

Nucleotide sequence of a human cannabinoid receptor cDNA

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We described previously the cloning of putative G protein-coupled receptor by selective amplification using the polymerase chain reaction and degenerate primers corresponding to conserved regions of known receptors (1). This approach led to the cloning of the TSH receptor (2). Amongst the other characterized clones, HGMP08 appeared as preferentially expressed in the brain. The full coding region was isolated by screening a human brain stem library constructed in lambda gt11. Sequencing on both strands was performed after subcloning in M13mp derivatives. This clone was identified as a human cannabinoid receptor clone, based on its high similarity with the rat cannabinoid receptor cDNA

published recently (3). Human and rat sequences are 90% identical in terms of nucleotides and 98% in terms of amino acids. Complete functional characterization is now under investigation.

REFERENCES

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-148                               GGGGACTACGGAGAGCTCTGCAGGGAGCCGAGGCCCCCGCCGGGCCAAGGGAGCTTC
-90  TGTCCTCGAGGACCAGGGGATGCGAAGGGATTGCCCCCTGTGGGTCACTTTCTCAGTCATTTTGTAGCTCAGCCTAATCAAGACTGAGGTT
  1  ATGAAGTCGATCCTAGATGGCCTTGCGATACCACCTTCCGACCATCACCCTGACCTCCTGTACGTGGGCTCAAATGACATTCAGTAC
 91  GAAGACATCAAAGGTGACATGGCATCAAATTAGGGTACTTCCCAGCAAATTCCTTTAACTTCTTTAGGGGAAGTCCCTTCCAAGAG
181  AAGATGACTGCGGGAGACAACCCAGCTAGTCCCAGCAGACCAGGTGAACATTACAGAAATTTACAACAAGTCTCTCTCGTCTTCAAG
271  GAGAATGAGGAGAACATCCAGTGTGGGGAAGTTCATGGACATAGAGTGTTCATGGTCCGAACCCAGCCAGCAGCTGGCCATTGCA
361  GTCCTGTCCCTCAGCTGGGCACCTTACGGTCCGAGAACTCCTGGTGTGTGCGTCATCTCCACTCCCGCAGCCTCCGCTGCAGG
451  CCTTCTACCCTTATCGGCAGCCTGGCGGTGGCAGACCTCCTGGGGAGTGTATTTTGTCTACAGCTTCACTGACTTCCACGTGTT
541  CACCGCAAAGATAGCCGCAACGTGTTTCTGTCAAAGTGGTGGGTCACGGCCTCCTTCACTGCCTCCGTGGGCAGCCTGTCTCACA
631  GCCATCGACAGGTACATATCCATTCACAGGCCCTGGCCTATAAGAGGATTGTACCAGGCCAAGCCGTGGTGGCGTTTTGCTGATG
721  TGGACCATAGCCATTGTGATCGCCGTGCTGCTCTCCTGGGCTGGAACGCGAGAAATGCAATCTGTTTGTCTAGACATTTTCCCACAC
811  ATTGATGAAACCTACCTGATGTTCTGGATCGGGTACCAGCGTACTGCTTCTGTTTCATCGTGTATGCGTACATGTATATCTCTGGAAG
901  GCTCACAGCCACGCCGTCGCGATGATTCAGCGTGGCACCAGAAGAGCATCATCCACACGCTGAGGATGGGAAGGTACAGGTGACC
991  CGGCCAGACCAAGCCCGCATGGACATTAGGTTAGCCAAGACCCTGGTCTGATCCTGGTGGTGTGATCATCTGCTGGGCCCTCTGCTT
1081 GCAATCATGGTGTATGATGCTTTGGGAAGATGAACAAGCTCATTAAAGACGGTGTTCATTCTGCAGTATGCTCTGCCTGCTGAATCC
1171 ACCGTGAACCCCATCATCTATGCTCTGAGGAGTAAGGACCTGCGACACGCTTCCGGAGCATGTTCCCTCTTGTGAAGGACTGCGCAG
1261 CCTCTGGATAACAGCATGGGGACTCGGACTGCCGACAAACACGAAACAATGCAGCCAGTGTTCACAGGGCCGAGAAAGCTGCATC
1351 AAGAGCACGGTCAAGATTGCCAAGGTAACCATGCTGTGTCCACAGACACGCTGCCGAGGCTCTGTGAGCCTGATGCCCTCCCTGGCAGC
1441 ACAGGAAAAGAAATTTTTTTTTTAAGCTCAAATCTAGAAGAGTCTATTGCTCCTTGGTTATTTTTTTAACTTACCATGCTCAATG
1531 AAAAGGTGATTGCCACATGTCATTATTTGCTTAGTTCCGTTGGGCTAATCTCCGGGTTCTGAGGAAACCTTT

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