

Title (en)
RECOMBINANT THYROTROPIN RECEPTOR

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Application
EP 91904350 A 19901219

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Abstract (en)
[origin: WO9109137A1] Functionally-active, human thyrotropin receptor has been expressed in non-thyroidal eukaryotic cells. A human thyroid cDNA library was screened with two synthetic oligonucleotides based on the reported amino acid sequence of the 3rd and 4th transmembrane domains of a putative human thyrotropin receptor and related receptors. The nucleotide sequence of a 4 kb clone revealed an open reading frame of 764 amino acids (86,816 Daltons) with a putative signal peptide, seven transmembrane domains, five potential glycosylation sites, and a very short intracytoplasmic region. Homology with the extracellular domain of the pig LH/CG receptor was only 33 %. Chinese hamster ovary cells stably transfected with this cDNA in an expression vector generated a functional receptor, able to activate adenylate cyclase, specifically in response to thyrotropin stimulation.

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C12Q 1/00; C12Q 1/68; G01N 33/53

IPC 8 full level
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• See references of WO 9109137A1

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