



ADA2 (NM_001282225.2) - cDNA - 2026-05-31

AGTTGGTGAG CTTTTCCGGT GCTCTGCACA GATGCTGGGG CGCTGAGCAA -77
ACAGCCCTCA GTTTCTGGAG CTGTTCCGAG TCCCGTGGAG TCTCCATCTG -27 -43C>T c.-42G>A -31A>G
AGCCCTTTCC TAGTCCAGGC ATCCCGATGT TGGTGGATGG CCATCTGAG 24 c.-14G>T M1T P6L
CGGCCAGCCC TGTGCTTCTT GCTGTTGGCT GTGGCAATGT CTTTCTTCGG 74 R9W G25C
CTCAGCTCTA TCCATAGATG AAACA CGGGC GCATCTGTTG TTGAAAGAAA 124 I30T T33Nfs*29 R34W
AGATGATGCG GCTGGGGGGG CGGCTGGTGC TGAACACCAA GGAGGAGCTG 174 R45W c.138G>C G47R G47W G47R_GC G47A G47V G48R c.144delG R49Afs*13 R49W c.158del N53N

K13del

GCCAATGAGA GGCTCATGAC GCTCAAAATC GCTGAGATGA AGGAGGCCAT 224
GAGGACCCTG ATATTCCCAC CCAGCATGCA CTTTTTCCAG GCCAAGCATC 274 c.232_322+105delinsATG H91R H91Lfs
TCATTGAGAG AAGTCAAGTG TTTAATATTC TAAGGATGAT GCCAAAAGGG 324 I93T P106S p.A109Lfs*11
GCTGCCTTGC ACCCTCCATGA CATTGGCATC GTGACTATGG ACTGGCTGGT 374 A109D H112Y H112Q 116Lfs*4 M121T
GAGGAATGTC ACCTACAGGC CTCACTGCCA CATCTGTTTC ACCCAAGGG 424 N127I T129P p.(Y130Sfs*48) R131Sfs c.396_397del C134Y
GGATCATGCA GTTCAGATTT GCTCACC~~CAA~~ CTCCCCGTC~~C~~ ATCAGAAAAA 474 I143Sfs*41 P151QfsX P155Hfs*29
TGTTC~~CAAGT~~ GGATTCTGCT GGAGGATTAT CGGAAGCGGG TGCAGAACGT 524 C159Y W162R R169G R169Q
CACTGAGT~~IT~~ GATGACAGCT TGC~~T~~GAGGAA TTTCACTCTG GTGACCCAGC 574 F178S L183P T187P L188V L188P
ACCCGAGGT GATTTACACA AACCAAAATG TTGTCTG~~GTC~~ GAAAT~~T~~GAA 624 P193L Y203A W204C_G>T W204C F207S
ACCA~~TCTTCT~~ TCACCATCTC TGGTCTCATC CATTACGCAC CAGTGTT~~CAG~~ 674 I210Tfs F212del Y220X
AGACT~~AT~~GTCT TCCGGAGCA TGCAGGAGTT CTACGAGGAC AACGTGCTCT 724 Y227fs M232T Y236del c.709delC (p.Glu237fs) D238N A247Qfs*16
ACA~~TGG~~A~~GAT~~ CAGAG~~C~~CAGG CTGCTG~~C~~CGG TGTATGAGCT CAGTGGAGAG 774 M243R E244A A247V L249P P251L P251P
CACCAT~~G~~ACG AAGAGT~~GGT~~C AGTGAAGACT TACCAGGAAG TAGCTCAGAA 824 D261Pfs*2 W264S W264Ter S265X
GTTTGTGGAA ACTCACCTG AGTT~~T~~ATTGG AATCAAAATC ATTTATT~~C~~GG 874 F283L S291L

ATCACAGATC CAAAGATGTG GCTGTCATCG CAGAATCCAT CCGAATGGCC 924 R306*
 ATGGGGCTCC GAATCAAGTT CCCCACGGTG GTGGCAGGGT TTGACCTGGT 974 M309I L311R R312ter T317M G321E G321A delEx7 Dup_Exon7
GGGGCATGAG GACACTGGCC ACTCCTTGCA TGACTACAAG GAAGCTCTGA 1024 G326V E328K E328D D329N H335R
 TGATCCCCGC CAAGGATGGC GTTAAGCTGC CTTACTTCTT CCACGCCGGA 1074 P344L V349I L351Q Y353H F355L A357T G358R
GAAACAGACT GGCAGGGTAC TTCCATAGAC AGGAACATTC TGGATGCTCT 1124 T119A N370K
 GATGCTGAAC ACTACCAGAA TCGGCCATGG ATTTGCTTTG AGCAAACCC 1174 G142S G383D H391Q
 CCGCAGTCAG GACTTACTCC TGGAAAAAGG ACATCCCCAT AGAAGTCTGT 1224 W399X I405L C408Y
CCCATCTCTA ACCAGGTGCT GAAACTGGTG TCTGACTTGA GGAACCACCC 1274 P409S P409H V372M N423K P425A
 TGTAGCCACT CTGATGGCCA CTGGGCACCC CATGGTGATC AGCTCTGATG 1324 P435A M436T
ACCCCAGCTAI GTTTGGTGCC AAAGGCTTGT CCTATGATTT CTATGAGGTC 1374 P443A M445T F404S K449Nfs*2 G450C G450= L451W L451F Y453C Y453Y D454H Y456C V458D
 TTCATGGGCA TTGGGGGGAT GAAGGCTGAC CTGAGGACCC TCAAACAGCT 1424 P.(M460K) M465fsX K466Tfs*2
 GGCCATGAAC TCTATCAAGT ACAGTACCCT GTTGGAGAGT GAGAAAAATA 1474 S479P Y482C S483Pfs* E489Q E489D
 CTTTCATGGA AATCTGGAAG AAGAGATGGG ATAAGTTCAT AGCAGATGTG 1524 W501*
 GCTACAAAGT GAGGAGAAGC TAGCCAGCCC TCTACAAGCT GTCTTCTTGC *38
 ACACGCTGTC ACTTCTCTC ACTCGTCTT GAATCAGCTC CATGTGCCCA *88
 TGAAATCAAT GGCCCTGTGA TGGAGCGACC CTGTGAGAAG CACTTGGCTG *138
 GCTGAGCAA TTCATCCTCT GGAAATATTC TCTCTCAGCC ACAGTGACAT *188 *159G>A
 TGACCCTCTT GGTTCCTCC TGTCTCTGGC CATTCTTCC AGTTTCCCTA *238
 TTTTCTGAGT TTCTCTCTC TCTGATCTCT GTGCTGTTTCTCAGGACTC *288
 AGTCCCTGGG CTTCTTCTAT TCTGGTCTCT TTATTTTTTTT ATTTTTGTAT *338
 TTTTCTGAGA TGGAGTTTTG CTCTTGTGTG CCAGGCTGGA GTACAATGGT *388
 GCGATCTCAG CTCAGTGCAA CCTCCGCCAC CCGGGTTCAG GCAATCTCT *438
 TGCATCAGCC TCGCGAGTAG TTGGAATTAT AGGCATGTGC CACCACACCC *488
 AGCTGATTTT TGCATTTTTA GTAGAGACAG GTTTTCACCA TGTGGCGGAG *538
 GCTGGTATCC AACTCTTGAC CTCAGGTGAT CCACTCGCCC CTTGGCTCCC *588
 AAAGTGCTGG AATTACAGGC ATTAGCCACC ATGCCTGGCC TATTCTGGTC *638
 TCTTTAACTC TCTCCTCTT ATTTCTCTT TCTCTCTGTA CACTTTTCCT *688
 GGGTGGTCTC ATCCATTCCT TTGCTTTTTT ATACCATTTA TTTGTTAATG *738

ATTCCCACAT TTATTTATGC ACTTGGAGAG CTCACAGGAA TCTCAGAAAC *788
TGATGAGGTA CAATTC TGAA CCCTCAGTCT CTTCCCTTTA AACCTTTCTT *838
TTTCTCTACT TTAATTTTTT TAAAGAGTGT CTTGCTATGT TGCCCAGGCT *888
GGTCTCCAAC TCAAGTGATC CTCCTGCCGC AGTCTCCCGA AGTGCTGGGA *938
TTACTGACAT GAGCCACCAC ACTCAGCCCT TTAAACCTTT CCCTGGCCTT *988
TCCCATAGCT GGTGAAGGAC ACCTCCATCC ATTCCACGCA GTTGCTCAAA *1038
GCAGAAATTT TCAGTGCAAG TCTTGATGCT GCGCCGTCCC CCACTCCCTA *1088
CATCAGAACG CATCCCTCAT CTGGACTCCA GCGGTGGCTT CTTGATGCTG *1138
CGCGGTCCCC CACTCCCTAC ATCAGAATGC ATCCCGCATC CAGACTCCAG *1188
CGGTGGTGCT CTACCTGCAC GCTGTTGCCA AGTCCAAGCT ACCATACTCC *1238
TGCTGAGCT ATGACAACAG CCTCCTCACT GATCTCCCCT TTCTTCCCTT *1288
TGCTCCTCC AGCTCATTTT TCACAGTGTA GAATGACATT TTGTTTGTTT *1338
GTTTTGTTTT GTTTGAGATG GAGTCTCGCT CTGTTGCCCA GGGTGGAGTG *1388
CAGCGGTGCG ATCTCGGCTC ACTGCAACCT CCACCTCCCG GTTCAAGCG *1438
GATTCCTCGTG CCTCAGCCTC CTGAGTAGCT GGGATTACAG GCATGCACCA *1488
CCATGCCCGG ATAATTTTTG TATTTTTAGT AGAGATGGGG TTCACTATG *1538
TTGGCCAGGC TGGTCTCGAA CACCTGACCT CGTGGTCCAC CCGCCTCGGC *1588
CTCCCAAAGC ACTGGGATTA CAGGCGTGAG CCACCCGGCC TGGCCTAGAA *1638
TGACTTTTAA AAGATCAAAT TAAATCAGGT CACTCCTTTG CTTACAACGC *1688
AGTGCGTTTA GAGGTACACC CCATGTCTCC ACAGGGCATA CAGCATCCGA *1738
TTAATCTGG ATCCATTCCG GCGCCTTCTT CTCCCAGTCA CCCAGAGGGC *1788
CCCAACCCCG GCGGCCCTTT CTTCCTCAAA TGTCCCTCGGC TCTATACCGT *1838
GCCTGGGTCT TTTCTCTTTC TCTCTGCCTG GAAGATTCTT TCTTTCCCCT *1888
TTTGTCTTGC CCACTCCTGT TTACCCTTCA AGTTTCAAGT TCATGTCACT *1938
GTCTCAGAGA GGTTTTCTTG TGCTCGCCCT GTTTCTCTCA GGAAGCCTTG *1988
CTCTTTTCCA TCATGCCTCT AATCACAGCT TATAATCGGA TATTTATTTT *2038
TGTGCTACA GTCTTGCCCT GCCAGACTGT ATGCCCATG TGGGCAGGCG *2088
CTCATGATTG TTTCTGATTG TTTACGCAT GCTGCTAACC CAGAGCCTGG *2138

GCCCAAAGCT AGTTAGTACT CAATAAACAA TGCATTGAAT GAGTGGCTGT *2188
CACTGTGTCT GTTCAGCCAG CTGCCAAGGC AGAGGGGAGT AGAGCAGAGC *2238
CGCCCCAAAT AAAAGACCTC ATGTGATCAG AGTCCAGCTC CTCACCTGGC *2288
CTTGGAAGAA GGATGCAAGA AGCCACCTCT GTCCTCACCC AACTCAAGGA *2338
TGGCAGGGAA TCAAAGAATT CCTCAAAAGC CCCAGGCGAA TGTCCTCTCA *2388
TCCATCTTCC ATGACCTGTA CCTGAGCTCT CAGACAGCAG CAAGCCCTCT *2438
CTCCATTCCT AGTTTATCAC CATTGGTTC CTGGAACCTGG GAAAAACAG *2488
CAACCATAAG CTGTGCCTGG ATGGAAGAAG ACAACCTCTA GGGTCCTGTC *2538
TAACCTGCA GGTGATTCAG TGCCTTACCC AATCCCTGAA GATCTTTTAG *2588
GTCCCAACTG CGCAGGGGAC CTCCAACACA GGCAGACGCA AACAGCCTCT *2638
GGCCTGGACT TGCTGTGATC TCTGATTTGG CAAAATGAAC CAGCAATAGT *2688
CTTGC

ADA2 (NM_001282225.2) - cDNA - 2026-05-31

