

Chinese hamster serotonin (5-HT) type 2 receptor cDNA sequence

Jean-Claude Chambard, Ellen Van Obberghen-Schilling*, Richard J. Haslam¹, Valérie Vouret and Jacques Pouyssegur

Centre de Biochimie, CNRS, Parc Valrose, 06034 Nice Cédex, France and ¹Department of Pathology, McMaster University, Hamilton, Ontario L8N 3Z5, Canada

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We report the nucleotide sequence corresponding to a Chinese hamster 5-HT₂ receptor, that belongs to the family of structurally-related receptors coupled to effectors via GTP-binding proteins (1, 2). Chinese hamster 5-HT₂ receptor cDNA clones were isolated from a Chinese hamster lung fibroblast (CCL39 line, ATCC) library constructed in the bacteriophage λZAP (Stratagene). A ³²P-labeled SacI-EcoRI restriction fragment (~ 1.6 kb) of rat 5-HT₂ receptor cDNA (3) was used as a probe. In the initial screening four positive clones were obtained; one of which contained a 3.5 kb insert that was sequenced following phagemid excision, using the T7 Sequencing Kit (Pharmacia) and (³⁵S)dATPαS (Amersham). The 3554 bp sequence has an open reading frame of 1413 bp that encodes a protein of 471 amino acids with a sequence very similar to that reported for the rat 5-HT₂ receptor by Julius *et al.* (4) (deduced by reconstructing overlapping genomic and cDNA clones). Both sequences differ in the amino-terminal region from the rat sequence deduced by Pritchett *et al.* (3). Our hamster sequence and the rat 5-HT₂ receptor sequences reported in (4) display 94% overall amino

acid sequence identity, whereas 98% of the residues in the seven putative membrane-spanning domains are conserved.

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* To whom correspondence should be addressed