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Sequence of the 5′ end of the developmentally regulated rat P450 PB1 (P450IIC6) gene

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The P450IIC6 gene becomes transcriptionally activated in both male and female rats between two and four weeks of age (1). To determine the mechanism of this developmental regulation we isolated the 5′ end of the IIC6 gene from a rat genomic library, constructed in λEMBL3, using a 5′ fragment probe derived from the IIC6 cDNA (1). Sequence was determined using the random shotgun cloning protocol (2) and dideoxy sequencing method (3). Computer manipulation of sequence data was performed using the Beckman Microgenie program. The transcription start site was determined by primer extension and designated +1. The position of hybridization of the primer is underlined (position +83 to +107). A putative TATA box is found at position -26 to -29. DNA showing significant similarity to Rdre.1 (4) is located at +1296 to +1348, +1516 to +1685, and +2059 to +2212.

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AAGCTCTATGCTTCCTGGCAGAGCTGTGTCAATAAAGAGAAACTCAATGGATCTGGTCATGTTGCTGGTGCTCACTCTCACCTGTCTTATTCTCCTGTCAATCTGGAGACAGAGTTCTGG 95
                +1                  M D L V M L L V L T L T C L I L L S I W R Q S S G
GAGAGGAAAGCTCCCCCCAGGCCCTATTCCTCTCCCAATTATTGGCAATATCTTTCAGCTAAATGTGAAGAACATCACCCAATCCTTAACCAGTGTAAGTATGCTTATGCTCCTCTTTTA 215
  R G K L P P G P I P L P I I G N I F Q L N V K N I T Q S L T Q
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ATAAGGCTGCGATGAACATAGTGGAGCACGTGTCTCTTTT 2295
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