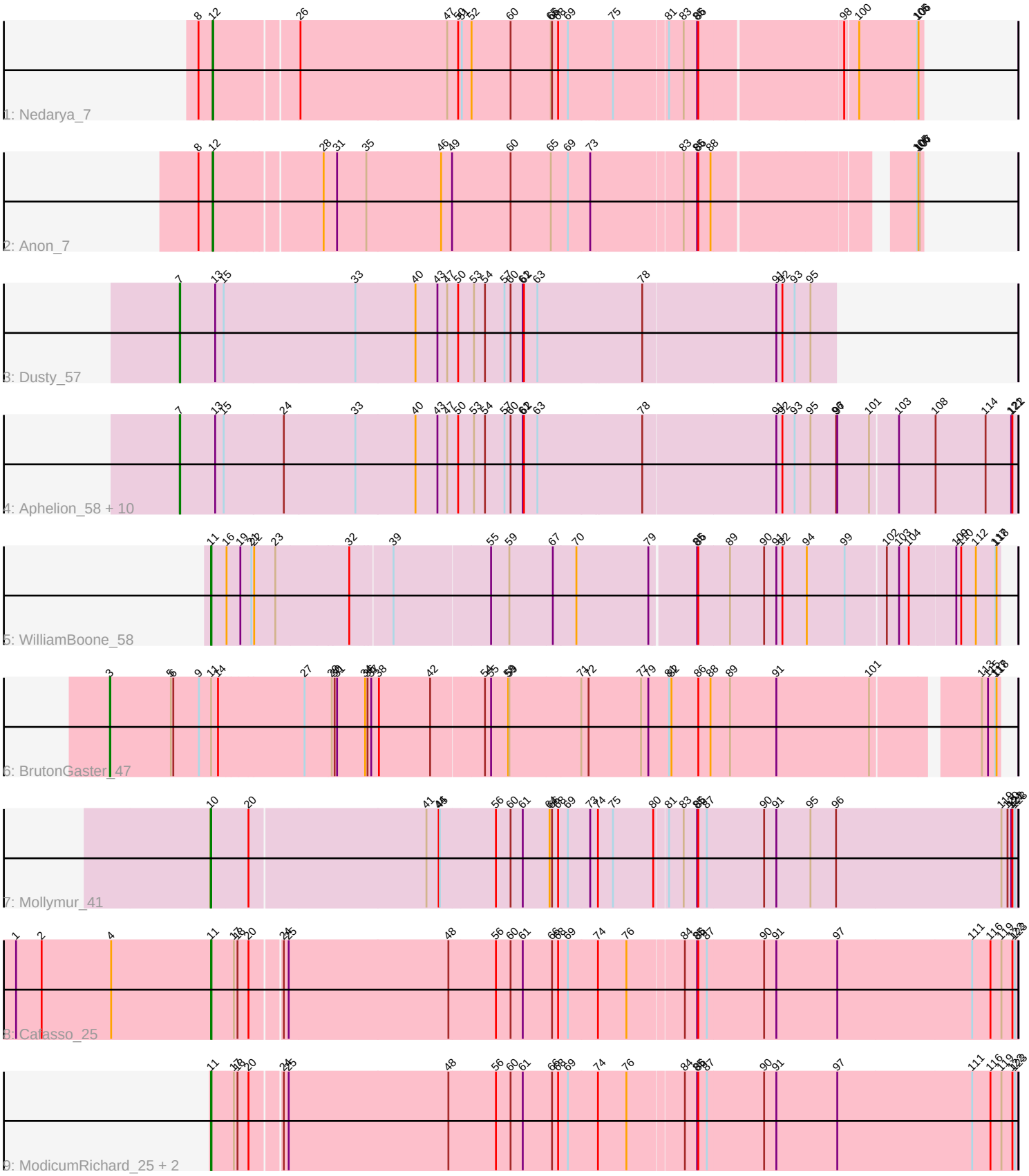
Pham 346163


1: Nedarya_7
2: Anon_7
3: Dusty_57
4: Aphelion_58 + 10
5: WilliamBoone_58
6: BrutonGaster_47
7: Mollymur_41
8: Cafasso_25
9: ModicumRichard_25 + 2

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 346163 Report

This analysis was run 11/14/26 on database version 672.

Pham number 346163 has 21 members, 1 are drafts.

Phages represented in each track:
• Track 1 : Nedarya_7
• Track 2 : Anon_7
• Track 3 : Dusty_57
• Track 4 : Aphelion_58, Toniann_59, Geeche_57, Norvs_59, Engineer_60, Lozinak_59, Bachita_60, Miskis_56, Smoothie_60, Cucurbita_60, PhinkBoden_58
• Track 5 : WilliamBoone_58
• Track 6 : BrutonGaster_47
• Track 7 : Mollymur_41
• Track 8 : Cafasso_25
• Track 9 : ModicumRichard_25, ObLaDi_25, Aleemily_24

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

The start number called the most often in the published annotations is 7, it was called in 11 of the 20 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aphelion_58, Bachita_60, Cucurbita_60, Dusty_57, Engineer_60, Geeche_57, Lozinak_59, Miskis_56, Norvs_59, PhinkBoden_58, Smoothie_60, Toniann_59,

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

Genes that do not have the "Most Annotated" start:
• Aleemily_24, Anon_7, BrutonGaster_47, Cafasso_25, ModicumRichard_25, Mollymur_41, Nedarya_7, ObLaDi_25, WilliamBoone_58,

Summary by start number:

Start 3:
• Found in 1 of 21 (4.8%) of genes in pham
• Manual Annotations of this start: 1 of 20
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BrutonGaster_47 (CQ2),

Start 7:
• Found in 12 of 21 (57.1%) of genes in pham
• Manual Annotations of this start: 11 of 20
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aphelion_58 (CQ1), Bachita_60 (CQ1), Cucurbita_60 (CQ1), Dusty_57 (CQ1), Engineer_60 (CQ1), Geeche_57 (CQ1), Lozinak_59 (CQ1), Miskis_56 (CQ1), Norvs_59 (CQ1), PhinkBoden_58 (CQ1), Smoothie_60 (CQ1), Toniann_59 (CQ1),

Start 10:
• Found in 1 of 21 (4.8%) of genes in pham
• Manual Annotations of this start: 1 of 20
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Mollymur_41 (DL),

Start 11:
• Found in 6 of 21 (28.6%) of genes in pham
• Manual Annotations of this start: 5 of 20
• Called 83.3% of time when present
• Phage (with cluster) where this start called: Aleemily_24 (DZ), Cafasso_25 (DZ), ModicumRichard_25 (DZ), ObLaDi_25 (DZ), WilliamBoone_58 (CQ1),

Start 12:
• Found in 2 of 21 (9.5%) of genes in pham
• Manual Annotations of this start: 2 of 20
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Anon_7 (A15), Nedarya_7 (A15),

Summary by clusters:

There are 5 clusters represented in this pham: A15, CQ2, CQ1, DZ, DL,

Info for manual annotations of cluster A15:
•Start number 12 was manually annotated 2 times for cluster A15.

Info for manual annotations of cluster CQ1:
•Start number 7 was manually annotated 11 times for cluster CQ1.
•Start number 11 was manually annotated 1 time for cluster CQ1.

Info for manual annotations of cluster CQ2:
•Start number 3 was manually annotated 1 time for cluster CQ2.

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

Info for manual annotations of cluster DZ:
•Start number 11 was manually annotated 4 times for cluster DZ.

Gene Information:

Gene: Aleemily_24 Start: 21422, Stop: 23347, Start Num: 11
Candidate Starts for Aleemily_24:
(Start: 11 @21422 has 5 MA's), (17, 21473), (18, 21482), (20, 21509), (24, 21575), (25, 21587), (48, 21977), (56, 22088), (60, 22124), (61, 22154), (66, 22226), (68, 22241), (69, 22265), (74, 22337), (76, 22406), (84, 22538), (85, 22568), (86, 22571), (87, 22592), (90, 22730), (91, 22760), (97, 22910), (111, 23237), (116, 23282), (119, 23306), (122, 23333), (123, 23339),

Gene: Anon_7 Start: 3320, Stop: 4939, Start Num: 12
Candidate Starts for Anon_7:
(8, 3287), (Start: 12 @3320 has 2 MA's), (28, 3563), (31, 3596), (35, 3668), (46, 3851), (49, 3878), (60, 4022), (65, 4121), (69, 4163), (73, 4217), (83, 4433), (85, 4466), (86, 4469), (88, 4499), (105, 4925), (106, 4928), (107, 4931),

Gene: Aphelion_58 Start: 37957, Stop: 39987, Start Num: 7
Candidate Starts for Aphelion_58:
(Start: 7 @37957 has 11 MA's), (13, 38044), (15, 38065), (24, 38212), (33, 38386), (40, 38533), (43, 38587), (47, 38611), (50, 38638), (53, 38677), (54, 38704), (57, 38752), (60, 38767), (61, 38797), (62, 38800), (63, 38833), (78, 39088), (91, 39409), (92, 39424), (93, 39454), (95, 39493), (96, 39556), (97, 39559), (101, 39637), (103, 39703), (108, 39790), (114, 39913), (121, 39976), (122, 39979),

Gene: Bachita_60 Start: 38390, Stop: 40420, Start Num: 7
Candidate Starts for Bachita_60:
(Start: 7 @38390 has 11 MA's), (13, 38477), (15, 38498), (24, 38645), (33, 38819), (40, 38966), (43, 39020), (47, 39044), (50, 39071), (53, 39110), (54, 39137), (57, 39185), (60, 39200), (61, 39230), (62, 39233), (63, 39266), (78, 39521), (91, 39842), (92, 39857), (93, 39887), (95, 39926), (96, 39989), (97, 39992), (101, 40070), (103, 40136), (108, 40223), (114, 40346), (121, 40409), (122, 40412),

Gene: BrutonGaster_47 Start: 34997, Stop: 37117, Start Num: 3
Candidate Starts for BrutonGaster_47:
(Start: 3 @34997 has 1 MA's), (5, 35147), (6, 35153), (9, 35216), (Start: 11 @35246 has 5 MA's), (14, 35261), (27, 35468), (29, 35534), (30, 35540), (31, 35546), (34, 35615), (36, 35621), (37, 35630), (38, 35648), (42, 35774), (54, 35900), (55, 35915), (58, 35957), (59, 35960), (71, 36134), (72, 36152), (77, 36281), (79, 36299), (81, 36350), (82, 36356), (86, 36422), (88, 36452), (89, 36500), (91, 36614), (101, 36839), (113, 37073), (115, 37088), (117, 37106), (118, 37109),

Gene: Cafasso_25 Start: 21996, Stop: 23921, Start Num: 11
Candidate Starts for Cafasso_25:
(1, 21516), (2, 21579), (4, 21750), (Start: 11 @21996 has 5 MA's), (17, 22047), (18, 22056), (20, 22083), (24, 22149), (25, 22161), (48, 22551), (56, 22662), (60, 22698), (61, 22728), (66, 22800), (68, 22815), (69, 22839), (74, 22911), (76, 22980), (84, 23112), (85, 23142), (86, 23145), (87, 23166), (90, 23304), (91, 23334), (97, 23484), (111, 23811), (116, 23856), (119, 23880), (122, 23907), (123, 23913),

Gene: Cucurbita_60 Start: 39249, Stop: 41279, Start Num: 7
Candidate Starts for Cucurbita_60:
(Start: 7 @39249 has 11 MA's), (13, 39336), (15, 39357), (24, 39504), (33, 39678), (40, 39825), (43, 39879), (47, 39903), (50, 39930), (53, 39969), (54, 39996), (57, 40044), (60, 40059), (61, 40089), (62, 40092), (63, 40125), (78, 40380), (91, 40701), (92, 40716), (93, 40746), (95, 40785), (96, 40848), (97, 40851), (101, 40929), (103, 40995), (108, 41082), (114, 41205), (121, 41268), (122, 41271),

Gene: Dusty_57 Start: 37688, Stop: 39286, Start Num: 7
Candidate Starts for Dusty_57:

(Start: 7 @37688 has 11 MA's), (13, 37775), (15, 37796), (33, 38117), (40, 38264), (43, 38318), (47, 38342), (50, 38369), (53, 38408), (54, 38435), (57, 38483), (60, 38498), (61, 38528), (62, 38531), (63, 38564), (78, 38819), (91, 39140), (92, 39155), (93, 39185), (95, 39224),

Gene: Engineer_60 Start: 38363, Stop: 40393, Start Num: 7
Candidate Starts for Engineer_60:
(Start: 7 @38363 has 11 MA's), (13, 38450), (15, 38471), (24, 38618), (33, 38792), (40, 38939), (43, 38993), (47, 39017), (50, 39044), (53, 39083), (54, 39110), (57, 39158), (60, 39173), (61, 39203), (62, 39206), (63, 39239), (78, 39494), (91, 39815), (92, 39830), (93, 39860), (95, 39899), (96, 39962), (97, 39965), (101, 40043), (103, 40109), (108, 40196), (114, 40319), (121, 40382), (122, 40385),

Gene: Geeche_57 Start: 37779, Stop: 39809, Start Num: 7
Candidate Starts for Geeche_57:
(Start: 7 @37779 has 11 MA's), (13, 37866), (15, 37887), (24, 38034), (33, 38208), (40, 38355), (43, 38409), (47, 38433), (50, 38460), (53, 38499), (54, 38526), (57, 38574), (60, 38589), (61, 38619), (62, 38622), (63, 38655), (78, 38910), (91, 39231), (92, 39246), (93, 39276), (95, 39315), (96, 39378), (97, 39381), (101, 39459), (103, 39525), (108, 39612), (114, 39735), (121, 39798), (122, 39801),

Gene: Lozinak_59 Start: 38418, Stop: 40445, Start Num: 7
Candidate Starts for Lozinak_59:
(Start: 7 @38418 has 11 MA's), (13, 38505), (15, 38526), (24, 38673), (33, 38847), (40, 38994), (43, 39048), (47, 39072), (50, 39099), (53, 39138), (54, 39165), (57, 39213), (60, 39228), (61, 39258), (62, 39261), (63, 39294), (78, 39549), (91, 39870), (92, 39885), (93, 39915), (95, 39954), (96, 40017), (97, 40020), (101, 40098), (103, 40164), (108, 40251), (114, 40374), (121, 40434), (122, 40437),

Gene: Miskis_56 Start: 37723, Stop: 39753, Start Num: 7
Candidate Starts for Miskis_56:
(Start: 7 @37723 has 11 MA's), (13, 37810), (15, 37831), (24, 37978), (33, 38152), (40, 38299), (43, 38353), (47, 38377), (50, 38404), (53, 38443), (54, 38470), (57, 38518), (60, 38533), (61, 38563), (62, 38566), (63, 38599), (78, 38854), (91, 39175), (92, 39190), (93, 39220), (95, 39259), (96, 39322), (97, 39325), (101, 39403), (103, 39469), (108, 39556), (114, 39679), (121, 39742), (122, 39745),

Gene: ModicumRichard_25 Start: 21995, Stop: 23920, Start Num: 11
Candidate Starts for ModicumRichard_25:
(Start: 11 @21995 has 5 MA's), (17, 22046), (18, 22055), (20, 22082), (24, 22148), (25, 22160), (48, 22550), (56, 22661), (60, 22697), (61, 22727), (66, 22799), (68, 22814), (69, 22838), (74, 22910), (76, 22979), (84, 23111), (85, 23141), (86, 23144), (87, 23165), (90, 23303), (91, 23333), (97, 23483), (111, 23810), (116, 23855), (119, 23879), (122, 23906), (123, 23912),

Gene: Mollymur_41 Start: 36754, Stop: 38694, Start Num: 10
Candidate Starts for Mollymur_41:
(Start: 10 @36754 has 1 MA's), (20, 36841), (41, 37267), (44, 37297), (45, 37300), (56, 37432), (60, 37468), (61, 37498), (64, 37564), (66, 37570), (68, 37585), (69, 37609), (73, 37663), (74, 37681), (75, 37717), (80, 37816), (81, 37843), (83, 37879), (85, 37912), (86, 37915), (87, 37936), (90, 38074), (91, 38104), (95, 38188), (96, 38251), (119, 38653), (120, 38668), (121, 38677), (122, 38680), (123, 38686),

Gene: Nedarya_7 Start: 3383, Stop: 5050, Start Num: 12
Candidate Starts for Nedarya_7:
(8, 3350), (Start: 12 @3383 has 2 MA's), (26, 3569), (47, 3929), (50, 3956), (51, 3965), (52, 3989), (60, 4085), (65, 4184), (66, 4187), (68, 4202), (69, 4226), (75, 4334), (81, 4460), (83, 4496), (85, 4529), (86, 4532), (98, 4865), (100, 4895), (105, 5036), (106, 5039),

Gene: Norvs_59 Start: 37962, Stop: 39992, Start Num: 7
Candidate Starts for Norvs_59:
(Start: 7 @37962 has 11 MA's), (13, 38049), (15, 38070), (24, 38217), (33, 38391), (40, 38538), (43, 38592), (47, 38616), (50, 38643), (53, 38682), (54, 38709), (57, 38757), (60, 38772), (61, 38802), (62, 38805), (63, 38838), (78, 39093), (91, 39414), (92, 39429), (93, 39459), (95, 39498), (96, 39561), (97, 39564), (101, 39642), (103, 39708), (108, 39795), (114, 39918), (121, 39981), (122, 39984),

Gene: ObLaDi_25 Start: 21974, Stop: 23899, Start Num: 11
Candidate Starts for ObLaDi_25:
(Start: 11 @21974 has 5 MA's), (17, 22025), (18, 22034), (20, 22061), (24, 22127), (25, 22139), (48, 22529), (56, 22640), (60, 22676), (61, 22706), (66, 22778), (68, 22793), (69, 22817), (74, 22889), (76, 22958), (84, 23090), (85, 23120), (86, 23123), (87, 23144), (90, 23282), (91, 23312), (97, 23462), (111, 23789), (116, 23834), (119, 23858), (122, 23885), (123, 23891),

Gene: PhinkBoden_58 Start: 38343, Stop: 40373, Start Num: 7
Candidate Starts for PhinkBoden_58:
(Start: 7 @38343 has 11 MA's), (13, 38430), (15, 38451), (24, 38598), (33, 38772), (40, 38919), (43, 38973), (47, 38997), (50, 39024), (53, 39063), (54, 39090), (57, 39138), (60, 39153), (61, 39183), (62, 39186), (63, 39219), (78, 39474), (91, 39795), (92, 39810), (93, 39840), (95, 39879), (96, 39942), (97, 39945), (101, 40023), (103, 40089), (108, 40176), (114, 40299), (121, 40362), (122, 40365),

Gene: Smoothie_60 Start: 38418, Stop: 40445, Start Num: 7
Candidate Starts for Smoothie_60:
(Start: 7 @38418 has 11 MA's), (13, 38505), (15, 38526), (24, 38673), (33, 38847), (40, 38994), (43, 39048), (47, 39072), (50, 39099), (53, 39138), (54, 39165), (57, 39213), (60, 39228), (61, 39258), (62, 39261), (63, 39294), (78, 39549), (91, 39870), (92, 39885), (93, 39915), (95, 39954), (96, 40017), (97, 40020), (101, 40098), (103, 40164), (108, 40251), (114, 40374), (121, 40434), (122, 40437),

Gene: Toniann_59 Start: 37905, Stop: 39935, Start Num: 7
Candidate Starts for Toniann_59:
(Start: 7 @37905 has 11 MA's), (13, 37992), (15, 38013), (24, 38160), (33, 38334), (40, 38481), (43, 38535), (47, 38559), (50, 38586), (53, 38625), (54, 38652), (57, 38700), (60, 38715), (61, 38745), (62, 38748), (63, 38781), (78, 39036), (91, 39357), (92, 39372), (93, 39402), (95, 39441), (96, 39504), (97, 39507), (101, 39585), (103, 39651), (108, 39738), (114, 39861), (121, 39924), (122, 39927),

Gene: WilliamBoone_58 Start: 37251, Stop: 39119, Start Num: 11
Candidate Starts for WilliamBoone_58:
(Start: 11 @37251 has 5 MA's), (16, 37281), (19, 37311), (21, 37338), (22, 37344), (23, 37395), (32, 37572), (39, 37668), (55, 37899), (59, 37944), (67, 38049), (70, 38106), (79, 38283), (85, 38391), (86, 38394), (89, 38469), (90, 38553), (91, 38583), (92, 38598), (94, 38658), (99, 38751), (102, 38847), (103, 38877), (104, 38901), (109, 39012), (110, 39024), (112, 39060), (117, 39108), (118, 39111),