

Sequence of the rat α c large chain of the clathrin associated protein complex AP-2

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We have isolated cDNA clones for the large α c chain of the rat brain Clathrin Associated Protein complex AP-2. A rat brain λ -ZAP-II cDNA library (Stratagene) was screened with the synthetic oligonucleotide probe 5'-C(C, T) TCCAT (A, G) TGNCC (A, G) AA (A, G) TC (G, T) ATGTCGTG, corresponding to the stretch of amino acids between His-70 and Ala-79 that are shared by both mouse α a and α c chains (1). Two cDNA clones were sequenced by the dideoxy termination method (2) using internal 17-mer sequencing primers. The combined DNA sequence is shown in Fig. 1. Sequence comparison with the mouse α a and α c homologues demonstrates that the rat protein is 99% identical to the mouse α c chain. It contains 938 amino acids, with no gaps, and two conservative changes corresponding

to Glu-8 instead of Asp-8 and Ile-788 instead of Val-788, respectively.

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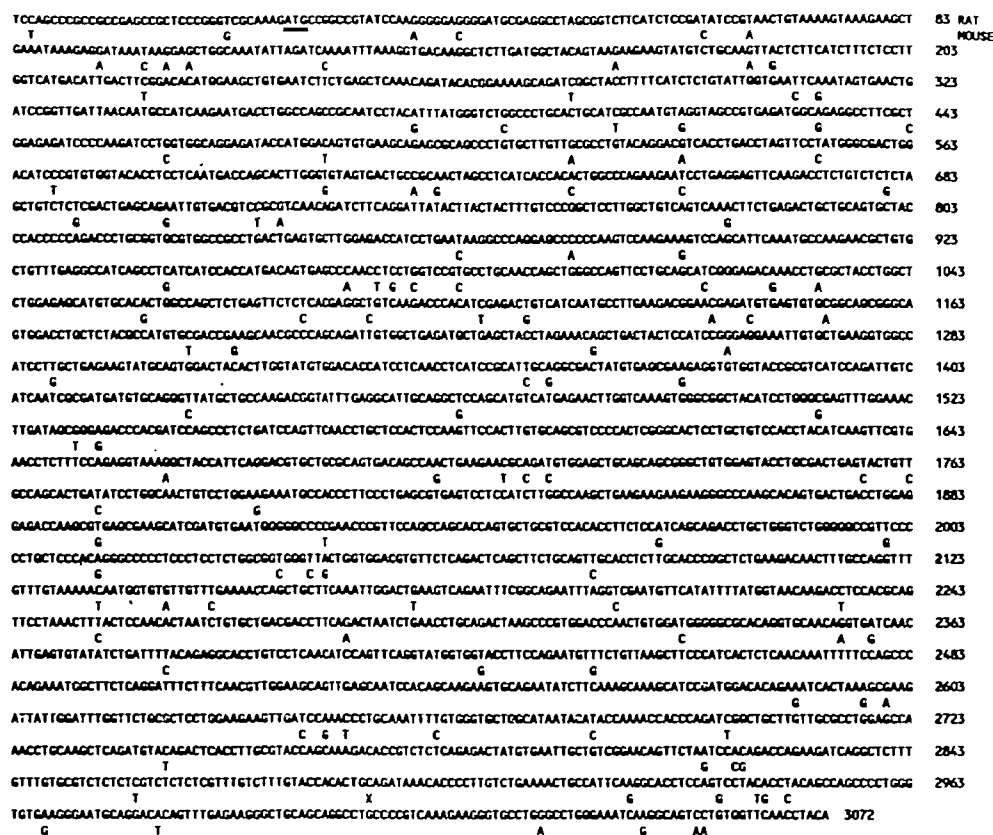


Figure 1. Nucleotide sequence of the rat brain large α c chain. The sequence comparison between the rat and mouse α c chains shows 95% identity at the DNA level and 99% identity at the protein level. Sequence differences and the initiation codon are indicated.

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