Nucleotide sequence of a rat heart cDNA encoding the isotype α of the catalytic subunit of protein phosphatase 2A

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The screening of a rat heart cDNA library yielded a cDNA encoding the catalytic subunit of α isotype of protein phosphatase 2A. The predicted 309 amino acids protein is identical or almost identical to other type α mammalian phosphatases 2A. An unusual conservation between different mammalian species is observed when non coding sequences are compared.

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-172                                CGGAGCACAGCGGGCCGCCGAGCACTGCGAGCGAG
-138 CGGCGGGCGGCCACGCCAGCAGCCGCTGGGGCCCGCAGGAAGCACCCCGGGAGCGGCGGGCGGTGTGC
-69 GTGTGGCGCGGGTGCGGGGCGGGCGCGGAGCAGGGCAGAGCGGCAGCCGGTTCGGGCGGGCGGCATC
  1 ATGGACGAGAAGTTGTTCCAAAGGAGCTGGACCAGTGGATCGAGCAGCTGAACGAGTGAAGCAGCTC
    M D E K L F T K E L D Q W I E Q L N E C K Q L
  70 TCCGAGTCCAGGTCAAGAGCCTCTGCGAGAAGGCTAAAGAAATCCTACAAAAGAATCTAATGTTTACG
    S E S Q G V K S L C E K A K E I L T K E S N V Q
  139 GAGGTTTCATGTCAGTTACTGTGTGTGGGGATGTGCATGGGCAATTTTCATGACCTCATGGAACCTTTT
    E V R C P V T V C G D V H G Q F H D L M E L F
  208 AGAATTGGTGGTAAATCACCAGATACAAATTAATCTGTTTATGGGAGACTATGTGGACAGAGGATATTAC
    R I G G K S P D T N Y L F M G D Y V D R G Y Y
  277 TCAGTTGAAACAGTTACTGCTTTAGCTCTTAAGGTTTCGTTACCGAGAGCGGTATCACCATACCTCCGA
    S V E T V T L L V A L K V R Y R E R I T I L R
  346 GGGAAATCAGGAGAGCAGACAGATCACACAAGTTTATGGTTTCTACGATGAGTGTTTAAAGGAAATACGGA
    G N H E S R Q I T Q V Y G F Y D E C L R K Y G
  415 AATGCAAAATGTTTGGAAATACCTTCACAGACCTTTTGTACTACCTTCCTCTCAGTGCCTTGGTGGATGGG
    N A N V W K Y F T D L F D Y L P L T A A L V D G
  484 CAGATCTTCTGTCTACATGGTGGTCTTTACCATCCATAGACACACTGGATCACATCCGAGCACTTGAT
    Q I F C L H G G L S P S I D T L D H I R A L D
  553 CGCCTACAAGAAGTTCCTCATGAGGGTCCAATGTGTGACTTGTGTGGTCAGATCCAGATGACCGTGGT
    R L Q E V P H E G P M C D L L W S D P D D R G
  622 GGGTGGGGGATATCTCCTCGGGGAGCTGGTTATACCTTTGGCCAAGATATTTCTGAGACATTTAATCAT
    G W G I S P R A G Y T F G Q D I S E T F N H
  691 GCCAATGGCCTCAGTTGGTGTCCAGAGCTCACCAGCTGGTGTGGAAGGATATACTGGTGCCATGAC
    A N G L T L V S R A H Q L V M E G Y N W C H D
  760 CGGAATGTAGTAACAATTTTCAGTGTCTCCAACTATTGCTATCGTTTGGTGAACCAAGCTGCAATCATG
    R N V V T I F S A P N Y C Y R C G N Q A A I M
  829 GAACCTTGATGACACTCTTAAGTATTCTTTCTTGCAGTTTCGATCCAGCACCTCGTAGAGGCGAGCCACAT
    E L D D T L K Y S F L Q F D P A P R R G E P H
  898 GTCACCTCGTGTACCCAGACTACTTCTGTAAAGAAAGTTAACTTGTACAGTATTGCCATGAACAC
    V T R R T P D Y F L
  967 CTTCTGTTGACCTAAATGGAATCGGAAGAGCAGCAGTAACCTCAAAGTGTCAGAAATAGTTAAACATTCAA
  1036 ACTTGTGTTCCACACGGAACCAAGATGTGCCATATAAAATACAAAGCCTCTTGTCTCAACAGCCGTGA
  1105 CCACTTTAGAATGAACAGTTTCAATGTCATGCTGACGCGACATTGTTGGTCAAGAATCCAGTTTCTGGCA
  1174 TAGCGCTATTGTTGATTAATTTGCTTTCTTGTGAGAGACTGCAGATCTAGGATGTAACATTAACACCTGT
  1243 GAGTCCAGTTGACTTCCACTTAAGCTGTAGCTTACTCAGCATGACTGTAGAGAGGATAGCAAAACATCAT
  1312 TGGAGCTTAATGAACATTTTAAATGAGTACCAAGGCCCTCCCTCTTGTGTTGTTCTTTCAGGGATACT
  1381 ATTAATTTAATTTGATGATTTCTCTGCACCTCAGTTTCTCCCTTCTCAAACTCGGCCCGCGTTGTTCTT
  1450 TGTTACTGTGCAGAAAACCTGGTGAAGTTGTTTGAACAGAACTGTCTCCTCTGTAAGATGATGTACTGCC
  1519 AAGTACGCAGTGTTCATAATAAACTTGAGACTGAGAAGTCAGGGTTT

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