Nucleotide sequence of the human β -actin promoter 5' flanking region

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The 14T β 17 wild-type allele of the human β -actin gene was molecularly cloned and sequenced from -240 to +2826 (1). One strand of the 14T β 17 5' flanking region from a SstI restriction site at -2011 to -1 was sequenced by the method of Sanger *et al.* (2). *In vitro* binding studies (3) indicate that the β -actin promoter regions including the two CC(A/T)₆GG motifs in the 5' flanking region (underlined), and the CC(A/T)₆GG motif in the first intron, interact with the same protein that binds to the human *c-fos* promoter serum response element.

-2011 GAGCTCTGTCTCTTGGCCAGCTGAATGGAGGCCAGCGGCAACACAGGTCCTGCCTGGGGATCAGGTCTGCT
-1939 CTGCACCCACCTTGTGCTGGAGCGCCACCTGACAACCTCTCATCCCTGCTCTGTAGATCCGGTCCCA
-1867 TCCCACTGCCACCCACCCACCCCCAGCACTCCACCCAGTTCAACGTTCCACGAACCCCAAGAACAGCCCT
-1795 CATCAACAGGCAGCAAGAAGGGCCCCCGCCCATCGCCCCACAACGCCAGCCGGGTGAACGTGTAGCGTTGGC
-1723 AGGTCTCTAGGCAGCTGAAGAATACAAGGCCAGGGACAGGACAGTCCCATCCCCAGGAGGCAGGGAGTATAC
-1651 AGGCTGGGAAGTTTGCCCTTGGCTGGGGTGGTGATGGAGGAGGCTCAGCAAGTCTTCTGGACTGTGAACCT
-1579 GTGCTGCCACTGTGTGCTGGGTGGTGGTTCATCTTTCCACCAGGCTGTGGCCTCTGCAACCTTCAAGGGAG
-1507 GAGCAGGTCCCATTTGGCTGAGCAGCCTTGTACGTGAACGAACAAGCAGCTCTCTCTGCCACAGGTT
-1435 CCATGTCCTTATATGGACTCATCTTTCCTATTGCGACACACACTCAATGAACACCTACTACGCGCTGCAAA
-1363 GAGCCCCGAGGCTTGGGTGCCCCACCTCACCCTCTTCTATTTTGTGTAAAAATCCAGCTTCTTGTGTC
-1291 ACCACCTCCAAGGAGGGGAGGAGGAGGAAGGCAGGTTCTCTAGGCTGAGCCGAATGCCCTCTGTGGTCC
-1219 CACGCCACTGATCGCTGCATGCCACCACTGGGTACACACAGTCTGTGATTCCCGAGCAGAACGGACCCCT
-1147 GCCCACCCTGCTTGTGTGCTACTCAGTGGACAGACCCCAAGGCAAGAAAGGTTGACAAGGACAGGGTCTTCC
-1075 CAGGCTGGCTTTGAGTTCCTAGCACCGCCCGCCCCCAATCTCTGTGGCAGATGGAGTCTTGGTCCCCAGA
-1003 GTCCCCCAGCGGCTCCAGATGGTCTGGGAGGGAGTTTCAGCTGTGGCTGCGCATAGCAGACATACAACGGA
-931 CGGTGGGCCAGACCCAGGCTGTGTAGACCCAGCCCCCGCCCCGAGTGCCTAGGTACCCACTAACGCC
-859 CAGGCTCTGTCTTGGCTGGGCGTGACTGTACCTCAAAAGCAGGAGCTCCAGGGTAAAAAGTGGCCTGC
-787 CTGTAGAGCCCACTTCCTTCCAGGGCTGCGGCTGGGTAGGTTTGTAGCCTTCATCACGGGCCACCTCCAG
-715 CCATCTGGACCGCTGGCCCCCTGCCTGTCTGGGAGTGTGGTCTGCGACTCTAATGGCCGCAAGCCACCTG
-643 ACTCCCCCAACACCACACTTACCTCTCAAGCCCAAGTCTCTCCCTAGTGACCCACCCAGCAGCATTTAGCTA
-571 GCTGAGCCCCACAGCCAGAGGTCTCAGGCCCTGCTTTTCAGGCGAGTTGCTCTGAAGTCGGCAAGGGGAGT
-499 GACTGCTGGCCACTCCATGCCCTCCAAGAGCTCCTTCTGAGGAGCGTACAGAACCCAGGGCCCTGGCACC
-427 CGTGACAGCCCTGGCCACCCACCTGGGCGCTCAGTGCCTCAAGAGATGTCCACACCTAGGATGTCCCGGG
-355 TGGGTGGGGGGCCGAGAGACGGGAGGCGGGGCGAGGCTGGCCATCGGGGGCGGAACCGGGCACTGGCC
-383 AGCGTGGGGCGCGGGGGCCAGGGCGCGGCCCCAGCCCCGGGCCAGCAGCCCAAGGCGGCCAACGCCAA
-211 AACTCTCCCTCCTCTCTTCTCAATCTCGCTCTCGCTCTTTTTTTTTTCGCAAAAGGAGGGAGAGGGGG
-139 TAAAAAATGCTGCACTGTGCGGCAAGCCGCTGAGTGAGCGGCGCGGGGCAATCGCGTCCGCGCTTCCGAA
-67 AGTTGCTTTTATGGCTCGAGCGGCGCGGCGGCCCTATAAAACCCAGCGGCGGACGCGCCACC -1

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