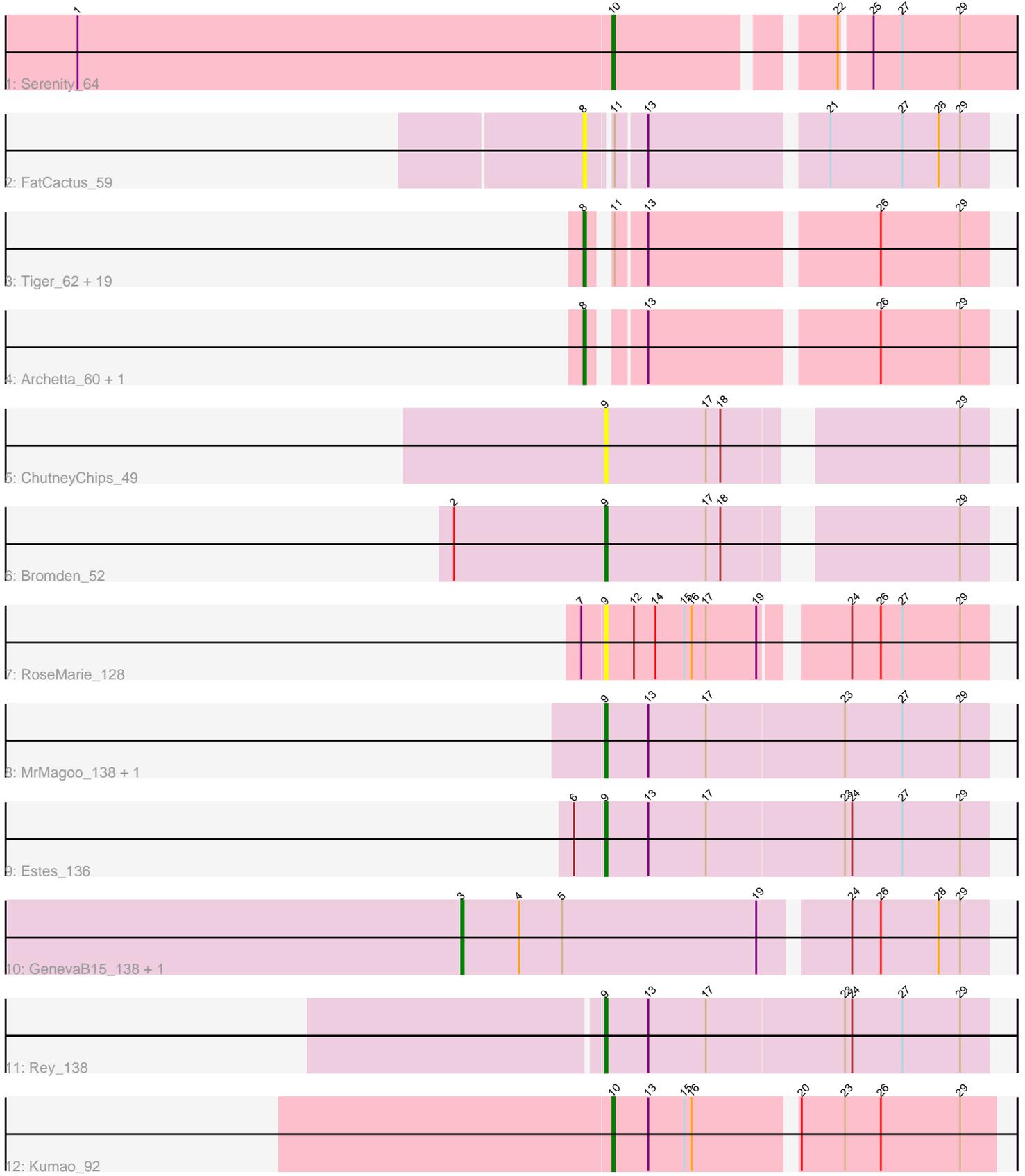# Pham 291368

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 291368 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291368 has 34 members, 7 are drafts.

Phages represented in each track:
• Track 1 : Serenity_64
• Track 2 : FatCactus_59
• Track 3 : Tiger_62, Swirley_62, AgentM_62, Discoknowium_60, Aragog_62, Phlorence_61, Twigg_58, HuhtaEnerson15_60, Florence1_57, Bonamassa_60, ForGetIt_63, Prinashe11_59, PickleBack_63, Jovo_63, Lev2_63, Florence4_59, Theia_59, Tarynearal_59, LittleCherry_60, Conspiracy_63
• Track 4 : Archetta_60, Bluefalcon_58
• Track 5 : ChutneyChips_49
• Track 6 : Bromden_52
• Track 7 : RoseMarie_128
• Track 8 : MrMagoo_138, GardenSalsa_136
• Track 9 : Estes_136
• Track 10 : GenevaB15_138, Aziz_135
• Track 11 : Rey_138
• Track 12 : Kumao_92

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

The start number called the most often in the published annotations is 8, it was called in 18 of the 27 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• AgentM_62, Aragog_62, Archetta_60, Bluefalcon_58, Bonamassa_60, Conspiracy_63, Discoknowium_60, FatCactus_59, Florence1_57, Florence4_59, ForGetIt_63, HuhtaEnerson15_60, Jovo_63, Lev2_63, LittleCherry_60, Phlorence_61, PickleBack_63, Prinashe11_59, Swirley_62, Tarynearal_59, Theia_59, Tiger_62, Twigg_58,

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

Genes that do not have the "Most Annotated" start:
• Aziz_135, Bromden_52, ChutneyChips_49, Estes_136, GardenSalsa_136, GenevaB15_138, Kumao_92, MrMagoo_138, Rey_138, RoseMarie_128,

Serenity_64,

Summary by start number:

Start 3:
• Found in 2 of 34 (5.9%) of genes in pham
• Manual Annotations of this start: 2 of 27
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aziz_135 (M2), GenevaB15_138 (M2),

Start 8:
• Found in 23 of 34 (67.6%) of genes in pham
• Manual Annotations of this start: 18 of 27
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AgentM_62 (A5), Aragog_62 (A5), Archetta_60 (A5), Bluefalcon_58 (A5), Bonamassa_60 (A5), Conspiracy_63 (A5), Discoknowium_60 (A5), FatCactus_59 (A20), Florence1_57 (A5), Florence4_59 (A5), ForGetIt_63 (A5), HuhtaEnerson15_60 (A5), Jovo_63 (A5), Lev2_63 (A5), LittleCherry_60 (A5), Phlorence_61 (A5), PickleBack_63 (A5), Prinashe11_59 (A5), Swirley_62 (A5), Tarynearal_59 (A5), Theia_59 (A5), Tiger_62 (A5), Twigg_58 (A5),

Start 9:
• Found in 7 of 34 (20.6%) of genes in pham
• Manual Annotations of this start: 5 of 27
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bromden_52 (L4), ChutneyChips_49 (L4), Estes_136 (M2), GardenSalsa_136 (M2), MrMagoo_138 (M2), Rey_138 (M2), RoseMarie_128 (M1),

Start 10:
• Found in 2 of 34 (5.9%) of genes in pham
• Manual Annotations of this start: 2 of 27
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kumao_92 (singleton), Serenity_64 (A2),

Summary by clusters:

There are 7 clusters represented in this pham: A20, singleton, L4, A2, M1, M2, A5,

Info for manual annotations of cluster A2:
•Start number 10 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster A5:
•Start number 8 was manually annotated 18 times for cluster A5.

Info for manual annotations of cluster L4:
•Start number 9 was manually annotated 1 time for cluster L4.

Info for manual annotations of cluster M2:
•Start number 3 was manually annotated 2 times for cluster M2.
•Start number 9 was manually annotated 4 times for cluster M2.

Gene Information:

Gene: AgentM_62 Start: 40126, Stop: 39974, Start Num: 8
Candidate Starts for AgentM_62:
(Start: 8 @40126 has 18 MA's), (11, 40120), (13, 40108), (26, 40018), (29, 39985),

Gene: Aragog_62 Start: 40146, Stop: 39994, Start Num: 8
Candidate Starts for Aragog_62:
(Start: 8 @40146 has 18 MA's), (11, 40140), (13, 40128), (26, 40038), (29, 40005),

Gene: Archetta_60 Start: 40330, Stop: 40178, Start Num: 8
Candidate Starts for Archetta_60:
(Start: 8 @40330 has 18 MA's), (13, 40312), (26, 40222), (29, 40189),

Gene: Aziz_135 Start: 65233, Stop: 65445, Start Num: 3
Candidate Starts for Aziz_135:
(Start: 3 @65233 has 2 MA's), (4, 65257), (5, 65275), (19, 65356), (24, 65389), (26, 65401), (28, 65425), (29, 65434),

Gene: Bluefalcon_58 Start: 40350, Stop: 40198, Start Num: 8
Candidate Starts for Bluefalcon_58:
(Start: 8 @40350 has 18 MA's), (13, 40332), (26, 40242), (29, 40209),

Gene: Bonamassa_60 Start: 39968, Stop: 39816, Start Num: 8
Candidate Starts for Bonamassa_60:
(Start: 8 @39968 has 18 MA's), (11, 39962), (13, 39950), (26, 39860), (29, 39827),

Gene: Bromden_52 Start: 39680, Stop: 39823, Start Num: 9
Candidate Starts for Bromden_52:
(2, 39617), (Start: 9 @39680 has 5 MA's), (17, 39722), (18, 39728), (29, 39812),

Gene: ChutneyChips_49 Start: 39044, Stop: 39187, Start Num: 9
Candidate Starts for ChutneyChips_49:
(Start: 9 @39044 has 5 MA's), (17, 39086), (18, 39092), (29, 39176),

Gene: Conspiracy_63 Start: 40368, Stop: 40216, Start Num: 8
Candidate Starts for Conspiracy_63:
(Start: 8 @40368 has 18 MA's), (11, 40362), (13, 40350), (26, 40260), (29, 40227),

Gene: Discoknowium_60 Start: 39885, Stop: 39733, Start Num: 8
Candidate Starts for Discoknowium_60:
(Start: 8 @39885 has 18 MA's), (11, 39879), (13, 39867), (26, 39777), (29, 39744),

Gene: Estes_136 Start: 65447, Stop: 65605, Start Num: 9
Candidate Starts for Estes_136:
(6, 65435), (Start: 9 @65447 has 5 MA's), (13, 65465), (17, 65489), (23, 65546), (24, 65549), (27, 65570), (29, 65594),

Gene: FatCactus_59 Start: 39594, Stop: 39439, Start Num: 8
Candidate Starts for FatCactus_59:

(Start: 8 @39594 has 18 MA's), (11, 39585), (13, 39573), (21, 39504), (27, 39474), (28, 39459), (29, 39450),

Gene: Florence1_57 Start: 39480, Stop: 39328, Start Num: 8
Candidate Starts for Florence1_57:
(Start: 8 @39480 has 18 MA's), (11, 39474), (13, 39462), (26, 39372), (29, 39339),

Gene: Florence4_59 Start: 39480, Stop: 39328, Start Num: 8
Candidate Starts for Florence4_59:
(Start: 8 @39480 has 18 MA's), (11, 39474), (13, 39462), (26, 39372), (29, 39339),

Gene: ForGetIt_63 Start: 40393, Stop: 40241, Start Num: 8
Candidate Starts for ForGetIt_63:
(Start: 8 @40393 has 18 MA's), (11, 40387), (13, 40375), (26, 40285), (29, 40252),

Gene: GardenSalsa_136 Start: 65626, Stop: 65784, Start Num: 9
Candidate Starts for GardenSalsa_136:
(Start: 9 @65626 has 5 MA's), (13, 65644), (17, 65668), (23, 65725), (27, 65749), (29, 65773),

Gene: GenevaB15_138 Start: 65233, Stop: 65445, Start Num: 3
Candidate Starts for GenevaB15_138:
(Start: 3 @65233 has 2 MA's), (4, 65257), (5, 65275), (19, 65356), (24, 65389), (26, 65401), (28, 65425), (29, 65434),

Gene: HuhtaEnerson15_60 Start: 39862, Stop: 39710, Start Num: 8
Candidate Starts for HuhtaEnerson15_60:
(Start: 8 @39862 has 18 MA's), (11, 39856), (13, 39844), (26, 39754), (29, 39721),

Gene: Jovo_63 Start: 40649, Stop: 40497, Start Num: 8
Candidate Starts for Jovo_63:
(Start: 8 @40649 has 18 MA's), (11, 40643), (13, 40631), (26, 40541), (29, 40508),

Gene: Kumao_92 Start: 57451, Stop: 57603, Start Num: 10
Candidate Starts for Kumao_92:
(Start: 10 @57451 has 2 MA's), (13, 57466), (15, 57481), (16, 57484), (20, 57523), (23, 57541), (26, 57556), (29, 57589),

Gene: Lev2_63 Start: 40281, Stop: 40129, Start Num: 8
Candidate Starts for Lev2_63:
(Start: 8 @40281 has 18 MA's), (11, 40275), (13, 40263), (26, 40173), (29, 40140),

Gene: LittleCherry_60 Start: 39732, Stop: 39580, Start Num: 8
Candidate Starts for LittleCherry_60:
(Start: 8 @39732 has 18 MA's), (11, 39726), (13, 39714), (26, 39624), (29, 39591),

Gene: MrMagoo_138 Start: 65627, Stop: 65785, Start Num: 9
Candidate Starts for MrMagoo_138:
(Start: 9 @65627 has 5 MA's), (13, 65645), (17, 65669), (23, 65726), (27, 65750), (29, 65774),

Gene: Phlorence_61 Start: 40026, Stop: 39874, Start Num: 8
Candidate Starts for Phlorence_61:
(Start: 8 @40026 has 18 MA's), (11, 40020), (13, 40008), (26, 39918), (29, 39885),

Gene: PickleBack_63 Start: 40203, Stop: 40051, Start Num: 8
Candidate Starts for PickleBack_63:
(Start: 8 @40203 has 18 MA's), (11, 40197), (13, 40185), (26, 40095), (29, 40062),

Gene: Prinashe11_59 Start: 39741, Stop: 39589, Start Num: 8
Candidate Starts for Prinashe11_59:
(Start: 8 @39741 has 18 MA's), (11, 39735), (13, 39723), (26, 39633), (29, 39600),

Gene: Rey_138 Start: 65174, Stop: 65332, Start Num: 9
Candidate Starts for Rey_138:
(Start: 9 @65174 has 5 MA's), (13, 65192), (17, 65216), (23, 65273), (24, 65276), (27, 65297), (29, 65321),

Gene: RoseMarie_128 Start: 67157, Stop: 67306, Start Num: 9
Candidate Starts for RoseMarie_128:
(7, 67148), (Start: 9 @67157 has 5 MA's), (12, 67169), (14, 67178), (15, 67190), (16, 67193), (17, 67199), (19, 67220), (24, 67250), (26, 67262), (27, 67271), (29, 67295),

Gene: Serenity_64 Start: 39562, Stop: 39410, Start Num: 10
Candidate Starts for Serenity_64:
(1, 39784), (Start: 10 @39562 has 2 MA's), (22, 39481), (25, 39469), (27, 39457), (29, 39433),

Gene: Swirley_62 Start: 40071, Stop: 39919, Start Num: 8
Candidate Starts for Swirley_62:
(Start: 8 @40071 has 18 MA's), (11, 40065), (13, 40053), (26, 39963), (29, 39930),

Gene: Tarynearal_59 Start: 39666, Stop: 39514, Start Num: 8
Candidate Starts for Tarynearal_59:
(Start: 8 @39666 has 18 MA's), (11, 39660), (13, 39648), (26, 39558), (29, 39525),

Gene: Theia_59 Start: 40266, Stop: 40114, Start Num: 8
Candidate Starts for Theia_59:
(Start: 8 @40266 has 18 MA's), (11, 40260), (13, 40248), (26, 40158), (29, 40125),

Gene: Tiger_62 Start: 39947, Stop: 39795, Start Num: 8
Candidate Starts for Tiger_62:
(Start: 8 @39947 has 18 MA's), (11, 39941), (13, 39929), (26, 39839), (29, 39806),

Gene: Twigg_58 Start: 39719, Stop: 39567, Start Num: 8
Candidate Starts for Twigg_58:
(Start: 8 @39719 has 18 MA's), (11, 39713), (13, 39701), (26, 39611), (29, 39578),