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Nucleotide sequence of a rat heart cDNA encoding the isotype β 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 β isotype of protein phosphatase 2A. The predicted 309 amino acids protein is identical or almost identical to other type β mammalian phosphatases 2A. An unusual conservation between different mammalian species is observed when non coding sequences are considered.

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-44                                    TGCAGGTCGGCGGCGGGGGGAGGCGGCGGGGGGACGGCTCGCCGCC
  1 ATGGACGACAAGGCGTTCACCAAGGAGCTGGACCAGTGGGTGGAGCAGCTGAACGAGTGTAAGCAGCTG
      M  D  D  K  A  F  T  K  E  L  D  Q  W  V  E  Q  L  N  E  C  K  Q  L
 70 AACGAGAACCAAGTGCGGACGCTGTGCGAGAAGGCTAAGGAAATTTTAACAAAAGAATCAAATGTACAA
      N  E  N  Q  V  R  T  L  C  E  K  A  K  E  I  L  T  K  E  S  N  V  Q
139 GAGGTTCGCTGTCCTGTTACCGTCTGTGGAGATGTGCATGGCCAATTCCATGACCTTATGGAACTCTTC
      E  V  R  C  P  V  T  V  C  G  D  V  H  G  Q  F  H  D  L  M  E  L  F
208 AGAATTGGTGGAAAATCACCAGACACCAACTATCTATTCATGGGTGACTATGTAGACAGAGGATATTAT
      R  I  G  G  K  S  P  D  T  N  Y  L  F  M  G  D  Y  V  D  R  G  Y  Y
277 TCTGTGGAGACCGTGACTCTTCTTGTAGCATTAAAGGTGCGCTATCCAGAGCGTATCACAATATTGCGA
      S  V  E  T  V  T  L  L  V  A  L  K  V  R  Y  P  E  R  I  T  I  L  R
346 GGAAATCATGAAAGCCGGCAGATCACACAAGTATATGGCTTTTATGATGAATGCCTACGAAAGTATGGG
      G  N  H  E  S  R  Q  I  T  Q  V  Y  G  F  Y  D  E  C  L  R  K  Y  G
415 AACGCCAACGTGTGGAAATACTTTACAGATCTCTTTGATTATCTTCCACTTACAGCTTTAGTAGATGGA
      N  A  N  V  W  K  Y  F  T  D  L  F  D  Y  L  P  L  T  A  L  V  D  G
484 CAGATATTCTGCCTCCACGGTGGCCTCTCTCCATCCATAGATACACTGGATCACATAAGAGCCCTGGAT
      Q  I  F  C  L  H  G  G  L  S  P  S  I  D  T  L  D  H  I  R  A  L  D
553 CGCTTACAGGAAGTTCCACATGAGGGCCCAATGTGTGATCTCTTATGGTCAGATCCAGATGACCGTGGT
      R  L  Q  E  V  P  H  E  G  P  M  C  D  L  L  W  S  D  P  D  D  R  G
622 GGCTGGGGCATTTCTCCACGTGGTGCTGGCTACACATTTGGACAAGACATTTCTGAAACATTTAACCAT
      G  W  G  I  S  P  R  G  A  G  Y  T  F  G  Q  D  I  S  E  T  F  N  H
691 GCCAACGGCCTCACACTGGTGTCCCGTGCTCACCAGCTTGTAATGGAAGGATATAATTGGTGCCATGAT
      A  N  G  L  T  L  V  S  R  A  H  Q  L  V  M  E  G  Y  N  W  C  H  D
760 CGGAATGTGGTCACCATTTTTAGTGCACCCAATTACTGCTACCGCTGTGGGAACCAGGCTGCTATCATG
      R  N  V  V  T  I  F  S  A  P  N  Y  C  Y  R  C  G  N  Q  A  A  I  M
829 GAATTAGACGACACTTTAAAATACTCTTTTCTTCAGTTTGACCCAGCACCTCGTCGTGGAGAGCCTCAT
      E  L  D  D  T  L  K  Y  S  F  L  Q  F  D  P  A  P  R  R  G  E  P  H
898 GTGACCCGGCGCACCCCAGACTACTTCCTATAAATTCCTCCCCAGGACCTGTCTTTGTATGTTGAAGTA
      V  T  R  R  T  P  D  Y  F  L
967 TACCTGCTTTTTAAAAAATATATATACATATATATATTTAAAAACAACAGTTATCTGTGTGTCTCTGTA
1036 ACAAATTGTGCTATGTCTTGACGTTAAAACACATCATGGACCAAAACGTGCCATACTAATGGTGAGCCA
1105 TCAGCACGGTGTGAACTTGAGTCCACTGTCCTAGCCACGAGTCAACCAGGCAGCCGCCTGCCCGCCTGC
1174 CTGCTGTAGTAGCCGTCCTTCGTGACTGGTTAAGGGAAAGGGTCACTGGTGGCTTCATCTTCCTTCGCG
1243 CTTACTTGGAAATTTAGTTACAGTTTAACTGGCATGGATTATAGAGTTGGAGTTTTATTTTTAAGAATT
1312 GACAAGCTGACTTCCACTTAAATTCATAACCCTTTATTTTGTTGAAATGTATGACTAACTGAAGAAGAG
1381 ATTCTTGGGAGTATGTTGTCATAACACTAAGATTTCCTTTCAAGTTTCCTGAACTGAATTACTGTTGGA
1450 TGTTGACCTGCACATTCTGTATATTTGTCCTGACAGTGTTGCATCCTCCTTGCTGTACTGAACAAATAA
1519 ACTTCCCAATTTAGAGAGAAAAAAAAA
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