:

- Found in 4 of 22 ( 18.2% ) of genes in pham
- Manual Annotations of this start: 2 of 16
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Gonephishing\_122 (J), MiaZeal\_128 (J), Squint\_126 (J),

Start 25:

- Found in 1 of 22 ( 4.5% ) 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: Malisha\_29 (DN),

Start 27:

- Found in 2 of 22 ( 9.1% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Forrest\_237 (BK1),

Start 36:

- Found in 9 of 22 ( 40.9% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 22.2% of time when present
- Phage (with cluster) where this start called: Jada\_236 (BK1), KentuckyRacer\_115 (BE2),

**Summary by clusters:**

There are 11 clusters represented in this pham: DN, F1, singleton, J, BE2, DN1, BK1, DN3, AY, FL, FN,

Info for manual annotations of cluster AY:

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

Info for manual annotations of cluster BK1:

- Start number 27 was manually annotated 1 time for cluster BK1.
- Start number 36 was manually annotated 1 time for cluster BK1.

Info for manual annotations of cluster DN:

- Start number 25 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 21 was manually annotated 4 times for cluster DN1.
- Start number 22 was manually annotated 1 time for cluster DN1.

Info for manual annotations of cluster DN3:

- Start number 22 was manually annotated 1 time for cluster DN3.

Info for manual annotations of cluster F1:

- Start number 10 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster FL:

- Start number 15 was manually annotated 1 time for cluster FL.

Info for manual annotations of cluster J:

- Start number 23 was manually annotated 2 times for cluster J.

### **Gene Information:**

Gene: Apricot\_49 Start: 33085, Stop: 32453, Start Num: 22

Candidate Starts for Apricot\_49:

(Start: 22 @33085 has 2 MA's), (Start: 36 @32965 has 1 MA's), (46, 32854), (49, 32812), (50, 32806), (56, 32773), (68, 32695), (71, 32683), (73, 32674), (76, 32662), (82, 32617), (94, 32530), (95, 32515), (96, 32509), (98, 32503), (102, 32464),

Gene: BENtherdunthat\_51 Start: 33462, Stop: 32830, Start Num: 21

Candidate Starts for BENtherdunthat\_51:

(Start: 21 @33462 has 5 MA's), (26, 33399), (Start: 36 @33342 has 1 MA's), (46, 33231), (49, 33189), (50, 33183), (56, 33150), (60, 33123), (68, 33072), (69, 33066), (76, 33039), (82, 32994), (94, 32907), (96, 32886), (98, 32880), (102, 32841),

Gene: BlackSpider\_71 Start: 42752, Stop: 43360, Start Num: 21

Candidate Starts for BlackSpider\_71:

(Start: 21 @42752 has 5 MA's), (26, 42815), (47, 42986), (56, 43055), (73, 43148), (86, 43241), (88, 43259), (94, 43289),

Gene: BlackSpider\_66 Start: 38978, Stop: 39544, Start Num: 20

Candidate Starts for BlackSpider\_66:

(20, 38978), (55, 39260), (66, 39329), (73, 39356), (76, 39368), (92, 39485),

Gene: Cantare\_76 Start: 62423, Stop: 63022, Start Num: 19

Candidate Starts for Cantare\_76:

(Start: 19 @62423 has 1 MA's), (Start: 23 @62441 has 2 MA's), (37, 62582), (65, 62819), (89, 62963), (93, 62978),

Gene: EvePickles\_79 Start: 46090, Stop: 46698, Start Num: 21

Candidate Starts for EvePickles\_79:

(Start: 21 @46090 has 5 MA's), (26, 46153), (56, 46393), (73, 46486), (85, 46564), (86, 46579), (88, 46597), (96, 46648),

Gene: Footloose\_49 Start: 28880, Stop: 29479, Start Num: 18

Candidate Starts for Footloose\_49:

(16, 28868), (Start: 18 @28880 has 1 MA's), (31, 29000), (51, 29150), (54, 29162), (58, 29189), (64, 29225), (90, 29393), (97, 29435),

Gene: Forrest\_237 Start: 114096, Stop: 114590, Start Num: 27

Candidate Starts for Forrest\_237:

(Start: 27 @114096 has 1 MA's), (30, 114117), (Start: 36 @114144 has 1 MA's), (43, 114231), (48, 114303), (65, 114378), (99, 114585),

Gene: Getalong\_54 Start: 36463, Stop: 35831, Start Num: 21

Candidate Starts for Getalong\_54:

(Start: 21 @36463 has 5 MA's), (26, 36400), (Start: 36 @36343 has 1 MA's), (46, 36232), (49, 36190), (50, 36184), (56, 36151), (60, 36124), (68, 36073), (69, 36067), (76, 36040), (82, 35995), (94, 35908), (96, 35887), (98, 35881), (102, 35842),

Gene: Gonephishing\_122 Start: 66828, Stop: 67358, Start Num: 23

Candidate Starts for Gonephishing\_122:

(Start: 23 @66828 has 2 MA's), (32, 66921), (33, 66930), (35, 66942), (39, 66981), (42, 67014), (52, 67089), (57, 67116), (60, 67128), (62, 67146), (63, 67152), (77, 67230),

Gene: Holliday\_49 Start: 33694, Stop: 33062, Start Num: 22

Candidate Starts for Holliday\_49:

(Start: 22 @33694 has 2 MA's), (Start: 36 @33574 has 1 MA's), (46, 33463), (49, 33421), (50, 33415), (56, 33382), (60, 33355), (68, 33304), (69, 33298), (76, 33271), (82, 33226), (83, 33220), (94, 33139), (96, 33118), (98, 33112), (102, 33073),

Gene: Jada\_236 Start: 113382, Stop: 113834, Start Num: 36

Candidate Starts for Jada\_236:

(Start: 27 @113334 has 1 MA's), (30, 113355), (Start: 36 @113382 has 1 MA's), (65, 113616),

Gene: Jinkies\_7 Start: 5796, Stop: 6461, Start Num: 15

Candidate Starts for Jinkies\_7:

(3, 5598), (5, 5655), (6, 5658), (9, 5700), (Start: 15 @5796 has 1 MA's), (29, 5910), (44, 6057), (59, 6165), (72, 6234), (73, 6240), (79, 6279), (83, 6300), (94, 6384),

Gene: Kenna\_50 Start: 34206, Stop: 33574, Start Num: 21

Candidate Starts for Kenna\_50:

(Start: 21 @34206 has 5 MA's), (26, 34143), (Start: 36 @34086 has 1 MA's), (46, 33975), (49, 33933), (50, 33927), (56, 33894), (60, 33867), (68, 33816), (69, 33810), (76, 33783), (82, 33738), (94, 33651), (96, 33630), (98, 33624), (102, 33585),

Gene: KentuckyRacer\_115 Start: 73819, Stop: 74262, Start Num: 36

Candidate Starts for KentuckyRacer\_115:

(Start: 36 @73819 has 1 MA's), (64, 74038), (65, 74053), (75, 74089),

Gene: Lutum\_51 Start: 34206, Stop: 33574, Start Num: 21

Candidate Starts for Lutum\_51:

(Start: 21 @34206 has 5 MA's), (26, 34143), (Start: 36 @34086 has 1 MA's), (46, 33975), (49, 33933), (50, 33927), (56, 33894), (60, 33867), (68, 33816), (69, 33810), (76, 33783), (82, 33738), (94, 33651), (96, 33630), (98, 33624), (102, 33585),

Gene: Malisha\_29 Start: 23381, Stop: 24040, Start Num: 25

Candidate Starts for Malisha\_29:

(1, 23009), (2, 23066), (4, 23111), (7, 23165), (8, 23168), (11, 23204), (13, 23249), (14, 23252), (Start: 25 @23381 has 1 MA's), (28, 23390), (32, 23417), (34, 23432), (38, 23480), (40, 23507), (41, 23516), (45, 23555), (74, 23750), (76, 23762), (80, 23795), (81, 23804), (87, 23849), (91, 23885), (100, 23954), (103, 23981),

Gene: MiaZeal\_128 Start: 68487, Stop: 69017, Start Num: 23

Candidate Starts for MiaZeal\_128:

(Start: 23 @68487 has 2 MA's), (32, 68580), (33, 68589), (35, 68601), (39, 68640), (42, 68673), (52, 68748), (57, 68775), (60, 68787), (62, 68805), (63, 68811), (77, 68889),

Gene: Phrank15\_80 Start: 42147, Stop: 42713, Start Num: 20

Candidate Starts for Phrank15\_80:

(20, 42147), (55, 42429), (66, 42498), (73, 42525), (76, 42537), (92, 42654),

Gene: Piper2020\_23 Start: 23232, Stop: 23960, Start Num: 10

Candidate Starts for Piper2020\_23:

(Start: 10 @23232 has 1 MA's), (17, 23331), (20, 23352), (53, 23655), (72, 23766), (94, 23904),

Gene: REQ3\_23 Start: 10266, Stop: 11021, Start Num: 12

Candidate Starts for REQ3\_23:

(12, 10266), (20, 10365), (24, 10380), (29, 10443), (58, 10668), (59, 10671), (61, 10683), (67, 10728),  
(70, 10746), (78, 10791), (84, 10836), (96, 10932), (101, 10974), (104, 10995), (105, 11001),

Gene: Squint\_126 Start: 68600, Stop: 69130, Start Num: 23

Candidate Starts for Squint\_126:

(Start: 23 @68600 has 2 MA's), (32, 68693), (33, 68702), (35, 68714), (39, 68753), (42, 68786), (52, 68861), (57, 68888), (60, 68900), (62, 68918), (63, 68924), (77, 69002),