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Complete coding sequence of human tryptophan hydroxylase

Sylviane Boularand, Michèle C.Darmon, Yves Ganem[1], Jean-Marie Launay[1] and Jacques Mallet*
Laboratorire de Neurobiologie Cellulaire et Moléculaire, C.N.R.S. 91198 Gif-sur-Yvette and [1]Service de Biochimie et Neuroendocrinologie, Hôpital Saint-Louis, 75475 Paris Cedex 10, France

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We report here the isolation of a cDNA clone containing the complete coding sequence of human tryptophan hydroxylase (TPH). A cDNA library from a serotonin secreting carcinoid tumor was constructed in lambda-ZAP vector and was screened with a rat TPH cDNA probe (1). The nucleotide coding sequence of 1,332 bp encodes a protein of 444 amino-acids, as in the rat, with a predicted molecular weight of 50,952 daltons. The figure presents the comparison of the human TPH coding region with that of rat TPH. The identity between these two sequences is 86.8% in nucleotides and 91.2% in amino acids. Interestingly, three putative phosphorylation sites previously identified in rat TPH protein are also conserved in human TPH protein and are located at positions 58, 260 and 443.

REFERENCE

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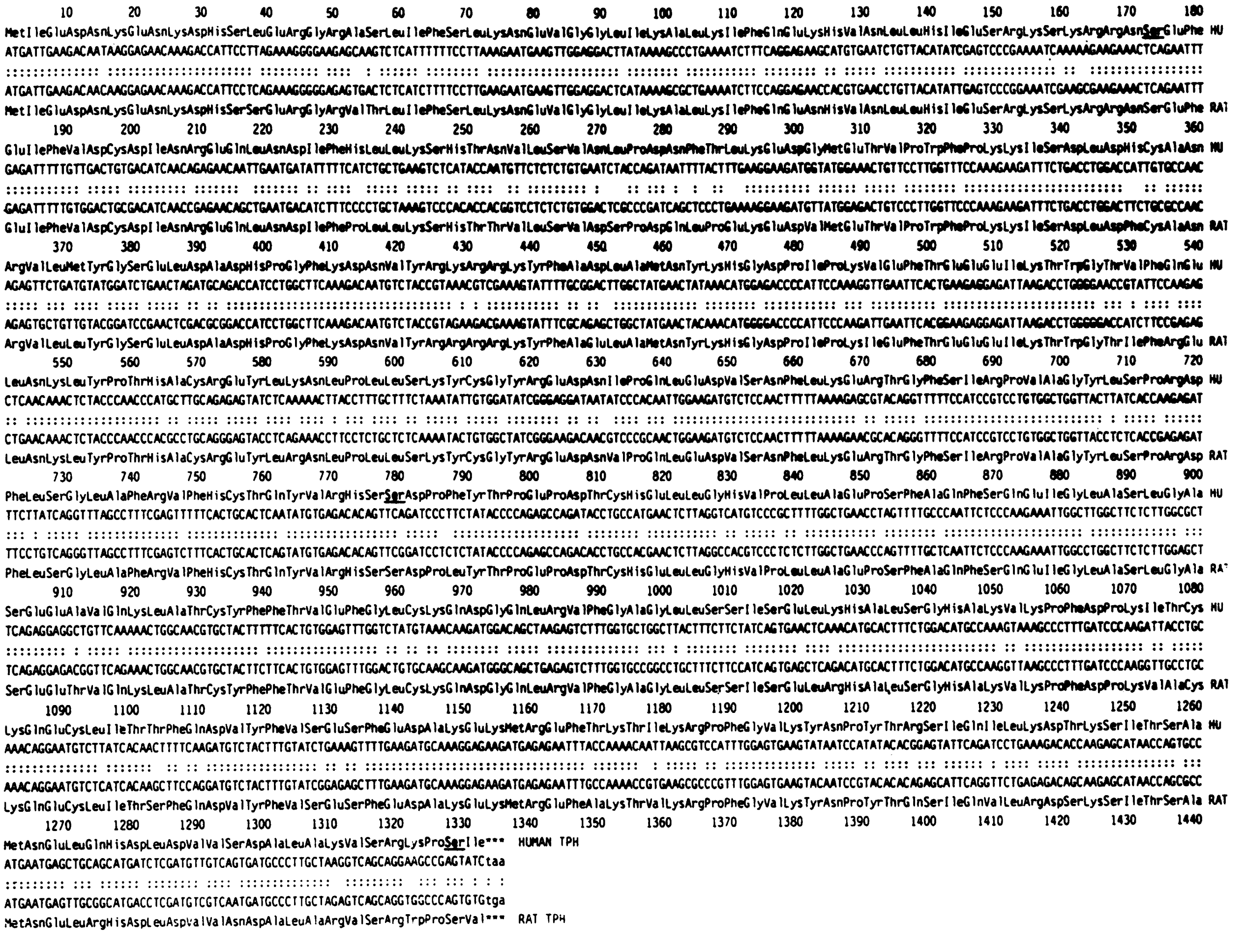

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* To whom correspondence should be addressed