

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 7938 Report

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

Pham number 7938 has 6 members, 0 are drafts.

Phages represented in each track:

Track 1 : PauloDiaboli_201, A3Wally_202

Track 2 : Zooman_172Track 3 : Big4_190Track 4 : Cece 179

Track 5 : Pumpernickel_186

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

The start number called the most often in the published annotations is 10, it was called in 5 of the 6 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

A3Wally_202, Big4_190, PauloDiaboli_201, Pumpernickel_186, Zooman_172,

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

• Cece_179,

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

Summary by start number:

Start 9:

- Found in 1 of 6 (16.7%) 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: Cece_179 (GD3),

Start 10:

- Found in 6 of 6 (100.0%) of genes in pham
- Manual Annotations of this start: 5 of 6
- Called 83.3% of time when present
- Phage (with cluster) where this start called: A3Wally_202 (GD1), Big4_190 (GD2), PauloDiaboli_201 (GD1), Pumpernickel_186 (GD4), Zooman_172 (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 10 was manually annotated 2 times for cluster GD1.

Info for manual annotations of cluster GD2:

•Start number 10 was manually annotated 2 times for cluster GD2.

Info for manual annotations of cluster GD3:

•Start number 9 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster GD4:

•Start number 10 was manually annotated 1 time for cluster GD4.

Gene Information:

Gene: A3Wally_202 Start: 111379, Stop: 110117, Start Num: 10 Candidate Starts for A3Wally_202: (Start: 10 @111379 has 5 MA's), (13, 111271), (17, 111187), (21, 111139), (22, 111118), (24, 111058), (25, 111040), (26, 111031), (29, 110965), (32, 110863), (35, 110800), (40, 110644), (41, 110533), (42, 110530), (43, 110500), (44, 110476), (46, 110449), (55, 110269), (59, 110173), (60, 110161), (62, 110146),

Gene: Big4_190 Start: 107321, Stop: 106059, Start Num: 10 Candidate Starts for Big4_190: (1, 107429), (2, 107423), (3, 107402), (4, 107393), (7, 107372), (Start: 10 @107321 has 5 MA's), (11, 107288), (12, 107285), (13, 107216), (14, 107177), (19, 107108), (22, 107063), (24, 107003), (25, 106985), (26, 106976), (28, 106913), (29, 106910), (30, 106880), (31, 106877), (37, 106688), (38, 106685), (39, 106613), (41, 106478), (43, 106445), (52, 106283), (55, 106214), (56, 106184), (57,

Gene: Cece_179 Start: 111921, Stop: 110644, Start Num: 9 Candidate Starts for Cece 179:

106175), (58, 106142), (60, 106106),

(Start: 9 @111921 has 1 MA's), (Start: 10 @111915 has 5 MA's), (11, 111882), (15, 111768), (16, 111741), (19, 111702), (20, 111690), (23, 111603), (24, 111597), (26, 111570), (28, 111507), (29, 111504), (32, 111402), (33, 111381), (36, 111285), (40, 111183), (41, 111072), (45, 110994), (46, 110988), (48, 110955), (49, 110946), (50, 110937), (55, 110808), (56, 110778), (57, 110769), (59, 110712), (60, 110700), (62, 110685), (63, 110655),

Gene: PauloDiaboli_201 Start: 109426, Stop: 108164, Start Num: 10 Candidate Starts for PauloDiaboli_201:

(Start: 10 @109426 has 5 MA's), (13, 109318), (17, 109234), (21, 109186), (22, 109165), (24, 109105), (25, 109087), (26, 109078), (29, 109012), (32, 108910), (35, 108847), (40, 108691), (41, 108580), (42, 108577), (43, 108547), (44, 108523), (46, 108496), (55, 108316), (59, 108220), (60, 108208), (62, 108193),

Gene: Pumpernickel_186 Start: 108543, Stop: 107254, Start Num: 10 Candidate Starts for Pumpernickel_186:

(Start: 10 @108543 has 5 MA's), (14, 108399), (19, 108330), (22, 108285), (24, 108225), (25, 108207), (27, 108189), (28, 108135), (29, 108132), (30, 108102), (39, 107835), (41, 107700), (42, 107697), (43, 107667), (47, 107589), (50, 107565), (51, 107511), (52, 107505), (53, 107487), (54, 107442), (55, 107436), (57, 107397), (58, 107364), (59, 107340), (61, 107325),

Gene: Zooman_172 Start: 103941, Stop: 102679, Start Num: 10 Candidate Starts for Zooman_172:

 $\begin{array}{l} (1,\,104049),\,(3,\,104022),\,(4,\,104013),\,(5,\,104010),\,(6,\,104001),\,(8,\,103989),\,(\text{Start:}\,\,10\,\,@\,103941\,\,\text{has}\,\,5\,\,\text{MA's}),\,(11,\,103908),\,(12,\,103905),\,(13,\,103836),\,(14,\,103797),\,(18,\,103734),\,(19,\,103728),\,(22,\,103683),\,(24,\,103623),\,(25,\,103605),\,(26,\,103596),\,(29,\,103530),\,(30,\,103500),\,(31,\,103497),\,(32,\,103428),\,(34,\,103401),\,(37,\,103308),\,(38,\,103305),\,(39,\,103233),\,(41,\,103098),\,(46,\,103014),\,(55,\,102834),\,(56,\,102804),\,(57,\,102795),\,(58,\,102762),\,(60,\,102726), \end{array}$