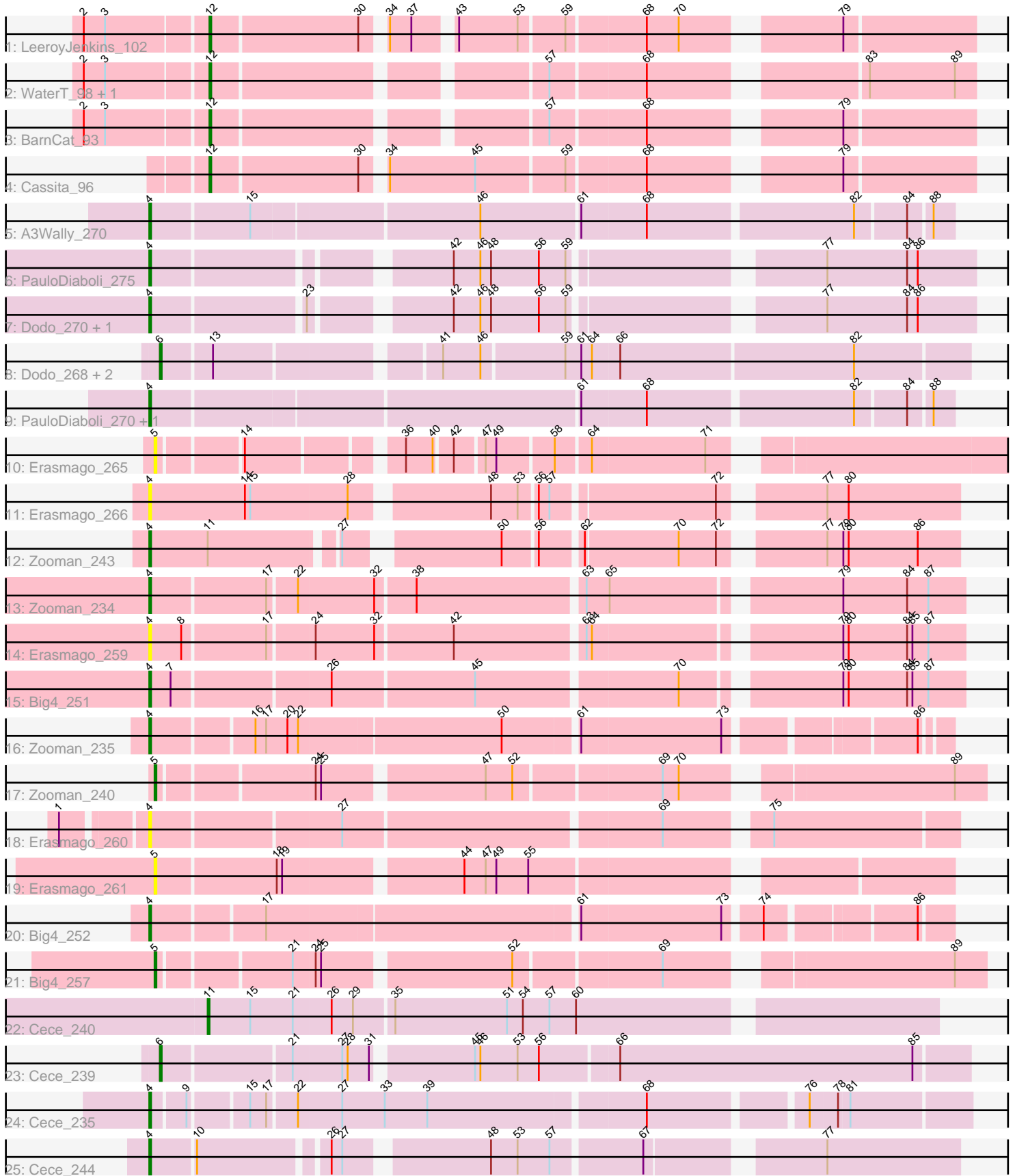


Pham 309044



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 309044 Report

This analysis was run 06/27/26 on database version 652.

Pham number 309044 has 30 members, 5 are drafts.

Phages represented in each track:

- Track 1 : LeeroyJenkins\_102
- Track 2 : WaterT\_98, Lifes\_94
- Track 3 : BarnCat\_93
- Track 4 : Cassita\_96
- Track 5 : A3Wally\_270
- Track 6 : PauloDiaboli\_275
- Track 7 : Dodo\_270, A3Wally\_275
- Track 8 : Dodo\_268, A3Wally\_273, PauloDiaboli\_273
- Track 9 : PauloDiaboli\_270, Dodo\_265
- Track 10 : Erasmago\_265
- Track 11 : Erasmago\_266
- Track 12 : Zooman\_243
- Track 13 : Zooman\_234
- Track 14 : Erasmago\_259
- Track 15 : Big4\_251
- Track 16 : Zooman\_235
- Track 17 : Zooman\_240
- Track 18 : Erasmago\_260
- Track 19 : Erasmago\_261
- Track 20 : Big4\_252
- Track 21 : Big4\_257
- Track 22 : Cece\_240
- Track 23 : Cece\_239
- Track 24 : Cece\_235
- Track 25 : Cece\_244

### ***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 13 of the 25 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- A3Wally\_270, A3Wally\_275, Big4\_251, Big4\_252, Cece\_235, Cece\_244, Dodo\_265, Dodo\_270, Erasmago\_259, Erasmago\_260, Erasmago\_266,

PauloDiaboli\_270, PauloDiaboli\_275, Zooman\_234, Zooman\_235, Zooman\_243,

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

- 

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

- A3Wally\_273, BarnCat\_93, Big4\_257, Cassita\_96, Cece\_239, Cece\_240, Dodo\_268, Erasmago\_261, Erasmago\_265, LeeroyJenkins\_102, Lifes\_94, PauloDiaboli\_273, WaterT\_98, Zooman\_240,

### Summary by start number:

Start 4:

- Found in 16 of 30 ( 53.3% ) of genes in pham
- Manual Annotations of this start: 13 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: A3Wally\_270 (GD1), A3Wally\_275 (GD1), Big4\_251 (GD2), Big4\_252 (GD2), Cece\_235 (GD3), Cece\_244 (GD3), Dodo\_265 (GD1), Dodo\_270 (GD1), Erasmago\_259 (GD2), Erasmago\_260 (GD2), Erasmago\_266 (GD2), PauloDiaboli\_270 (GD1), PauloDiaboli\_275 (GD1), Zooman\_234 (GD2), Zooman\_235 (GD2), Zooman\_243 (GD2),

Start 5:

- Found in 4 of 30 ( 13.3% ) of genes in pham
- Manual Annotations of this start: 2 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Big4\_257 (GD2), Erasmago\_261 (GD2), Erasmago\_265 (GD2), Zooman\_240 (GD2),

Start 6:

- Found in 4 of 30 ( 13.3% ) of genes in pham
- Manual Annotations of this start: 4 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: A3Wally\_273 (GD1), Cece\_239 (GD3), Dodo\_268 (GD1), PauloDiaboli\_273 (GD1),

Start 11:

- Found in 2 of 30 ( 6.7% ) of genes in pham
- Manual Annotations of this start: 1 of 25
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Cece\_240 (GD3),

Start 12:

- Found in 5 of 30 ( 16.7% ) of genes in pham
- Manual Annotations of this start: 5 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BarnCat\_93 (GB), Cassita\_96 (GB), LeeroyJenkins\_102 (GB), Lifes\_94 (GB), WaterT\_98 (GB),

### Summary by clusters:

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

Info for manual annotations of cluster GB:

- Start number 12 was manually annotated 5 times for cluster GB.

Info for manual annotations of cluster GD1:

- Start number 4 was manually annotated 6 times for cluster GD1.
- Start number 6 was manually annotated 3 times for cluster GD1.

Info for manual annotations of cluster GD2:

- Start number 4 was manually annotated 5 times for cluster GD2.
- Start number 5 was manually annotated 2 times for cluster GD2.

Info for manual annotations of cluster GD3:

- Start number 4 was manually annotated 2 times for cluster GD3.
- Start number 6 was manually annotated 1 time for cluster GD3.
- Start number 11 was manually annotated 1 time for cluster GD3.

### ***Gene Information:***

Gene: A3Wally\_270 Start: 148054, Stop: 148482, Start Num: 4

Candidate Starts for A3Wally\_270:

(Start: 4 @148054 has 13 MA's), (15, 148108), (46, 148231), (61, 148285), (68, 148321), (82, 148432), (84, 148459), (88, 148471),

Gene: A3Wally\_273 Start: 150031, Stop: 150459, Start Num: 6

Candidate Starts for A3Wally\_273:

(Start: 6 @150031 has 4 MA's), (13, 150058), (41, 150172), (46, 150193), (59, 150238), (61, 150247), (64, 150253), (66, 150268), (82, 150397),

Gene: A3Wally\_275 Start: 150902, Stop: 151321, Start Num: 4

Candidate Starts for A3Wally\_275:

(Start: 4 @150902 has 13 MA's), (23, 150983), (42, 151049), (46, 151064), (48, 151070), (56, 151097), (59, 151112), (77, 151238), (84, 151283), (86, 151289),

Gene: BarnCat\_93 Start: 51338, Stop: 50955, Start Num: 12

Candidate Starts for BarnCat\_93:

(2, 51404), (3, 51392), (Start: 12 @51338 has 5 MA's), (57, 51170), (68, 51119), (79, 51026),

Gene: Big4\_251 Start: 144012, Stop: 144440, Start Num: 4

Candidate Starts for Big4\_251:

(Start: 4 @144012 has 13 MA's), (7, 144024), (26, 144108), (45, 144186), (70, 144294), (79, 144372), (80, 144375), (84, 144408), (85, 144411), (87, 144420),

Gene: Big4\_252 Start: 144450, Stop: 144866, Start Num: 4

Candidate Starts for Big4\_252:

(Start: 4 @144450 has 13 MA's), (17, 144510), (61, 144678), (73, 144756), (74, 144774), (86, 144849),

Gene: Big4\_257 Start: 146896, Stop: 147318, Start Num: 5

Candidate Starts for Big4\_257:

(Start: 5 @146896 has 2 MA's), (21, 146965), (24, 146977), (25, 146980), (52, 147079), (69, 147157), (89, 147301),

Gene: Cassita\_96 Start: 52186, Stop: 51794, Start Num: 12

Candidate Starts for Cassita\_96:

(Start: 12 @52186 has 5 MA's), (30, 52105), (34, 52096), (45, 52048), (59, 52000), (68, 51958), (79, 51865),

Gene: Cece\_240 Start: 143936, Stop: 144328, Start Num: 11

Candidate Starts for Cece\_240:

(Start: 11 @143936 has 1 MA's), (15, 143960), (21, 143984), (26, 144005), (29, 144017), (35, 144038), (51, 144101), (54, 144110), (57, 144125), (60, 144140),

Gene: Cece\_239 Start: 143505, Stop: 143939, Start Num: 6

Candidate Starts for Cece\_239:

(Start: 6 @143505 has 4 MA's), (21, 143574), (27, 143601), (28, 143604), (31, 143616), (45, 143667), (46, 143670), (53, 143691), (56, 143703), (66, 143745), (85, 143910),

Gene: Cece\_235 Start: 141216, Stop: 141644, Start Num: 4

Candidate Starts for Cece\_235:

(Start: 4 @141216 has 13 MA's), (9, 141234), (15, 141264), (17, 141273), (22, 141288), (27, 141312), (33, 141336), (39, 141360), (68, 141477), (76, 141558), (78, 141573), (81, 141579),

Gene: Cece\_244 Start: 145566, Stop: 145976, Start Num: 4

Candidate Starts for Cece\_244:

(Start: 4 @145566 has 13 MA's), (10, 145590), (26, 145656), (27, 145662), (48, 145734), (53, 145749), (57, 145767), (67, 145815), (77, 145902),

Gene: Dodo\_270 Start: 150586, Stop: 151005, Start Num: 4

Candidate Starts for Dodo\_270:

(Start: 4 @150586 has 13 MA's), (23, 150667), (42, 150733), (46, 150748), (48, 150754), (56, 150781), (59, 150796), (77, 150922), (84, 150967), (86, 150973),

Gene: Dodo\_268 Start: 149715, Stop: 150143, Start Num: 6

Candidate Starts for Dodo\_268:

(Start: 6 @149715 has 4 MA's), (13, 149742), (41, 149856), (46, 149877), (59, 149922), (61, 149931), (64, 149937), (66, 149952), (82, 150081),

Gene: Dodo\_265 Start: 147738, Stop: 148166, Start Num: 4

Candidate Starts for Dodo\_265:

(Start: 4 @147738 has 13 MA's), (61, 147969), (68, 148005), (82, 148116), (84, 148143), (88, 148155),

Gene: Erasmago\_265 Start: 147639, Stop: 148061, Start Num: 5

Candidate Starts for Erasmago\_265:

(Start: 5 @147639 has 2 MA's), (14, 147681), (36, 147756), (40, 147771), (42, 147780), (47, 147795), (49, 147801), (58, 147831), (64, 147849), (71, 147912),

Gene: Erasmago\_266 Start: 148076, Stop: 148495, Start Num: 4

Candidate Starts for Erasmago\_266:

(Start: 4 @148076 has 13 MA's), (14, 148130), (15, 148133), (28, 148187), (48, 148256), (53, 148271), (56, 148280), (57, 148286), (72, 148373), (77, 148421), (80, 148433),

Gene: Erasmago\_259 Start: 144536, Stop: 144964, Start Num: 4

Candidate Starts for Erasmago\_259:

(Start: 4 @144536 has 13 MA's), (8, 144554), (17, 144599), (24, 144623), (32, 144656), (42, 144698), (63, 144767), (64, 144770), (79, 144896), (80, 144899), (84, 144932), (85, 144935), (87, 144944),

Gene: Erasmago\_260 Start: 144964, Stop: 145389, Start Num: 4  
Candidate Starts for Erasmago\_260:  
(1, 144922), (Start: 4 @144964 has 13 MA's), (27, 145066), (69, 145237), (75, 145288),

Gene: Erasmago\_261 Start: 145389, Stop: 145802, Start Num: 5  
Candidate Starts for Erasmago\_261:  
(Start: 5 @145389 has 2 MA's), (18, 145455), (19, 145458), (44, 145551), (47, 145563), (49, 145569),  
(55, 145587),

Gene: LeeroyJenkins\_102 Start: 53214, Stop: 52831, Start Num: 12  
Candidate Starts for LeeroyJenkins\_102:  
(2, 53280), (3, 53268), (Start: 12 @53214 has 5 MA's), (30, 53133), (34, 53124), (37, 53112), (43,  
53094), (53, 53061), (59, 53037), (68, 52995), (70, 52977), (79, 52902),

Gene: Lifes\_94 Start: 50208, Stop: 49825, Start Num: 12  
Candidate Starts for Lifes\_94:  
(2, 50274), (3, 50262), (Start: 12 @50208 has 5 MA's), (57, 50040), (68, 49989), (83, 49884), (89,  
49836),

Gene: PauloDiaboli\_275 Start: 148101, Stop: 148520, Start Num: 4  
Candidate Starts for PauloDiaboli\_275:  
(Start: 4 @148101 has 13 MA's), (42, 148248), (46, 148263), (48, 148269), (56, 148296), (59, 148311),  
(77, 148437), (84, 148482), (86, 148488),

Gene: PauloDiaboli\_270 Start: 145253, Stop: 145681, Start Num: 4  
Candidate Starts for PauloDiaboli\_270:  
(Start: 4 @145253 has 13 MA's), (61, 145484), (68, 145520), (82, 145631), (84, 145658), (88, 145670),

Gene: PauloDiaboli\_273 Start: 147230, Stop: 147658, Start Num: 6  
Candidate Starts for PauloDiaboli\_273:  
(Start: 6 @147230 has 4 MA's), (13, 147257), (41, 147371), (46, 147392), (59, 147437), (61, 147446),  
(64, 147452), (66, 147467), (82, 147596),

Gene: WaterT\_98 Start: 52153, Stop: 51770, Start Num: 12  
Candidate Starts for WaterT\_98:  
(2, 52219), (3, 52207), (Start: 12 @52153 has 5 MA's), (57, 51985), (68, 51934), (83, 51829), (89,  
51781),

Gene: Zooman\_243 Start: 146605, Stop: 147012, Start Num: 4  
Candidate Starts for Zooman\_243:  
(Start: 4 @146605 has 13 MA's), (Start: 11 @146638 has 1 MA's), (27, 146704), (50, 146779), (56,  
146797), (62, 146818), (70, 146869), (72, 146890), (77, 146938), (79, 146947), (80, 146950), (86,  
146989),

Gene: Zooman\_234 Start: 142710, Stop: 143138, Start Num: 4  
Candidate Starts for Zooman\_234:  
(Start: 4 @142710 has 13 MA's), (17, 142773), (22, 142788), (32, 142830), (38, 142851), (63, 142941),  
(65, 142953), (79, 143070), (84, 143106), (87, 143118),

Gene: Zooman\_235 Start: 143148, Stop: 143561, Start Num: 4  
Candidate Starts for Zooman\_235:

(Start: 4 @143148 has 13 MA's), (16, 143202), (17, 143208), (20, 143220), (22, 143226), (50, 143337), (61, 143376), (73, 143454), (86, 143547),

Gene: Zooman\_240 Start: 145582, Stop: 146004, Start Num: 5

Candidate Starts for Zooman\_240:

(Start: 5 @145582 has 2 MA's), (24, 145663), (25, 145666), (47, 145750), (52, 145765), (69, 145843), (70, 145852), (89, 145987),