

The cDNAs coding for the α - and β -subunits of *Xenopus laevis* casein kinase II

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Using a λ gt10 cDNA library obtained from *Xenopus laevis* oocytes and probes derived from the known sequences of the human and *Drosophila* genes, a cDNA coding for the β -subunit of the X. *laevis* casein kinase II was isolated. The coding sequence of this clone determines a polypeptide of 350 amino acids. The X. *laevis* sequence is 98% identical to the human and rat proteins in the first 323 amino acids. Using the polymerase chain reaction to generate a 370-nucleotide-long probe, it was possible to clone and sequence a cDNA of 900 nucleotides that coded for the X. *laevis* β -subunit of casein kinase II. The derived protein sequence is 215 amino acids long and again shows an extraordinary degree of conservation with other species. © 1992.