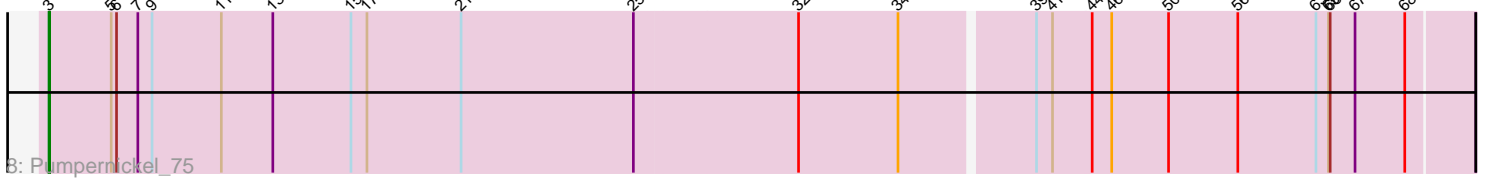
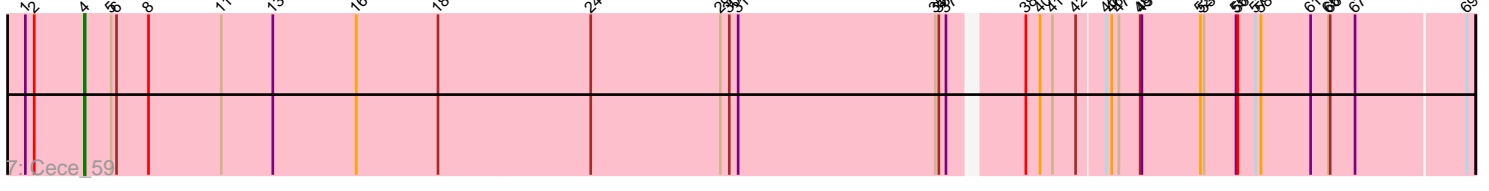
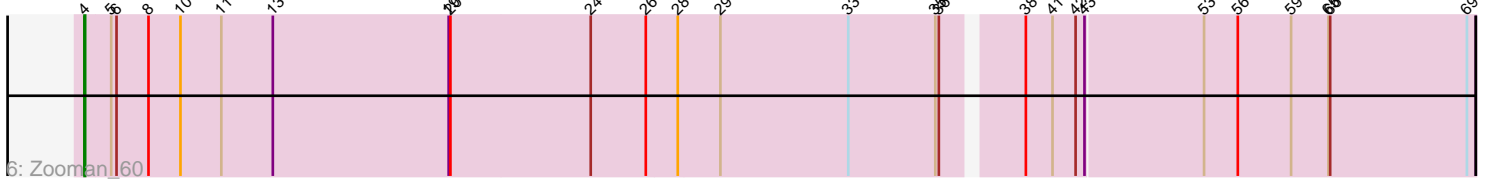
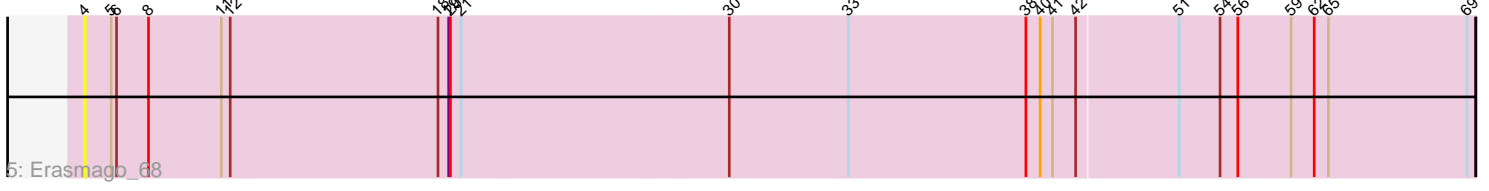
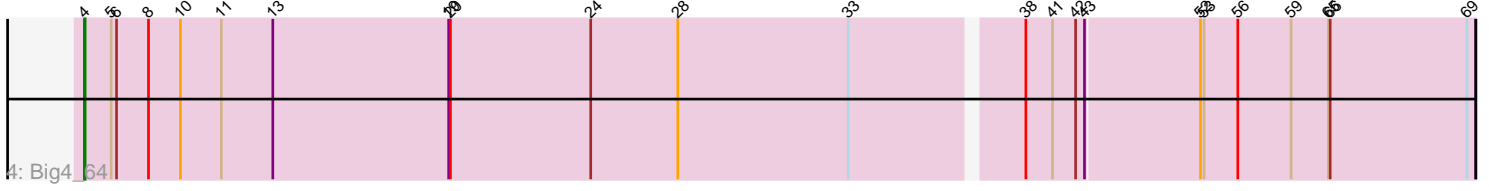
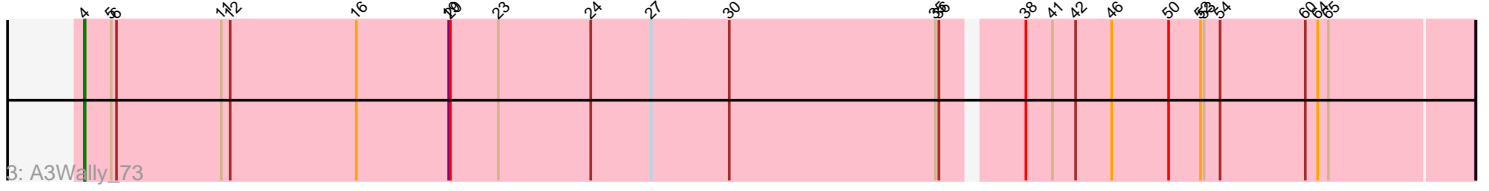
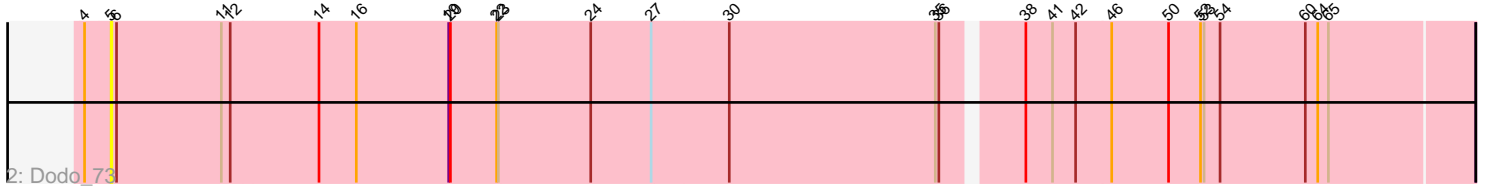
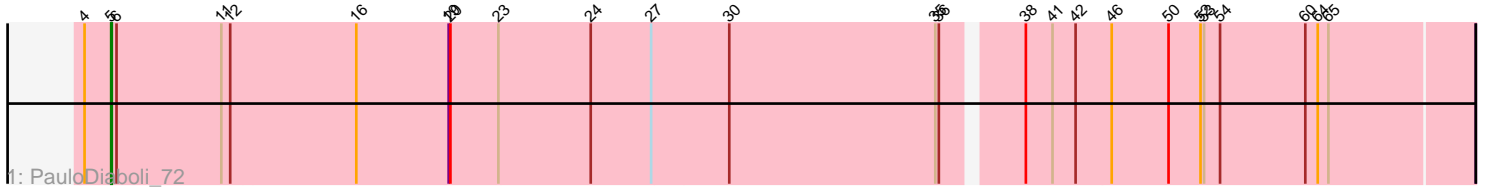


Pham 297295



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 297295 Report

This analysis was run 04/25/26 on database version 644.

Pham number 297295 has 8 members, 2 are drafts.

Phages represented in each track:

- Track 1 : PauloDiaboli\_72
- Track 2 : Dodo\_73
- Track 3 : A3Wally\_73
- Track 4 : Big4\_64
- Track 5 : Erasmago\_68
- Track 6 : Zooman\_60
- Track 7 : Cece\_59
- Track 8 : Pumpernickel\_75

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

The start number called the most often in the published annotations is 4, it was called in 4 of the 6 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- A3Wally\_73, Big4\_64, Cece\_59, Erasmago\_68, Zooman\_60,

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

- Dodo\_73, PauloDiaboli\_72,

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

- Pumpernickel\_75,

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

Start 3:

- Found in 1 of 8 ( 12.5% ) of genes in pham
- Manual Annotations of this start: 1 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pumpernickel\_75 (GD4),

Start 4:

- Found in 7 of 8 ( 87.5% ) of genes in pham
- Manual Annotations of this start: 4 of 6

- Called 71.4% of time when present
- Phage (with cluster) where this start called: A3Wally\_73 (GD1), Big4\_64 (GD2), Cece\_59 (GD3), Erasmago\_68 (GD2), Zooman\_60 (GD2),

Start 5:

- Found in 8 of 8 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 1 of 6
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Dodo\_73 (GD1), PauloDiaboli\_72 (GD1),

### Summary by clusters:

There are 4 clusters represented in this pham: GD1, GD2, GD3, GD4,

Info for manual annotations of cluster GD1:

- Start number 4 was manually annotated 1 time for cluster GD1.
- Start number 5 was manually annotated 1 time for cluster GD1.

Info for manual annotations of cluster GD2:

- Start number 4 was manually annotated 2 times for cluster GD2.

Info for manual annotations of cluster GD3:

- Start number 4 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster GD4:

- Start number 3 was manually annotated 1 time for cluster GD4.

### Gene Information:

Gene: A3Wally\_73 Start: 23945, Stop: 26236, Start Num: 4

Candidate Starts for A3Wally\_73:

(Start: 4 @23945 has 4 MA's), (Start: 5 @23987 has 1 MA's), (6, 23996), (11, 24173), (12, 24188), (16, 24395), (19, 24551), (20, 24554), (23, 24635), (24, 24788), (27, 24890), (30, 25016), (35, 25364), (36, 25370), (38, 25487), (41, 25532), (42, 25571), (46, 25631), (50, 25727), (52, 25781), (53, 25787), (54, 25814), (60, 25958), (64, 25979), (65, 25997),

Gene: Big4\_64 Start: 24020, Stop: 26320, Start Num: 4

Candidate Starts for Big4\_64:

(Start: 4 @24020 has 4 MA's), (Start: 5 @24062 has 1 MA's), (6, 24071), (8, 24125), (10, 24179), (11, 24248), (13, 24335), (19, 24632), (20, 24635), (24, 24869), (28, 25013), (33, 25298), (38, 25568), (41, 25613), (42, 25652), (43, 25667), (52, 25856), (53, 25862), (56, 25919), (59, 26009), (65, 26072), (66, 26075), (69, 26306),

Gene: Cece\_59 Start: 22539, Stop: 24836, Start Num: 4

Candidate Starts for Cece\_59:

(1, 22440), (2, 22455), (Start: 4 @22539 has 4 MA's), (Start: 5 @22581 has 1 MA's), (6, 22590), (8, 22644), (11, 22767), (13, 22854), (16, 22995), (18, 23133), (24, 23388), (29, 23607), (30, 23622), (31, 23637), (35, 23970), (36, 23976), (37, 23988), (38, 24093), (40, 24117), (41, 24138), (42, 24177), (45, 24222), (46, 24231), (47, 24243), (48, 24279), (49, 24282), (52, 24381), (53, 24387), (55, 24441), (56, 24444), (57, 24474), (58, 24483), (61, 24567), (65, 24597), (66, 24600), (67, 24642), (69, 24822),

Gene: Dodo\_73 Start: 24309, Stop: 26558, Start Num: 5

Candidate Starts for Dodo\_73:

(Start: 4 @24267 has 4 MA's), (Start: 5 @24309 has 1 MA's), (6, 24318), (11, 24495), (12, 24510), (14, 24654), (16, 24717), (19, 24873), (20, 24876), (22, 24954), (23, 24957), (24, 25110), (27, 25212), (30, 25338), (35, 25686), (36, 25692), (38, 25809), (41, 25854), (42, 25893), (46, 25953), (50, 26049), (52, 26103), (53, 26109), (54, 26136), (60, 26280), (64, 26301), (65, 26319),

Gene: Erasmago\_68 Start: 23755, Stop: 26082, Start Num: 4

Candidate Starts for Erasmago\_68:

(Start: 4 @23755 has 4 MA's), (Start: 5 @23800 has 1 MA's), (6, 23809), (8, 23863), (11, 23986), (12, 24001), (18, 24346), (19, 24364), (20, 24367), (21, 24385), (30, 24829), (33, 25030), (38, 25330), (40, 25354), (41, 25375), (42, 25414), (51, 25582), (54, 25651), (56, 25681), (59, 25771), (62, 25810), (65, 25834), (69, 26068),

Gene: PauloDiaboli\_72 Start: 23344, Stop: 25593, Start Num: 5

Candidate Starts for PauloDiaboli\_72:

(Start: 4 @23302 has 4 MA's), (Start: 5 @23344 has 1 MA's), (6, 23353), (11, 23530), (12, 23545), (16, 23752), (19, 23908), (20, 23911), (23, 23992), (24, 24145), (27, 24247), (30, 24373), (35, 24721), (36, 24727), (38, 24844), (41, 24889), (42, 24928), (46, 24988), (50, 25084), (52, 25138), (53, 25144), (54, 25171), (60, 25315), (64, 25336), (65, 25354),

Gene: Pumpernickel\_75 Start: 27251, Stop: 29614, Start Num: 3

Candidate Starts for Pumpernickel\_75:

(Start: 3 @27251 has 1 MA's), (Start: 5 @27353 has 1 MA's), (6, 27362), (7, 27398), (9, 27422), (11, 27539), (13, 27626), (15, 27758), (17, 27785), (21, 27944), (25, 28235), (32, 28505), (34, 28673), (39, 28886), (41, 28913), (44, 28979), (46, 29012), (50, 29108), (56, 29225), (63, 29357), (65, 29378), (66, 29381), (67, 29423), (68, 29507),

Gene: Zooman\_60 Start: 22688, Stop: 24988, Start Num: 4

Candidate Starts for Zooman\_60:

(Start: 4 @22688 has 4 MA's), (Start: 5 @22730 has 1 MA's), (6, 22739), (8, 22793), (10, 22847), (11, 22916), (13, 23003), (19, 23300), (20, 23303), (24, 23537), (26, 23630), (28, 23681), (29, 23750), (33, 23966), (35, 24113), (36, 24119), (38, 24236), (41, 24281), (42, 24320), (43, 24335), (53, 24530), (56, 24587), (59, 24677), (65, 24740), (66, 24743), (69, 24974),