
Consensus sequences of the *Rattus norvegicus* B1- and B2 repeats

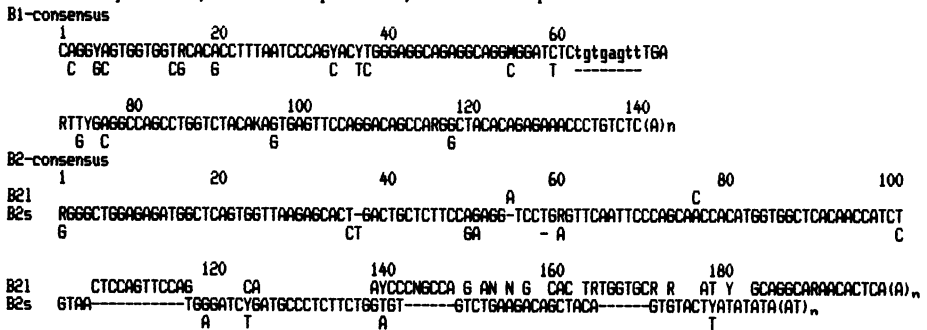
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During our sequence analysis of the flanking and intronic regions of six rat (*Rattus norvegicus*) gamma-crystallin genes, we encountered a number of repetitive elements closely related to either the murine Alu B1 or B2 type repeats (1,2). To our knowledge no consensus sequence of either rat repeat has been published. We report here the consensus sequences for these elements in rat and show that they are ~90% homologous to the murine ones.

The consensus sequence of the rat B1 repeat was deduced from 12 elements encountered within our sequences. Three of the B1 elements carried a 7 bp insertion at pos. 62. For the derivation of the B2 consensus sequence we used the sequences of 11 elements established by us and those of 3 elements reported by others (3,4). Five B2 elements differed considerably towards the 3' end from the other nine. As they also carried several insertions, they were placed in a B21 subgroup. Most B1 and B2 repeats end in long A-rich sequences or simple sequence DNA, such as (AG)_n. Most repeats were bordered by short, often imperfect, direct repeats.


Consensus sequences of the rat B1- and B2-repetitive elements.

Rat B2 elements are separated in the B21 (long) and B2s (short) subgroups. The rat sequence (shown completely for B1 and B2s) is compared to the murine one (bottom line); only differences are specified. Sequences in lower case were not present in all elements (see text). Dashes indicate deletions, Y=pyrimidine, R=purine, N=any, K=G/T and M=A/C.

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References: (1) Kalb et al., (1983), Nucl. Acids Res. **11**, 2177-2184. (2) Krayev et al., (1982), Nucl. Acids Res. **10**, 7461-7475. (3) Barta et al., (1981), Proc. Nat. Acad. Sci. USA **78**, 4867-4871. (4) Witney and Furano, (1984), J. Biol. Chem. **259**, 10481-10492.