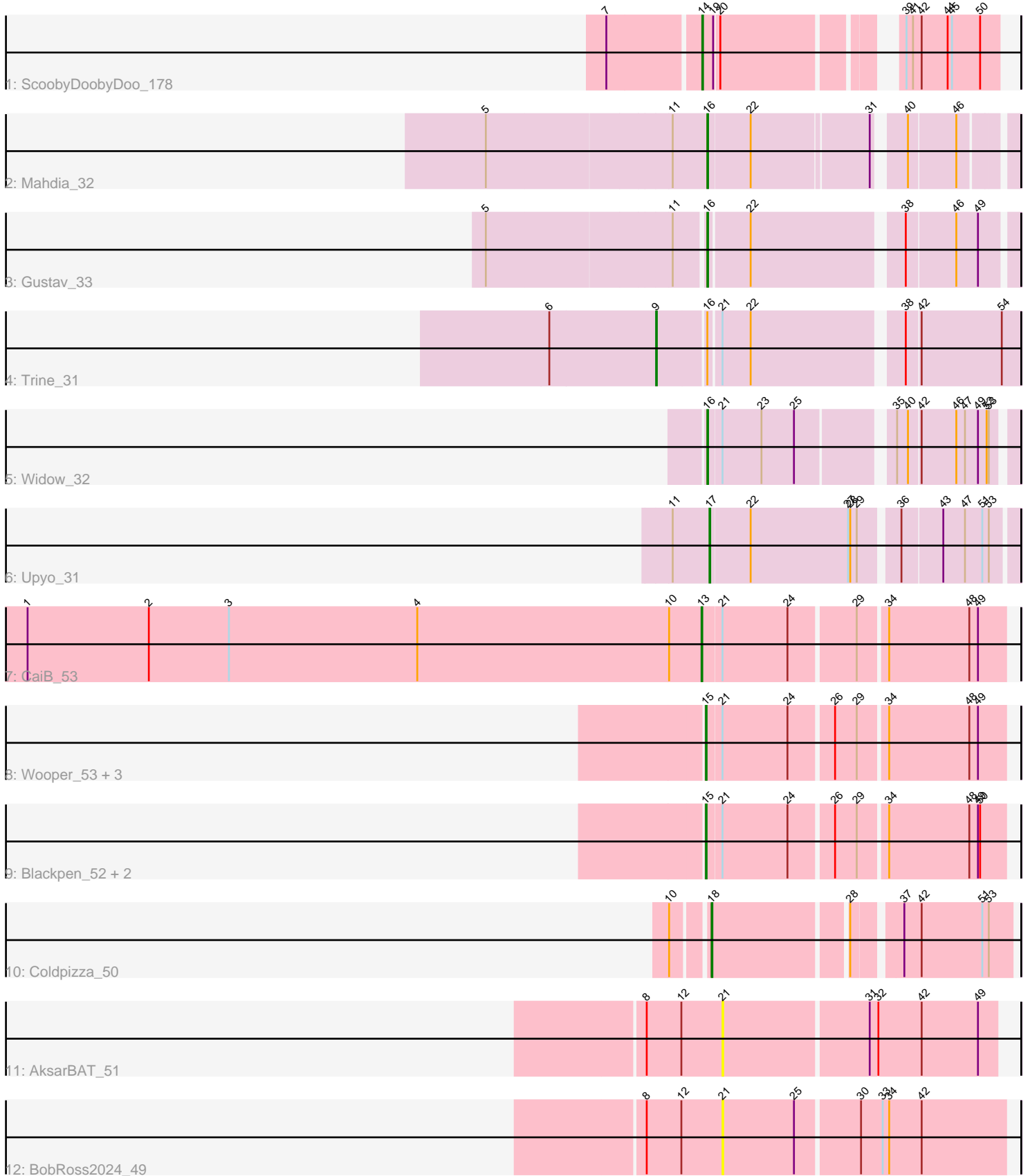


Pham 295170



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 295170 Report

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

Pham number 295170 has 17 members, 5 are drafts.

Phages represented in each track:

- Track 1 : ScoobyDoobyDoo\_178
- Track 2 : Mahdia\_32
- Track 3 : Gustav\_33
- Track 4 : Trine\_31
- Track 5 : Widow\_32
- Track 6 : Upyo\_31
- Track 7 : CaiB\_53
- Track 8 : Wooper\_53, Yeshua\_53, MossRose\_52, TraderJ\_53
- Track 9 : Blackpen\_52, CloverMinnie\_52, FelixTres\_52
- Track 10 : Coldpizza\_50
- Track 11 : AksarBAT\_51
- Track 12 : BobRoss2024\_49

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

The start number called the most often in the published annotations is 15, it was called in 4 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Blackpen\_52, CloverMinnie\_52, FelixTres\_52, MossRose\_52, TraderJ\_53, Wooper\_53, Yeshua\_53,

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

- 

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

- AksarBAT\_51, BobRoss2024\_49, CaiB\_53, Coldpizza\_50, Gustav\_33, Mahdia\_32, ScoobyDoobyDoo\_178, Trine\_31, Upyo\_31, Widow\_32,

### **Summary by start number:**

Start 9:

- Found in 1 of 17 ( 5.9% ) of genes in pham
- Manual Annotations of this start: 1 of 12

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Trine\_31 (CD),

Start 13:

- Found in 1 of 17 ( 5.9% ) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CaiB\_53 (DR),

Start 14:

- Found in 1 of 17 ( 5.9% ) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ScoobyDoobyDoo\_178 (C2),

Start 15:

- Found in 7 of 17 ( 41.2% ) of genes in pham
- Manual Annotations of this start: 4 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Blackpen\_52 (DR), CloverMinnie\_52 (DR), FelixTres\_52 (DR), MossRose\_52 (DR), TraderJ\_53 (DR), Wooper\_53 (DR), Yeshua\_53 (DR),

Start 16:

- Found in 4 of 17 ( 23.5% ) of genes in pham
- Manual Annotations of this start: 3 of 12
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Gustav\_33 (CD), Mahdia\_32 (CD), Widow\_32 (CD),

Start 17:

- Found in 1 of 17 ( 5.9% ) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Upyo\_31 (CD),

Start 18:

- Found in 1 of 17 ( 5.9% ) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Coldpizza\_50 (DR),

Start 21:

- Found in 12 of 17 ( 70.6% ) of genes in pham
- No Manual Annotations of this start.
- Called 16.7% of time when present
- Phage (with cluster) where this start called: AksarBAT\_51 (DR), BobRoss2024\_49 (DR),

**Summary by clusters:**

There are 3 clusters represented in this pham: C2, DR, CD,

Info for manual annotations of cluster C2:

- Start number 14 was manually annotated 1 time for cluster C2.

Info for manual annotations of cluster CD:

- Start number 9 was manually annotated 1 time for cluster CD.
- Start number 16 was manually annotated 3 times for cluster CD.
- Start number 17 was manually annotated 1 time for cluster CD.

Info for manual annotations of cluster DR:

- Start number 13 was manually annotated 1 time for cluster DR.
- Start number 15 was manually annotated 4 times for cluster DR.
- Start number 18 was manually annotated 1 time for cluster DR.

### **Gene Information:**

Gene: AksarBAT\_51 Start: 44810, Stop: 44442, Start Num: 21

Candidate Starts for AksarBAT\_51:

(8, 44915), (12, 44867), (21, 44810), (31, 44615), (32, 44606), (42, 44546), (49, 44468),

Gene: Blackpen\_52 Start: 45239, Stop: 44847, Start Num: 15

Candidate Starts for Blackpen\_52:

(Start: 15 @45239 has 4 MA's), (21, 45221), (24, 45131), (26, 45074), (29, 45044), (34, 45008), (48, 44897), (49, 44885), (50, 44882),

Gene: BobRoss2024\_49 Start: 43873, Stop: 43490, Start Num: 21

Candidate Starts for BobRoss2024\_49:

(8, 43978), (12, 43930), (21, 43873), (25, 43774), (30, 43690), (33, 43660), (34, 43651), (42, 43606),

Gene: CaiB\_53 Start: 46692, Stop: 46294, Start Num: 13

Candidate Starts for CaiB\_53:

(1, 47625), (2, 47457), (3, 47346), (4, 47085), (10, 46737), (Start: 13 @46692 has 1 MA's), (21, 46668), (24, 46578), (29, 46491), (34, 46455), (48, 46344), (49, 46332),

Gene: CloverMinnie\_52 Start: 45747, Stop: 45355, Start Num: 15

Candidate Starts for CloverMinnie\_52:

(Start: 15 @45747 has 4 MA's), (21, 45729), (24, 45639), (26, 45582), (29, 45552), (34, 45516), (48, 45405), (49, 45393), (50, 45390),

Gene: Coldpizza\_50 Start: 46742, Stop: 46362, Start Num: 18

Candidate Starts for Coldpizza\_50:

(10, 46784), (Start: 18 @46742 has 1 MA's), (28, 46568), (37, 46511), (42, 46487), (51, 46403), (53, 46394),

Gene: FelixTres\_52 Start: 45785, Stop: 45393, Start Num: 15

Candidate Starts for FelixTres\_52:

(Start: 15 @45785 has 4 MA's), (21, 45767), (24, 45677), (26, 45620), (29, 45590), (34, 45554), (48, 45443), (49, 45431), (50, 45428),

Gene: Gustav\_33 Start: 25688, Stop: 25296, Start Num: 16

Candidate Starts for Gustav\_33:

(5, 25976), (11, 25727), (Start: 16 @25688 has 3 MA's), (22, 25634), (38, 25439), (46, 25373), (49, 25343),

Gene: Mahdia\_32 Start: 24869, Stop: 24492, Start Num: 16

Candidate Starts for Mahdia\_32:

(5, 25166), (11, 24917), (Start: 16 @24869 has 3 MA's), (22, 24812), (31, 24656), (40, 24623), (46, 24560),

Gene: MossRose\_52 Start: 45804, Stop: 45412, Start Num: 15

Candidate Starts for MossRose\_52:

(Start: 15 @45804 has 4 MA's), (21, 45786), (24, 45696), (26, 45639), (29, 45609), (34, 45573), (48, 45462), (49, 45450),

Gene: ScoobyDoobyDoo\_178 Start: 98579, Stop: 98932, Start Num: 14

Candidate Starts for ScoobyDoobyDoo\_178:

(7, 98456), (Start: 14 @98579 has 1 MA's), (19, 98594), (20, 98600), (39, 98804), (41, 98813), (42, 98825), (44, 98861), (45, 98867), (50, 98906),

Gene: TraderJ\_53 Start: 46127, Stop: 45735, Start Num: 15

Candidate Starts for TraderJ\_53:

(Start: 15 @46127 has 4 MA's), (21, 46109), (24, 46019), (26, 45962), (29, 45932), (34, 45896), (48, 45785), (49, 45773),

Gene: Trine\_31 Start: 25044, Stop: 24577, Start Num: 9

Candidate Starts for Trine\_31:

(6, 25191), (Start: 9 @25044 has 1 MA's), (Start: 16 @24981 has 3 MA's), (21, 24966), (22, 24927), (38, 24732), (42, 24714), (54, 24603),

Gene: Upyo\_31 Start: 25589, Stop: 25188, Start Num: 17

Candidate Starts for Upyo\_31:

(11, 25640), (Start: 17 @25589 has 1 MA's), (22, 25535), (27, 25400), (28, 25397), (29, 25388), (36, 25340), (43, 25286), (47, 25256), (51, 25232), (53, 25223),

Gene: Widow\_32 Start: 25169, Stop: 24783, Start Num: 16

Candidate Starts for Widow\_32:

(Start: 16 @25169 has 3 MA's), (21, 25151), (23, 25097), (25, 25052), (35, 24935), (40, 24920), (42, 24905), (46, 24857), (47, 24845), (49, 24827), (52, 24815), (53, 24812),

Gene: Wooper\_53 Start: 46136, Stop: 45744, Start Num: 15

Candidate Starts for Wooper\_53:

(Start: 15 @46136 has 4 MA's), (21, 46118), (24, 46028), (26, 45971), (29, 45941), (34, 45905), (48, 45794), (49, 45782),

Gene: Yeshua\_53 Start: 46113, Stop: 45721, Start Num: 15

Candidate Starts for Yeshua\_53:

(Start: 15 @46113 has 4 MA's), (21, 46095), (24, 46005), (26, 45948), (29, 45918), (34, 45882), (48, 45771), (49, 45759),