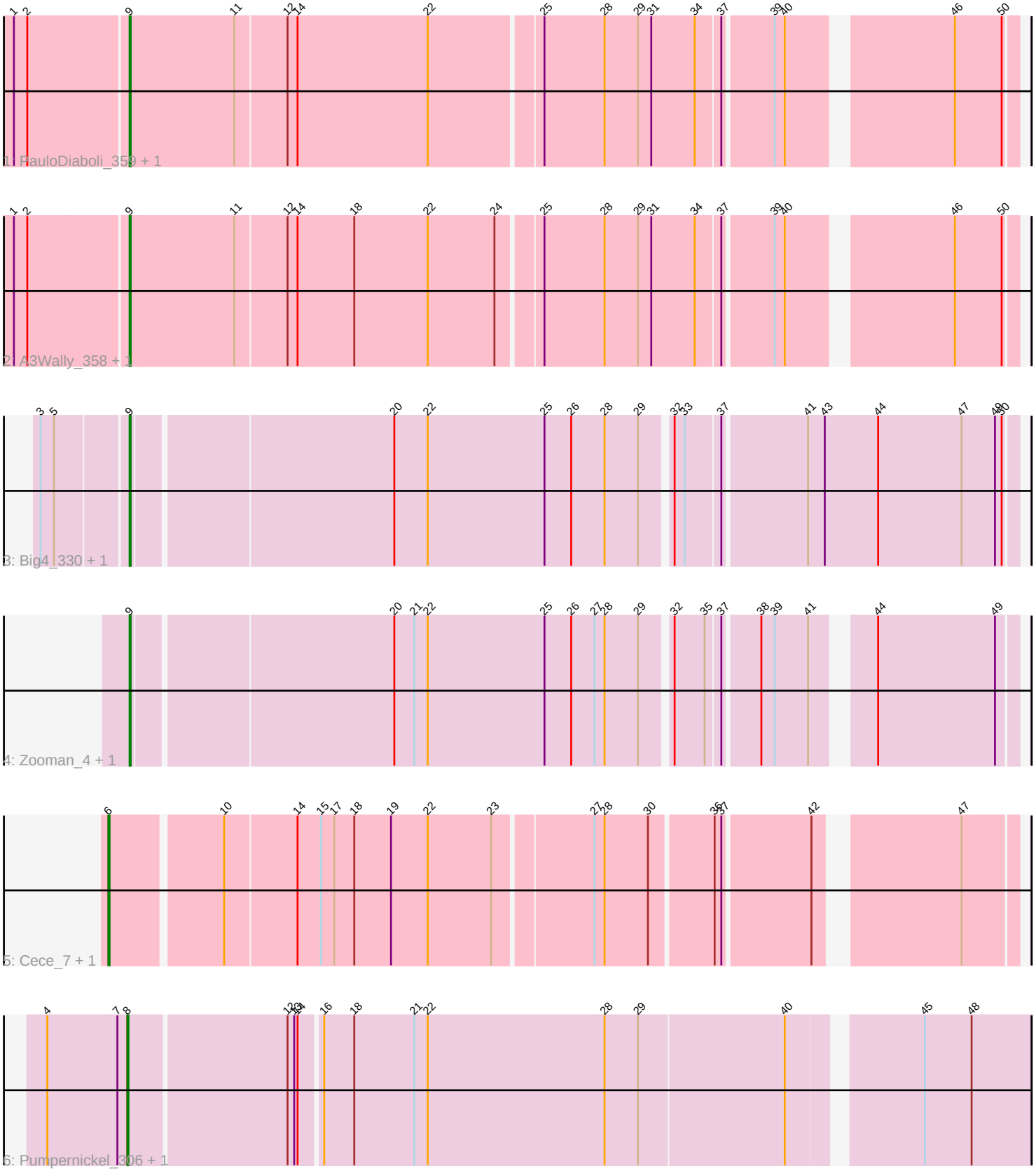
# Pham 4996


1: PauloDiaboli_359 + 1
2: A3Wally_358 + 1
3: Big4_330 + 1
4: Zooman_4 + 1
5: Cece_7 + 1
6: Pumpernickel_306 + 1

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 4996 Report

This analysis was run 04/05/24 on database version 557.

Pham number 4996 has 12 members, 0 are drafts.

Phages represented in each track:
• Track 1 : PauloDiaboli_359, PauloDiaboli_4
• Track 2 : A3Wally_358, A3Wally_4
• Track 3 : Big4_330, Big4_4
• Track 4 : Zooman_4, Zooman_317
• Track 5 : Cece_7, Cece_309
• Track 6 : Pumpernickel_306, Pumpernickel_5

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

The start number called the most often in the published annotations is 9, it was called in 8 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• A3Wally_358, A3Wally_4, Big4_330, Big4_4, PauloDiaboli_359, PauloDiaboli_4, Zooman_317, Zooman_4,

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

Genes that do not have the "Most Annotated" start:
• Cece_309, Cece_7, Pumpernickel_306, Pumpernickel_5,

**Summary by start number:**

Start 6:
• 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_309 (GD3), Cece_7 (GD3),

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: Pumpernickel_306 (GD4), Pumpernickel_5 (GD4),

Start 9:
• Found in 8 of 12 ( 66.7% ) of genes in pham
• Manual Annotations of this start: 8 of 12
• Called 100.0% of time when present
• Phage (with cluster) where this start called: A3Wally_358 (GD1), A3Wally_4 (GD1), Big4_330 (GD2), Big4_4 (GD2), PauloDiaboli_359 (GD1), PauloDiaboli_4 (GD1), Zooman_317 (GD2), Zooman_4 (GD2),

**Summary by clusters:**

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

Info for manual annotations of cluster GD1:
•Start number 9 was manually annotated 4 times for cluster GD1.

Info for manual annotations of cluster GD2:
•Start number 9 was manually annotated 4 times for cluster GD2.

Info for manual annotations of cluster GD3:
•Start number 6 was manually annotated 2 times for cluster GD3.

Info for manual annotations of cluster GD4:
•Start number 8 was manually annotated 2 times for cluster GD4.

***Gene Information:***

Gene: A3Wally_358 Start: 180502, Stop: 181254, Start Num: 9
Candidate Starts for A3Wally_358:
(1, 180403), (2, 180415), (Start: 9 @180502 has 8 MA's), (11, 180595), (12, 180640), (14, 180649), (18, 180700), (22, 180766), (24, 180826), (25, 180862), (28, 180916), (29, 180946), (31, 180958), (34, 180997), (37, 181018), (39, 181060), (40, 181069), (46, 181201), (50, 181243),

Gene: A3Wally_4 Start: 1281, Stop: 2033, Start Num: 9
Candidate Starts for A3Wally_4:
(1, 1182), (2, 1194), (Start: 9 @1281 has 8 MA's), (11, 1374), (12, 1419), (14, 1428), (18, 1479), (22, 1545), (24, 1605), (25, 1641), (28, 1695), (29, 1725), (31, 1737), (34, 1776), (37, 1797), (39, 1839), (40, 1848), (46, 1980), (50, 2022),

Gene: Big4_330 Start: 175975, Stop: 176739, Start Num: 9
Candidate Starts for Big4_330:
(3, 175903), (5, 175915), (Start: 9 @175975 has 8 MA's), (20, 176200), (22, 176230), (25, 176335), (26, 176359), (28, 176389), (29, 176419), (32, 176443), (33, 176452), (37, 176482), (41, 176554), (43, 176569), (44, 176617), (47, 176692), (49, 176722), (50, 176728),

Gene: Big4_4 Start: 1281, Stop: 2045, Start Num: 9
Candidate Starts for Big4_4:
(3, 1209), (5, 1221), (Start: 9 @1281 has 8 MA's), (20, 1506), (22, 1536), (25, 1641), (26, 1665), (28, 1695), (29, 1725), (32, 1749), (33, 1758), (37, 1788), (41, 1860), (43, 1875), (44, 1923), (47, 1998),

(49, 2028), (50, 2034),

Gene: Cece_7 Start: 1917, Stop: 2672, Start Num: 6
Candidate Starts for Cece_7:
(Start: 6 @1917 has 2 MA's), (10, 2010), (14, 2073), (15, 2094), (17, 2106), (18, 2124), (19, 2157), (22, 2190), (23, 2247), (27, 2331), (28, 2340), (30, 2379), (36, 2433), (37, 2439), (42, 2514), (47, 2625),

Gene: Cece_309 Start: 170351, Stop: 171106, Start Num: 6
Candidate Starts for Cece_309:
(Start: 6 @170351 has 2 MA's), (10, 170444), (14, 170507), (15, 170528), (17, 170540), (18, 170558), (19, 170591), (22, 170624), (23, 170681), (27, 170765), (28, 170774), (30, 170813), (36, 170867), (37, 170873), (42, 170948), (47, 171059),

Gene: PauloDiaboli_359 Start: 177901, Stop: 178653, Start Num: 9
Candidate Starts for PauloDiaboli_359:
(1, 177802), (2, 177814), (Start: 9 @177901 has 8 MA's), (11, 177994), (12, 178039), (14, 178048), (22, 178165), (25, 178261), (28, 178315), (29, 178345), (31, 178357), (34, 178396), (37, 178417), (39, 178459), (40, 178468), (46, 178600), (50, 178642),

Gene: PauloDiaboli_4 Start: 1272, Stop: 2024, Start Num: 9
Candidate Starts for PauloDiaboli_4:
(1, 1173), (2, 1185), (Start: 9 @1272 has 8 MA's), (11, 1365), (12, 1410), (14, 1419), (22, 1536), (25, 1632), (28, 1686), (29, 1716), (31, 1728), (34, 1767), (37, 1788), (39, 1830), (40, 1839), (46, 1971), (50, 2013),

Gene: Pumpernickel_306 Start: 167777, Stop: 168553, Start Num: 8
Candidate Starts for Pumpernickel_306:
(4, 167705), (7, 167768), (Start: 8 @167777 has 2 MA's), (12, 167915), (13, 167921), (14, 167924), (16, 167942), (18, 167969), (21, 168023), (22, 168035), (28, 168194), (29, 168224), (40, 168353), (45, 168458), (48, 168500),

Gene: Pumpernickel_5 Start: 1645, Stop: 2421, Start Num: 8
Candidate Starts for Pumpernickel_5:
(4, 1573), (7, 1636), (Start: 8 @1645 has 2 MA's), (12, 1783), (13, 1789), (14, 1792), (16, 1810), (18, 1837), (21, 1891), (22, 1903), (28, 2062), (29, 2092), (40, 2221), (45, 2326), (48, 2368),

Gene: Zooman_4 Start: 1285, Stop: 2028, Start Num: 9
Candidate Starts for Zooman_4:
(Start: 9 @1285 has 8 MA's), (20, 1510), (21, 1528), (22, 1540), (25, 1645), (26, 1669), (27, 1690), (28, 1699), (29, 1729), (32, 1753), (35, 1780), (37, 1792), (38, 1822), (39, 1834), (41, 1864), (44, 1906), (49, 2011),

Gene: Zooman_317 Start: 176936, Stop: 177679, Start Num: 9
Candidate Starts for Zooman_317:
(Start: 9 @176936 has 8 MA's), (20, 177161), (21, 177179), (22, 177191), (25, 177296), (26, 177320), (27, 177341), (28, 177350), (29, 177380), (32, 177404), (35, 177431), (37, 177443), (38, 177473), (39, 177485), (41, 177515), (44, 177557), (49, 177662),