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# Genomic sequence of rat β-globin minor gene

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In order to understand the complexity of rat β-like globin locus a number of clones covering the region was isolated from heterogenus genomic library prepared in EMBL 3 vector from Wistar strain animals carrying Belgrade anemia (1). The folowing DNA sequence which contains one entire rat β-globin gene ($\beta_b^{miny}$) from clone λ11 was determined using Sanger's dideoxy sequencing method. The detailed sequence analysis and comparison with available globin mRNA, globin gene and protein sequences indicate that this is an active $\beta^{min}$ globin gene wich shares extensive homology with the mouse $\beta^{min}$ globin gene(2, 3, 4). The coding regions are underlined.

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   1 CCCTGGTAGT TATGGCTATC ATCTCTGAAG CCTCACCCTG CAGAGGCACA
  51 CCCTCACATT GCCCAATCTG CTCACACAGG ACAGAGTGAT CAGGGGCCAG
 101 AATTTGGCAT ATAAAGCAGA ACAGAACCAG TTGCTTCTTA TATTTGCTTC
 151 TGATACTGTT GTGTTGACTC GCAACCTCAG GAACAGACAC CATGGTGCAC
 201 CTAACTGATG CTGAGAAGGC TACTGTTAGT GGCCTGTGGG GAAAGGTGAA
 251 TGCTGATAAT GTTGGCGCTG AGGCCCTGGG CAGGTTGGTA TCCAGGTTAC
 301 AAGGTAGCTC CTAAGTAGAA GTTTGGTGCT TGGAGACAGA GGTCTGCTTT
 351 CCAGCAGGCA CTAACTTTTT TGTCTTCTGG CTATGTTTCC CCTTTGTAGG
 401 CTGCTGGTTG TCTACCCTTG GACCCAGAGG TACTTTTCTA AATTTGGGGA
 451 CCTGTCCTCT GCCTCTGCTA TCATGGGTAA CCCCCAGGTG AAGGCCCATG
 501 GCAAGAAGGT GATAAATGCC TTCAATGATG GCCTGAAACA CTTGGACAAC
 551 CTCAAGGGCA CCTTTGCTCA TCTGAGTGAA CTCCACTGTG ACAAGCTGCA
 601 TGTGGATCCT GAGAACTTCA GGGTGAGTCT AATGGGCTCC CCACTGGGTG
 651 TCCTTCCTGT GGCTTTCCTG CTCAAATTCC TATCAGAAGG AAAGAGGAAG
 701 CAATTCTAGG GAGCAGTTTT GATGATGATG TGTGGATATG CCCTGTGGAG
 751 TGTTGACAGG AGTCCAGTTA TTTTATCCTC TATTCACAAT CACTTCTCCC
 801 TCTCACTCTG TTCTTCTATG TTGTCATTTC CTCTTTCTTT GGTAAACTTT
 851 TAATTTTTCT GTTGCAGGTT TAAAGTACAT CTTTTATGTA CTTTCTCTCT
 901 TTTTTTTTAT TCAGCCATGA GGGTACCTTC TAGACTTTAA AAAACGTAGT
 951 ACTTTCTCTT TTGTTTCAAG TGTTTCCTGC TACTTTACTC TGAGGACGTA
1001 AAGATCAATG ATTCACTCAT TCCACACCTG TAAGGAATAG TAGAACAATA
1051 ATTGGCTTTC AGGCTAAGAT GATAGGGAAA TATATATTTT GCATATAAAT
1101 TTTGTCTGCT AGAAGAATTC TTATCAAAAT TGACCAGGAG AACTCAGTAG
1151 TCATTCTGCC TGTCTTTTAA GATTATAACT GCAAACTCCA TTTGAAATGG
1201 GCCTGCAGTG TCTGATATTG TTGTTCTACT TCATGTTGAA ACATCTTCCC
1251 TCTTCCCACA GCTCCTGGGC AATATGATTG TGATTGTGTT GGGCCACCAC
1301 CTGGGCAAGG AATTCACCCC CTGTGCACAG GCTGCCTTCC AGAAGGTGGT
1351 GGCTGGAGTG GCCAGTGCCC TGGCTCACAA GTACCACTAA ACCTCTTTTC
1401 CTGCTCTTGT CTTTGTGCAA TGGTCAATTG TTCCCAAGAG AGCATCTGTC
1451 AGTTGTTGTC AAAATGACAA AGACCTTTGA AAATCTGTCC TACTAATTAA
1501 AGGCATTTAC TTTCACTGCA ATGGTGTGTT AAATTAATTG TATCTCATAG
1551 AAGGGTTCAT GCTTAGGTTC AAGATACAAA GCAGTGAGGG
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