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Nucleotide sequence of the ε-subunit of the muscle mouse nicotinic acetylcholine receptor

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The two predominant types of nicotinic acetylcholine receptors expressed in mammalian muscle differ with respect to a variety of electrophysiological and biochemical properties. A developmental, innervation-dependent switch in the subunit structure of the receptor, in which a γ subunit is replaced by an ε subunit, is thought to account, in large part, for these differences (1). Because of the interest in the regulatory mechanisms underlying this switch, much attention has focused on these two subunits. Here I report the nucleotide and deduced amino acid sequences of a clone coding for the mouse muscle ε subunit isolated from a cDNA library constructed using poly (A)* RNA isolated from innervated mouse diaphragm. Assignment of an initiator methionine is based on sequence comparison with the mouse genomic ε subunit clone (2).

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REFERENCES