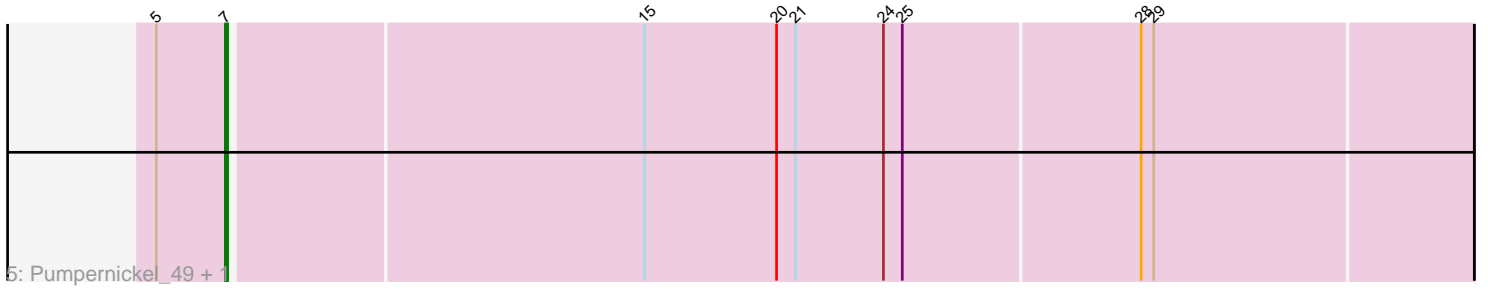
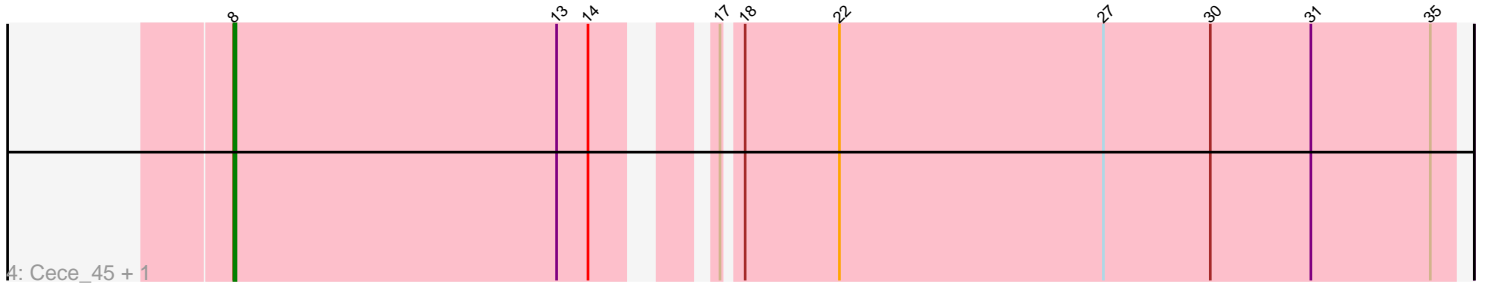
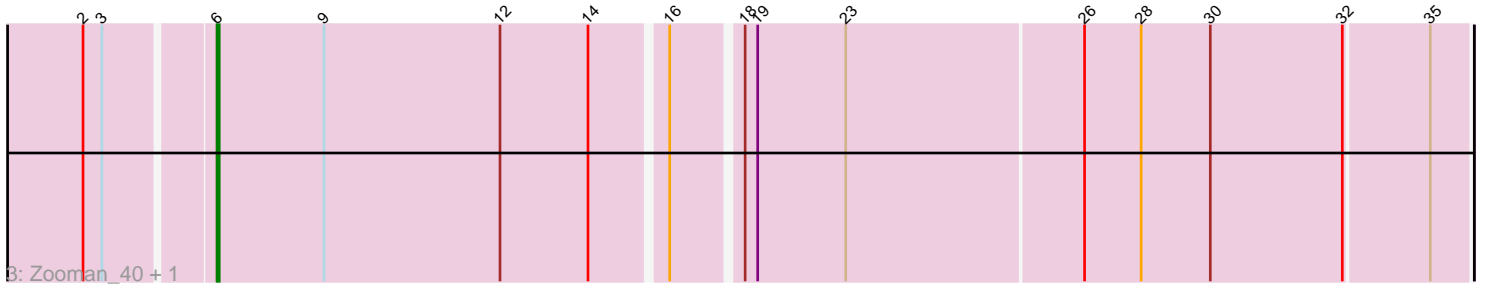
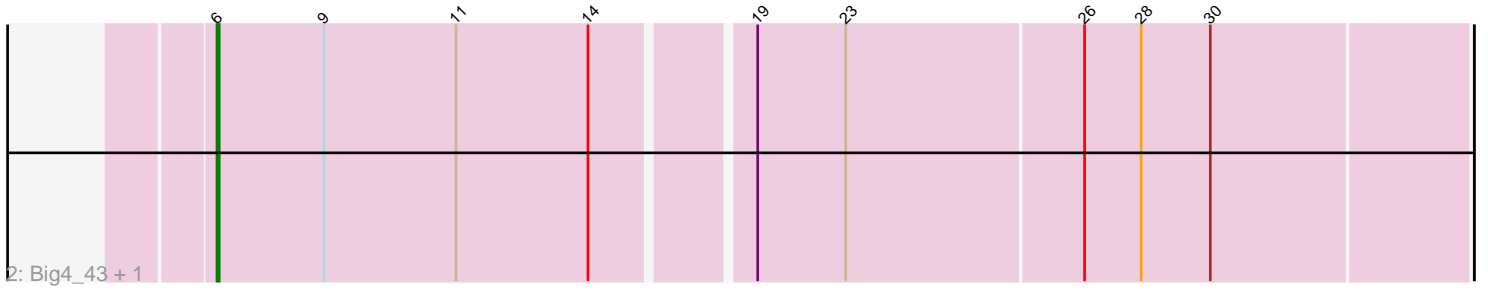
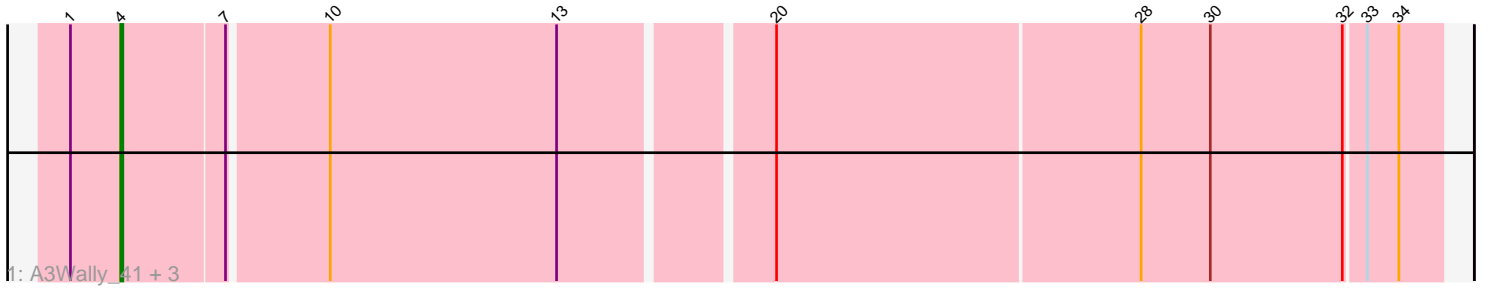


Pham 164065



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 164065 Report

This analysis was run 04/28/24 on database version 559.

Pham number 164065 has 12 members, 0 are drafts.

Phages represented in each track:

- Track 1 : A3Wally\_41, PauloDiaboli\_41, PauloDiaboli\_396, A3Wally\_394
- Track 2 : Big4\_43, Big4\_369
- Track 3 : Zooman\_40, Zooman\_353
- Track 4 : Cece\_45, Cece\_347
- Track 5 : Pumpernickel\_49, Pumpernickel\_350

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

The start number called the most often in the published annotations is 6, it was called in 4 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Big4\_369, Big4\_43, Zooman\_353, Zooman\_40,

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

- 

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

- A3Wally\_394, A3Wally\_41, Cece\_347, Cece\_45, PauloDiaboli\_396, PauloDiaboli\_41, Pumpernickel\_350, Pumpernickel\_49,

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

Start 4:

- Found in 4 of 12 ( 33.3% ) 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: A3Wally\_394 (GD1), A3Wally\_41 (GD1), PauloDiaboli\_396 (GD1), PauloDiaboli\_41 (GD1),

Start 6:

- Found in 4 of 12 ( 33.3% ) 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: Big4\_369 (GD2), Big4\_43 (GD2), Zooman\_353 (GD2), Zooman\_40 (GD2),

Start 7:

- Found in 6 of 12 ( 50.0% ) of genes in pham
- Manual Annotations of this start: 2 of 12
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Pumpernickel\_350 (GD4), Pumpernickel\_49 (GD4),

Start 8:

- Found in 2 of 12 ( 16.7% ) of genes in pham
- Manual Annotations of this start: 2 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cece\_347 (GD3), Cece\_45 (GD3),

### **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 4 times for cluster GD1.

Info for manual annotations of cluster GD2:

- Start number 6 was manually annotated 4 times for cluster GD2.

Info for manual annotations of cluster GD3:

- Start number 8 was manually annotated 2 times for cluster GD3.

Info for manual annotations of cluster GD4:

- Start number 7 was manually annotated 2 times for cluster GD4.

### **Gene Information:**

Gene: A3Wally\_41 Start: 14268, Stop: 14873, Start Num: 4

Candidate Starts for A3Wally\_41:

(1, 14244), (Start: 4 @14268 has 4 MA's), (Start: 7 @14316 has 2 MA's), (10, 14361), (13, 14469), (20, 14562), (28, 14733), (30, 14766), (32, 14829), (33, 14838), (34, 14853),

Gene: A3Wally\_394 Start: 193489, Stop: 194094, Start Num: 4

Candidate Starts for A3Wally\_394:

(1, 193465), (Start: 4 @193489 has 4 MA's), (Start: 7 @193537 has 2 MA's), (10, 193582), (13, 193690), (20, 193783), (28, 193954), (30, 193987), (32, 194050), (33, 194059), (34, 194074),

Gene: Big4\_43 Start: 16447, Stop: 17025, Start Num: 6

Candidate Starts for Big4\_43:

(Start: 6 @16447 has 4 MA's), (9, 16498), (11, 16561), (14, 16624), (19, 16693), (23, 16735), (26, 16846), (28, 16873), (30, 16906),

Gene: Big4\_369 Start: 191141, Stop: 191719, Start Num: 6

Candidate Starts for Big4\_369:

(Start: 6 @191141 has 4 MA's), (9, 191192), (11, 191255), (14, 191318), (19, 191387), (23, 191429), (26, 191540), (28, 191567), (30, 191600),

Gene: Cece\_45 Start: 16958, Stop: 17509, Start Num: 8

Candidate Starts for Cece\_45:

(Start: 8 @16958 has 2 MA's), (13, 17111), (14, 17126), (17, 17165), (18, 17171), (22, 17216), (27, 17342), (30, 17393), (31, 17441), (35, 17498),

Gene: Cece\_347 Start: 185392, Stop: 185943, Start Num: 8

Candidate Starts for Cece\_347:

(Start: 8 @185392 has 2 MA's), (13, 185545), (14, 185560), (17, 185599), (18, 185605), (22, 185650), (27, 185776), (30, 185827), (31, 185875), (35, 185932),

Gene: PauloDiaboli\_41 Start: 14108, Stop: 14713, Start Num: 4

Candidate Starts for PauloDiaboli\_41:

(1, 14084), (Start: 4 @14108 has 4 MA's), (Start: 7 @14156 has 2 MA's), (10, 14201), (13, 14309), (20, 14402), (28, 14573), (30, 14606), (32, 14669), (33, 14678), (34, 14693),

Gene: PauloDiaboli\_396 Start: 190737, Stop: 191342, Start Num: 4

Candidate Starts for PauloDiaboli\_396:

(1, 190713), (Start: 4 @190737 has 4 MA's), (Start: 7 @190785 has 2 MA's), (10, 190830), (13, 190938), (20, 191031), (28, 191202), (30, 191235), (32, 191298), (33, 191307), (34, 191322),

Gene: Pumpernickel\_49 Start: 17643, Stop: 18224, Start Num: 7

Candidate Starts for Pumpernickel\_49:

(5, 17610), (Start: 7 @17643 has 2 MA's), (15, 17835), (20, 17898), (21, 17907), (24, 17949), (25, 17958), (28, 18069), (29, 18075),

Gene: Pumpernickel\_350 Start: 183775, Stop: 184356, Start Num: 7

Candidate Starts for Pumpernickel\_350:

(5, 183742), (Start: 7 @183775 has 2 MA's), (15, 183967), (20, 184030), (21, 184039), (24, 184081), (25, 184090), (28, 184201), (29, 184207),

Gene: Zooman\_40 Start: 15855, Stop: 16433, Start Num: 6

Candidate Starts for Zooman\_40:

(2, 15798), (3, 15807), (Start: 6 @15855 has 4 MA's), (9, 15906), (12, 15990), (14, 16032), (16, 16065), (18, 16095), (19, 16101), (23, 16143), (26, 16254), (28, 16281), (30, 16314), (32, 16377), (35, 16416),

Gene: Zooman\_353 Start: 191506, Stop: 192084, Start Num: 6

Candidate Starts for Zooman\_353:

(2, 191449), (3, 191458), (Start: 6 @191506 has 4 MA's), (9, 191557), (12, 191641), (14, 191683), (16, 191716), (18, 191746), (19, 191752), (23, 191794), (26, 191905), (28, 191932), (30, 191965), (32, 192028), (35, 192067),