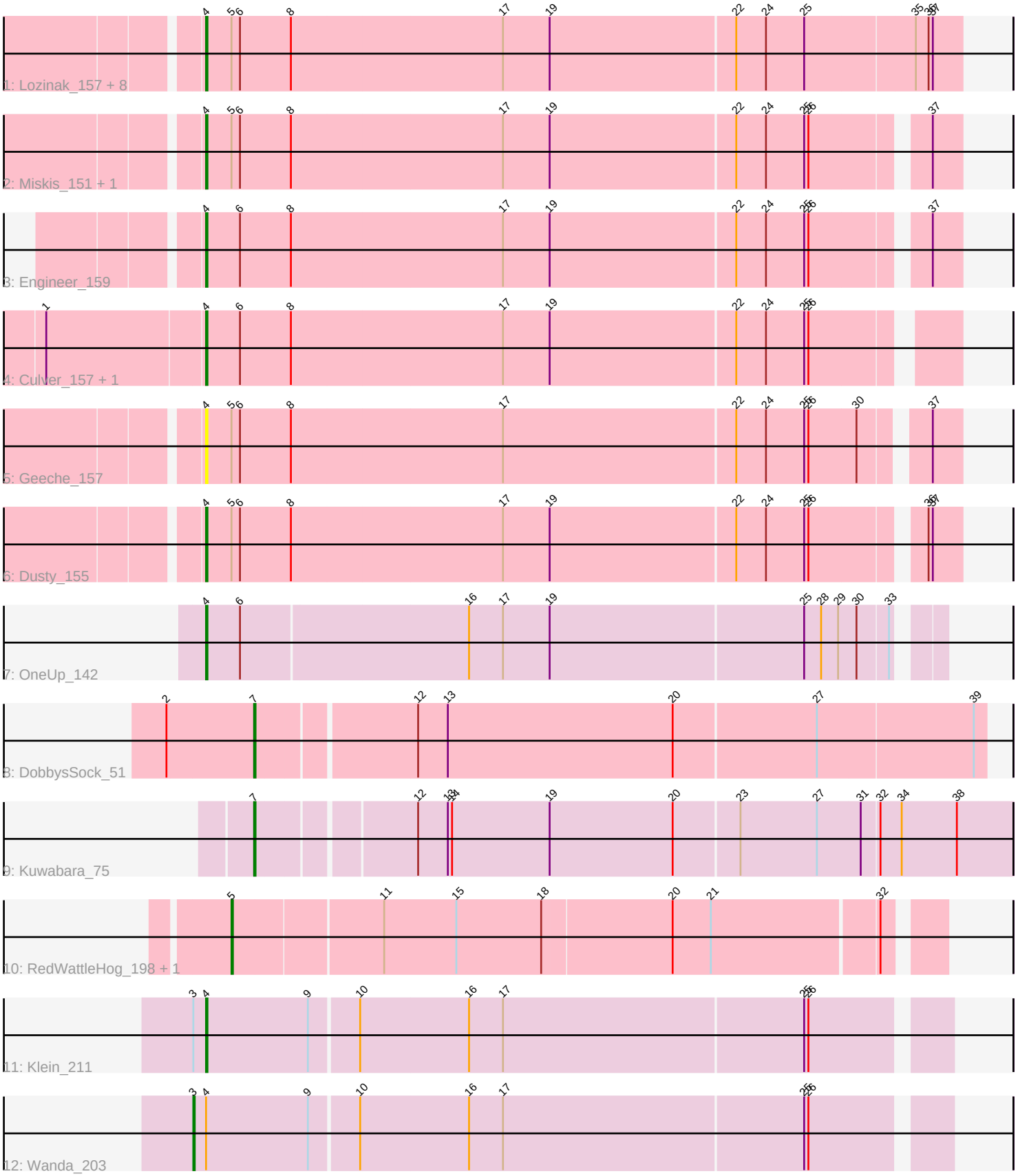
Pham 309212


1: Lozinak_157 + 8
2: Miskis_151 + 1
3: Engineer_159
4: Culver_157 + 1
5: Geeche_157
6: Dusty_155
7: OneUp_142
8: DobbysSock_51
9: Kuwabara_75
10: RedWattleHog_198 + 1
11: Klein_211
12: Wanda_203

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 309212 Report

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

Pham number 309212 has 23 members, 1 are drafts.

Phages represented in each track:
• Track 1 : Lozinak_157, Toniann_157, Abscondus_155, Cucurbita_156, Bachita_160, PhinkBoden_155, Norvs_155, Smoothie_158, ClubL_158
• Track 2 : Miskis_151, Aphelion_157
• Track 3 : Engineer_159
• Track 4 : Culver_157, WilliamBoone_159
• Track 5 : Geeche_157
• Track 6 : Dusty_155
• Track 7 : OneUp_142
• Track 8 : DobbysSock_51
• Track 9 : Kuwabara_75
• Track 10 : RedWattleHog_198, Stormageddon_199
• Track 11 : Klein_211
• Track 12 : Wanda_203

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 17 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Abscondus_155, Aphelion_157, Bachita_160, ClubL_158, Cucurbita_156, Culver_157, Dusty_155, Engineer_159, Geeche_157, Klein_211, Lozinak_157, Miskis_151, Norvs_155, OneUp_142, PhinkBoden_155, Smoothie_158, Toniann_157, WilliamBoone_159,

Genes that have the "Most Annotated" start but do not call it:
• Wanda_203,

Genes that do not have the "Most Annotated" start:
• DobbysSock_51, Kuwabara_75, RedWattleHog_198, Stormageddon_199,

Summary by start number:

Start 3:

• Found in 2 of 23 (8.7%) of genes in pham
• Manual Annotations of this start: 1 of 22
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Wanda_203 (J),

Start 4:
• Found in 19 of 23 (82.6%) of genes in pham
• Manual Annotations of this start: 17 of 22
• Called 94.7% of time when present
• Phage (with cluster) where this start called: Abscondus_155 (CQ1), Aphelion_157 (CQ1), Bachita_160 (CQ1), ClubL_158 (CQ1), Cucurbita_156 (CQ1), Culver_157 (CQ1), Dusty_155 (CQ1), Engineer_159 (CQ1), Geeche_157 (CQ1), Klein_211 (J), Lozinak_157 (CQ1), Miskis_151 (CQ1), Norvs_155 (CQ1), OneUp_142 (CQ2), PhinkBoden_155 (CQ1), Smoothie_158 (CQ1), Toniann_157 (CQ1), WilliamBoone_159 (CQ1),

Start 5:
• Found in 15 of 23 (65.2%) of genes in pham
• Manual Annotations of this start: 2 of 22
• Called 13.3% of time when present
• Phage (with cluster) where this start called: RedWattleHog_198 (DX), Stormageddon_199 (DX),

Start 7:
• Found in 2 of 23 (8.7%) of genes in pham
• Manual Annotations of this start: 2 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DobbysSock_51 (CZ4), Kuwabara_75 (DN4),

Summary by clusters:

There are 6 clusters represented in this pham: J, CZ4, DN4, DX, CQ2, CQ1,

Info for manual annotations of cluster CQ1:
•Start number 4 was manually annotated 15 times for cluster CQ1.

Info for manual annotations of cluster CQ2:
•Start number 4 was manually annotated 1 time for cluster CQ2.

Info for manual annotations of cluster CZ4:
•Start number 7 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster DN4:
•Start number 7 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster DX:
•Start number 5 was manually annotated 2 times for cluster DX.

Info for manual annotations of cluster J:
•Start number 3 was manually annotated 1 time for cluster J.
•Start number 4 was manually annotated 1 time for cluster J.

Gene Information:

Gene: Abscondus_155 Start: 83304, Stop: 82780, Start Num: 4
Candidate Starts for Abscondus_155:
(Start: 4 @83304 has 17 MA's), (Start: 5 @83286 has 2 MA's), (6, 83280), (8, 83244), (17, 83097), (19, 83064), (22, 82935), (24, 82914), (25, 82887), (35, 82812), (36, 82803), (37, 82800),

Gene: Aphelion_157 Start: 84453, Stop: 83941, Start Num: 4
Candidate Starts for Aphelion_157:
(Start: 4 @84453 has 17 MA's), (Start: 5 @84435 has 2 MA's), (6, 84429), (8, 84393), (17, 84246), (19, 84213), (22, 84084), (24, 84063), (25, 84036), (26, 84033), (37, 83961),

Gene: Bachita_160 Start: 84344, Stop: 83820, Start Num: 4
Candidate Starts for Bachita_160:
(Start: 4 @84344 has 17 MA's), (Start: 5 @84326 has 2 MA's), (6, 84320), (8, 84284), (17, 84137), (19, 84104), (22, 83975), (24, 83954), (25, 83927), (35, 83852), (36, 83843), (37, 83840),

Gene: ClubL_158 Start: 83596, Stop: 83072, Start Num: 4
Candidate Starts for ClubL_158:
(Start: 4 @83596 has 17 MA's), (Start: 5 @83578 has 2 MA's), (6, 83572), (8, 83536), (17, 83389), (19, 83356), (22, 83227), (24, 83206), (25, 83179), (35, 83104), (36, 83095), (37, 83092),

Gene: Cucurbita_156 Start: 84657, Stop: 84133, Start Num: 4
Candidate Starts for Cucurbita_156:
(Start: 4 @84657 has 17 MA's), (Start: 5 @84639 has 2 MA's), (6, 84633), (8, 84597), (17, 84450), (19, 84417), (22, 84288), (24, 84267), (25, 84240), (35, 84165), (36, 84156), (37, 84153),

Gene: Culver_157 Start: 82846, Stop: 82337, Start Num: 4
Candidate Starts for Culver_157:
(1, 82954), (Start: 4 @82846 has 17 MA's), (6, 82822), (8, 82786), (17, 82639), (19, 82606), (22, 82477), (24, 82456), (25, 82429), (26, 82426),

Gene: DobbysSock_51 Start: 37985, Stop: 38485, Start Num: 7
Candidate Starts for DobbysSock_51:
(2, 37925), (Start: 7 @37985 has 2 MA's), (12, 38090), (13, 38111), (20, 38270), (27, 38369), (39, 38477),

Gene: Dusty_155 Start: 83321, Stop: 82809, Start Num: 4
Candidate Starts for Dusty_155:
(Start: 4 @83321 has 17 MA's), (Start: 5 @83303 has 2 MA's), (6, 83297), (8, 83261), (17, 83114), (19, 83081), (22, 82952), (24, 82931), (25, 82904), (26, 82901), (36, 82832), (37, 82829),

Gene: Engineer_159 Start: 84171, Stop: 83659, Start Num: 4
Candidate Starts for Engineer_159:
(Start: 4 @84171 has 17 MA's), (6, 84147), (8, 84111), (17, 83964), (19, 83931), (22, 83802), (24, 83781), (25, 83754), (26, 83751), (37, 83679),

Gene: Geeche_157 Start: 83545, Stop: 83033, Start Num: 4
Candidate Starts for Geeche_157:
(Start: 4 @83545 has 17 MA's), (Start: 5 @83527 has 2 MA's), (6, 83521), (8, 83485), (17, 83338), (22, 83176), (24, 83155), (25, 83128), (26, 83125), (30, 83092), (37, 83053),

Gene: Klein_211 Start: 101652, Stop: 101146, Start Num: 4
Candidate Starts for Klein_211:
(Start: 3 @101661 has 1 MA's), (Start: 4 @101652 has 17 MA's), (9, 101580), (10, 101547), (16, 101472), (17, 101448), (25, 101238), (26, 101235),

Gene: Kuwabara_75 Start: 45173, Stop: 45688, Start Num: 7
Candidate Starts for Kuwabara_75:
(Start: 7 @45173 has 2 MA's), (12, 45275), (13, 45296), (14, 45299), (19, 45368), (20, 45455), (23, 45500), (27, 45554), (31, 45584), (32, 45596), (34, 45611), (38, 45650),

Gene: Lozinak_157 Start: 84185, Stop: 83661, Start Num: 4
Candidate Starts for Lozinak_157:
(Start: 4 @84185 has 17 MA's), (Start: 5 @84167 has 2 MA's), (6, 84161), (8, 84125), (17, 83978), (19, 83945), (22, 83816), (24, 83795), (25, 83768), (35, 83693), (36, 83684), (37, 83681),

Gene: Miskis_151 Start: 83202, Stop: 82690, Start Num: 4
Candidate Starts for Miskis_151:
(Start: 4 @83202 has 17 MA's), (Start: 5 @83184 has 2 MA's), (6, 83178), (8, 83142), (17, 82995), (19, 82962), (22, 82833), (24, 82812), (25, 82785), (26, 82782), (37, 82710),

Gene: Norvs_155 Start: 83376, Stop: 82852, Start Num: 4
Candidate Starts for Norvs_155:
(Start: 4 @83376 has 17 MA's), (Start: 5 @83358 has 2 MA's), (6, 83352), (8, 83316), (17, 83169), (19, 83136), (22, 83007), (24, 82986), (25, 82959), (35, 82884), (36, 82875), (37, 82872),

Gene: OneUp_142 Start: 83012, Stop: 82515, Start Num: 4
Candidate Starts for OneUp_142:
(Start: 4 @83012 has 17 MA's), (6, 82988), (16, 82832), (17, 82808), (19, 82775), (25, 82598), (28, 82586), (29, 82574), (30, 82562), (33, 82541),

Gene: PhinkBoden_155 Start: 83774, Stop: 83250, Start Num: 4
Candidate Starts for PhinkBoden_155:
(Start: 4 @83774 has 17 MA's), (Start: 5 @83756 has 2 MA's), (6, 83750), (8, 83714), (17, 83567), (19, 83534), (22, 83405), (24, 83384), (25, 83357), (35, 83282), (36, 83273), (37, 83270),

Gene: RedWattleHog_198 Start: 122096, Stop: 122575, Start Num: 5
Candidate Starts for RedWattleHog_198:
(Start: 5 @122096 has 2 MA's), (11, 122198), (15, 122249), (18, 122309), (20, 122399), (21, 122426), (32, 122540),

Gene: Smoothie_158 Start: 83875, Stop: 83351, Start Num: 4
Candidate Starts for Smoothie_158:
(Start: 4 @83875 has 17 MA's), (Start: 5 @83857 has 2 MA's), (6, 83851), (8, 83815), (17, 83668), (19, 83635), (22, 83506), (24, 83485), (25, 83458), (35, 83383), (36, 83374), (37, 83371),

Gene: Stormageddon_199 Start: 123043, Stop: 123522, Start Num: 5
Candidate Starts for Stormageddon_199:
(Start: 5 @123043 has 2 MA's), (11, 123145), (15, 123196), (18, 123256), (20, 123346), (21, 123373), (32, 123487),

Gene: Toniann_157 Start: 83517, Stop: 82993, Start Num: 4
Candidate Starts for Toniann_157:

(Start: 4 @83517 has 17 MA's), (Start: 5 @83499 has 2 MA's), (6, 83493), (8, 83457), (17, 83310), (19, 83277), (22, 83148), (24, 83127), (25, 83100), (35, 83025), (36, 83016), (37, 83013),

Gene: Wanda_203 Start: 99291, Stop: 98776, Start Num: 3
Candidate Starts for Wanda_203:
(Start: 3 @99291 has 1 MA's), (Start: 4 @99282 has 17 MA's), (9, 99210), (10, 99177), (16, 99102), (17, 99078), (25, 98868), (26, 98865),

Gene: WilliamBoone_159 Start: 81962, Stop: 81453, Start Num: 4
Candidate Starts for WilliamBoone_159:
(1, 82070), (Start: 4 @81962 has 17 MA's), (6, 81938), (8, 81902), (17, 81755), (19, 81722), (22, 81593), (24, 81572), (25, 81545), (26, 81542),