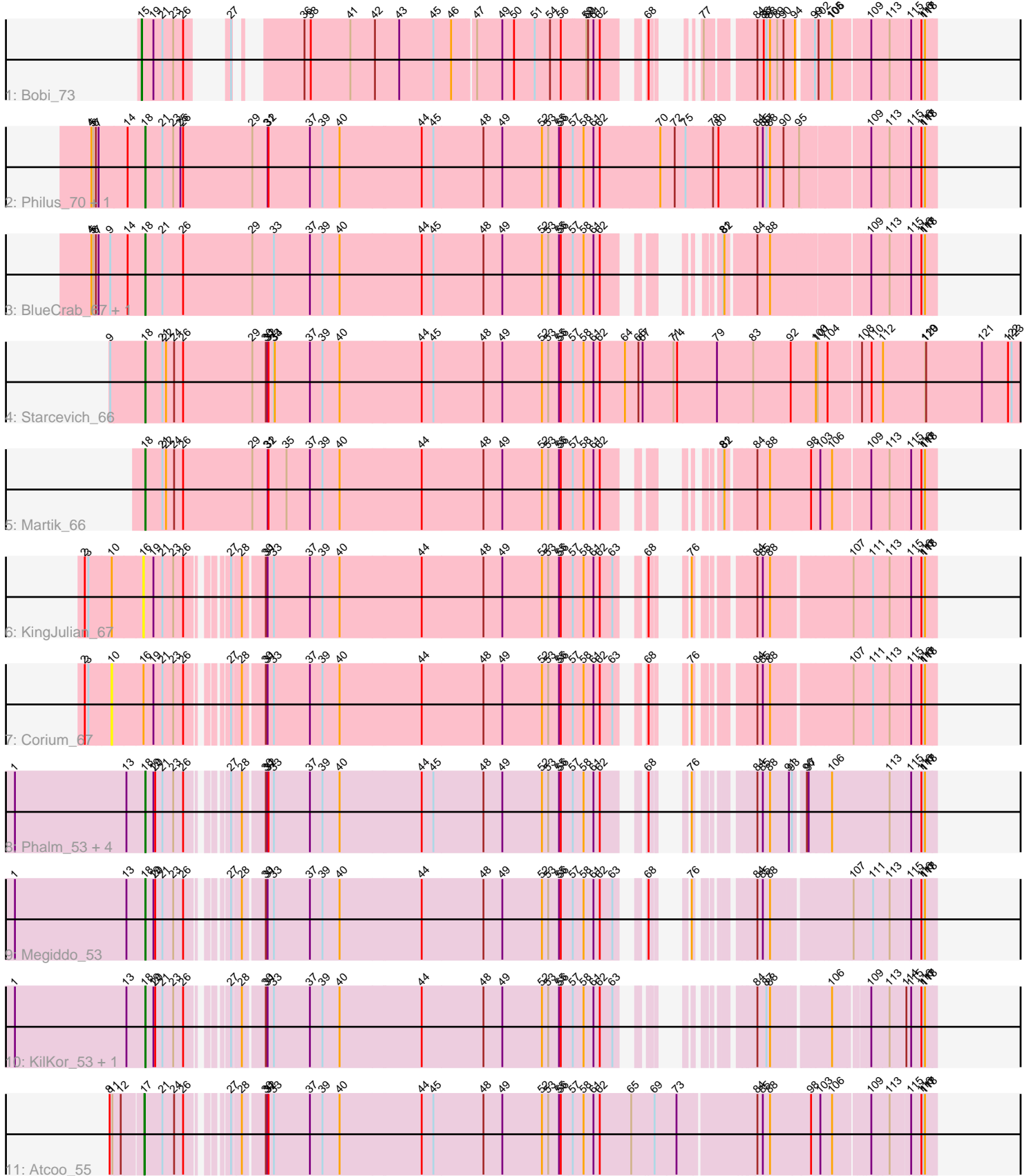


Pham 224938



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 224938 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224938 has 18 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Bobi_73
- Track 2 : Philus_70, DRBy19_70
- Track 3 : BlueCrab_67, FreddyB_67
- Track 4 : Starcevich_66
- Track 5 : Martik_66
- Track 6 : KingJulian_67
- Track 7 : Corium_67
- Track 8 : Phalm_53, CactusJack_53, StressBall_53, Gavriela_53, Glaske_53
- Track 9 : Megiddo_53
- Track 10 : KilKor_53, Willsammy_52
- Track 11 : Atcoo_55

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

The start number called the most often in the published annotations is 18, it was called in 14 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BlueCrab_67, CactusJack_53, DRBy19_70, FreddyB_67, Gavriela_53, Glaske_53, KilKor_53, Martik_66, Megiddo_53, Phalm_53, Philus_70, Starcevich_66, StressBall_53, Willsammy_52,

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

-

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

- Atcoo_55, Bobi_73, Corium_67, KingJulian_67,

Summary by start number:

Start 10:

- Found in 2 of 18 (11.1%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present

- Phage (with cluster) where this start called: Corium_67 (F1),

Start 15:

- Found in 1 of 18 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bobi_73 (F1),

Start 16:

- Found in 2 of 18 (11.1%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: KingJulian_67 (F1),

Start 17:

- Found in 1 of 18 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Atcoo_55 (P1),

Start 18:

- Found in 14 of 18 (77.8%) of genes in pham
- Manual Annotations of this start: 14 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BlueCrab_67 (F1), CactusJack_53 (P1), DRBy19_70 (F1), FreddyB_67 (F1), Gavriela_53 (P1), Glaske_53 (P1), KilKor_53 (P1), Martik_66 (F1), Megiddo_53 (P1), Phalm_53 (P1), Philus_70 (F1), Starcevich_66 (F1), StressBall_53 (P1), Willsammy_52 (P1),

Summary by clusters:

There are 2 clusters represented in this pham: F1, P1,

Info for manual annotations of cluster F1:

- Start number 15 was manually annotated 1 time for cluster F1.
- Start number 18 was manually annotated 6 times for cluster F1.

Info for manual annotations of cluster P1:

- Start number 17 was manually annotated 1 time for cluster P1.
- Start number 18 was manually annotated 8 times for cluster P1.

Gene Information:

Gene: Atcoo_55 Start: 37344, Stop: 39803, Start Num: 17

Candidate Starts for Atcoo_55:

(8, 37242), (11, 37251), (12, 37278), (Start: 17 @37344 has 1 MA's), (21, 37404), (24, 37443), (26, 37473), (27, 37563), (28, 37590), (30, 37653), (31, 37659), (32, 37662), (33, 37680), (37, 37800), (39, 37842), (40, 37899), (44, 38169), (45, 38208), (48, 38373), (49, 38436), (52, 38568), (53, 38589), (55, 38625), (56, 38631), (57, 38670), (58, 38706), (61, 38739), (62, 38760), (65, 38865), (69, 38940), (73, 39012), (84, 39258), (85, 39276), (88, 39300), (98, 39435), (103, 39465), (106, 39501), (109, 39603), (113, 39660), (115, 39720), (116, 39753), (117, 39762), (118, 39765),

Gene: BlueCrab_67 Start: 43881, Stop: 46157, Start Num: 18

Candidate Starts for BlueCrab_67:

(4, 43704), (5, 43710), (6, 43719), (7, 43728), (9, 43767), (14, 43824), (Start: 18 @43881 has 14 MA's), (21, 43938), (26, 44007), (29, 44238), (33, 44310), (37, 44430), (39, 44472), (40, 44529), (44, 44799), (45, 44838), (48, 45003), (49, 45066), (52, 45198), (53, 45219), (55, 45255), (56, 45261), (57, 45300), (58, 45336), (61, 45369), (62, 45390), (81, 45555), (82, 45558), (84, 45642), (88, 45684), (109, 45957), (113, 46014), (115, 46074), (116, 46107), (117, 46116), (118, 46119),

Gene: Bobi_73 Start: 44682, Stop: 46739, Start Num: 15

Candidate Starts for Bobi_73:

(Start: 15 @44682 has 1 MA's), (19, 44721), (21, 44751), (23, 44787), (26, 44820), (27, 44865), (36, 45009), (38, 45030), (41, 45162), (42, 45243), (43, 45324), (45, 45438), (46, 45495), (47, 45567), (49, 45651), (50, 45690), (51, 45759), (54, 45810), (56, 45843), (59, 45924), (60, 45930), (61, 45948), (62, 45969), (68, 46053), (77, 46095), (84, 46218), (86, 46239), (87, 46248), (88, 46260), (89, 46284), (90, 46305), (94, 46338), (99, 46383), (102, 46395), (105, 46434), (106, 46437), (109, 46539), (113, 46596), (115, 46656), (116, 46689), (117, 46698), (118, 46701),

Gene: CactusJack_53 Start: 36390, Stop: 38582, Start Num: 18

Candidate Starts for CactusJack_53:

(1, 35955), (13, 36327), (Start: 18 @36390 has 14 MA's), (19, 36417), (20, 36423), (21, 36447), (23, 36483), (26, 36516), (27, 36606), (28, 36633), (30, 36696), (31, 36702), (32, 36705), (33, 36723), (37, 36843), (39, 36885), (40, 36942), (44, 37212), (45, 37251), (48, 37416), (49, 37479), (52, 37611), (53, 37632), (55, 37668), (56, 37674), (57, 37713), (58, 37749), (61, 37782), (62, 37803), (68, 37887), (76, 37923), (84, 38046), (85, 38064), (88, 38088), (91, 38145), (93, 38151), (96, 38181), (97, 38187), (106, 38253), (113, 38439), (115, 38499), (116, 38532), (117, 38541), (118, 38544),

Gene: Corium_67 Start: 44493, Stop: 46790, Start Num: 10

Candidate Starts for Corium_67:

(2, 44409), (3, 44421), (10, 44493), (16, 44592), (19, 44622), (21, 44652), (23, 44688), (26, 44721), (27, 44811), (28, 44838), (30, 44901), (31, 44907), (33, 44928), (37, 45048), (39, 45090), (40, 45147), (44, 45417), (48, 45621), (49, 45684), (52, 45816), (53, 45837), (55, 45873), (56, 45879), (57, 45918), (58, 45954), (61, 45987), (62, 46008), (63, 46050), (68, 46092), (76, 46128), (84, 46251), (85, 46269), (88, 46293), (107, 46530), (111, 46593), (113, 46647), (115, 46707), (116, 46740), (117, 46749), (118, 46752),

Gene: DRBy19_70 Start: 44260, Stop: 46806, Start Num: 18

Candidate Starts for DRBy19_70:

(4, 44083), (5, 44089), (6, 44098), (7, 44107), (14, 44203), (Start: 18 @44260 has 14 MA's), (21, 44317), (23, 44353), (25, 44377), (26, 44386), (29, 44617), (31, 44668), (32, 44671), (37, 44809), (39, 44851), (40, 44908), (44, 45178), (45, 45217), (48, 45382), (49, 45445), (52, 45577), (53, 45598), (55, 45634), (56, 45640), (57, 45679), (58, 45715), (61, 45748), (62, 45769), (70, 45961), (72, 46009), (75, 46045), (78, 46135), (80, 46153), (84, 46276), (85, 46294), (87, 46306), (88, 46318), (90, 46363), (95, 46411), (109, 46606), (113, 46663), (115, 46723), (116, 46756), (117, 46765), (118, 46768),

Gene: FreddyB_67 Start: 41676, Stop: 43952, Start Num: 18

Candidate Starts for FreddyB_67:

(4, 41499), (5, 41505), (6, 41514), (7, 41523), (9, 41562), (14, 41619), (Start: 18 @41676 has 14 MA's), (21, 41733), (26, 41802), (29, 42033), (33, 42105), (37, 42225), (39, 42267), (40, 42324), (44, 42594), (45, 42633), (48, 42798), (49, 42861), (52, 42993), (53, 43014), (55, 43050), (56, 43056), (57, 43095), (58, 43131), (61, 43164), (62, 43185), (81, 43350), (82, 43353), (84, 43437), (88, 43479), (109, 43752), (113, 43809), (115, 43869), (116, 43902), (117, 43911), (118, 43914),

Gene: Gavriela_53 Start: 36390, Stop: 38582, Start Num: 18

Candidate Starts for Gavriela_53:

(1, 35955), (13, 36327), (Start: 18 @36390 has 14 MA's), (19, 36417), (20, 36423), (21, 36447), (23, 36483), (26, 36516), (27, 36606), (28, 36633), (30, 36696), (31, 36702), (32, 36705), (33, 36723), (37, 36843), (39, 36885), (40, 36942), (44, 37212), (45, 37251), (48, 37416), (49, 37479), (52, 37611), (53, 37632), (55, 37668), (56, 37674), (57, 37713), (58, 37749), (61, 37782), (62, 37803), (68, 37887), (76, 37923), (84, 38046), (85, 38064), (88, 38088), (91, 38145), (93, 38151), (96, 38181), (97, 38187), (106, 38253), (113, 38439), (115, 38499), (116, 38532), (117, 38541), (118, 38544),

Gene: Glaske_53 Start: 36390, Stop: 38582, Start Num: 18

Candidate Starts for Glaske_53:

(1, 35955), (13, 36327), (Start: 18 @36390 has 14 MA's), (19, 36417), (20, 36423), (21, 36447), (23, 36483), (26, 36516), (27, 36606), (28, 36633), (30, 36696), (31, 36702), (32, 36705), (33, 36723), (37, 36843), (39, 36885), (40, 36942), (44, 37212), (45, 37251), (48, 37416), (49, 37479), (52, 37611), (53, 37632), (55, 37668), (56, 37674), (57, 37713), (58, 37749), (61, 37782), (62, 37803), (68, 37887), (76, 37923), (84, 38046), (85, 38064), (88, 38088), (91, 38145), (93, 38151), (96, 38181), (97, 38187), (106, 38253), (113, 38439), (115, 38499), (116, 38532), (117, 38541), (118, 38544),

Gene: KilKor_53 Start: 36390, Stop: 38570, Start Num: 18

Candidate Starts for KilKor_53:

(1, 35955), (13, 36327), (Start: 18 @36390 has 14 MA's), (19, 36417), (20, 36423), (21, 36447), (23, 36483), (26, 36516), (27, 36606), (28, 36633), (30, 36696), (31, 36702), (33, 36723), (37, 36843), (39, 36885), (40, 36942), (44, 37212), (48, 37416), (49, 37479), (52, 37611), (53, 37632), (55, 37668), (56, 37674), (57, 37713), (58, 37749), (61, 37782), (62, 37803), (63, 37845), (84, 38052), (87, 38082), (88, 38094), (106, 38268), (109, 38370), (113, 38427), (114, 38472), (115, 38487), (116, 38520), (117, 38529), (118, 38532),

Gene: KingJulian_67 Start: 44592, Stop: 46790, Start Num: 16

Candidate Starts for KingJulian_67:

(2, 44409), (3, 44421), (10, 44493), (16, 44592), (19, 44622), (21, 44652), (23, 44688), (26, 44721), (27, 44811), (28, 44838), (30, 44901), (31, 44907), (33, 44928), (37, 45048), (39, 45090), (40, 45147), (44, 45417), (48, 45621), (49, 45684), (52, 45816), (53, 45837), (55, 45873), (56, 45879), (57, 45918), (58, 45954), (61, 45987), (62, 46008), (63, 46050), (68, 46092), (76, 46128), (84, 46251), (85, 46269), (88, 46293), (107, 46530), (111, 46593), (113, 46647), (115, 46707), (116, 46740), (117, 46749), (118, 46752),

Gene: Martik_66 Start: 42749, Stop: 45055, Start Num: 18

Candidate Starts for Martik_66:

(Start: 18 @42749 has 14 MA's), (21, 42806), (22, 42818), (24, 42845), (26, 42875), (29, 43106), (31, 43157), (32, 43160), (35, 43220), (37, 43298), (39, 43340), (40, 43397), (44, 43667), (48, 43871), (49, 43934), (52, 44066), (53, 44087), (55, 44123), (56, 44129), (57, 44168), (58, 44204), (61, 44237), (62, 44258), (81, 44423), (82, 44426), (84, 44510), (88, 44552), (98, 44687), (103, 44717), (106, 44753), (109, 44855), (113, 44912), (115, 44972), (116, 45005), (117, 45014), (118, 45017),

Gene: Megiddo_53 Start: 36390, Stop: 38585, Start Num: 18

Candidate Starts for Megiddo_53:

(1, 35955), (13, 36327), (Start: 18 @36390 has 14 MA's), (19, 36417), (20, 36423), (21, 36447), (23, 36483), (26, 36516), (27, 36606), (28, 36633), (30, 36696), (31, 36702), (33, 36723), (37, 36843), (39, 36885), (40, 36942), (44, 37212), (48, 37416), (49, 37479), (52, 37611), (53, 37632), (55, 37668), (56, 37674), (57, 37713), (58, 37749), (61, 37782), (62, 37803), (63, 37845), (68, 37887), (76, 37923), (84, 38046), (85, 38064), (88, 38088), (107, 38325), (111, 38388), (113, 38442), (115, 38502), (116, 38535), (117, 38544), (118, 38547),

Gene: Phalm_53 Start: 36390, Stop: 38582, Start Num: 18

Candidate Starts for Phalm_53:

(1, 35955), (13, 36327), (Start: 18 @36390 has 14 MA's), (19, 36417), (20, 36423), (21, 36447), (23, 36483), (26, 36516), (27, 36606), (28, 36633), (30, 36696), (31, 36702), (32, 36705), (33, 36723), (37, 36843), (39, 36885), (40, 36942), (44, 37212), (45, 37251), (48, 37416), (49, 37479), (52, 37611), (53, 37632), (55, 37668), (56, 37674), (57, 37713), (58, 37749), (61, 37782), (62, 37803), (68, 37887), (76, 37923), (84, 38046), (85, 38064), (88, 38088), (91, 38145), (93, 38151), (96, 38181), (97, 38187), (106, 38253), (113, 38439), (115, 38499), (116, 38532), (117, 38541), (118, 38544),

Gene: Philus_70 Start: 44236, Stop: 46782, Start Num: 18

Candidate Starts for Philus_70:

(4, 44059), (5, 44065), (6, 44074), (7, 44083), (14, 44179), (Start: 18 @44236 has 14 MA's), (21, 44293), (23, 44329), (25, 44353), (26, 44362), (29, 44593), (31, 44644), (32, 44647), (37, 44785), (39, 44827), (40, 44884), (44, 45154), (45, 45193), (48, 45358), (49, 45421), (52, 45553), (53, 45574), (55, 45610), (56, 45616), (57, 45655), (58, 45691), (61, 45724), (62, 45745), (70, 45937), (72, 45985), (75, 46021), (78, 46111), (80, 46129), (84, 46252), (85, 46270), (87, 46282), (88, 46294), (90, 46339), (95, 46387), (109, 46582), (113, 46639), (115, 46699), (116, 46732), (117, 46741), (118, 46744),

Gene: Starcevich_66 Start: 42297, Stop: 45341, Start Num: 18

Candidate Starts for Starcevich_66:

(9, 42183), (Start: 18 @42297 has 14 MA's), (21, 42354), (22, 42366), (24, 42393), (26, 42423), (29, 42654), (30, 42699), (31, 42705), (32, 42708), (33, 42726), (34, 42729), (37, 42846), (39, 42888), (40, 42945), (44, 43215), (45, 43254), (48, 43419), (49, 43482), (52, 43614), (53, 43635), (55, 43671), (56, 43677), (57, 43716), (58, 43752), (61, 43785), (62, 43806), (64, 43890), (66, 43935), (67, 43947), (71, 44049), (74, 44061), (79, 44193), (83, 44313), (92, 44436), (100, 44517), (101, 44523), (104, 44556), (108, 44655), (110, 44685), (112, 44721), (119, 44862), (120, 44865), (121, 45051), (122, 45138), (123, 45150),

Gene: StressBall_53 Start: 36390, Stop: 38582, Start Num: 18

Candidate Starts for StressBall_53:

(1, 35955), (13, 36327), (Start: 18 @36390 has 14 MA's), (19, 36417), (20, 36423), (21, 36447), (23, 36483), (26, 36516), (27, 36606), (28, 36633), (30, 36696), (31, 36702), (32, 36705), (33, 36723), (37, 36843), (39, 36885), (40, 36942), (44, 37212), (45, 37251), (48, 37416), (49, 37479), (52, 37611), (53, 37632), (55, 37668), (56, 37674), (57, 37713), (58, 37749), (61, 37782), (62, 37803), (68, 37887), (76, 37923), (84, 38046), (85, 38064), (88, 38088), (91, 38145), (93, 38151), (96, 38181), (97, 38187), (106, 38253), (113, 38439), (115, 38499), (116, 38532), (117, 38541), (118, 38544),

Gene: Willsammy_52 Start: 35873, Stop: 38053, Start Num: 18

Candidate Starts for Willsammy_52:

(1, 35438), (13, 35810), (Start: 18 @35873 has 14 MA's), (19, 35900), (20, 35906), (21, 35930), (23, 35966), (26, 35999), (27, 36089), (28, 36116), (30, 36179), (31, 36185), (33, 36206), (37, 36326), (39, 36368), (40, 36425), (44, 36695), (48, 36899), (49, 36962), (52, 37094), (53, 37115), (55, 37151), (56, 37157), (57, 37196), (58, 37232), (61, 37265), (62, 37286), (63, 37328), (84, 37535), (87, 37565), (88, 37577), (106, 37751), (109, 37853), (113, 37910), (114, 37955), (115, 37970), (116, 38003), (117, 38012), (118, 38015),