

Special Issue

Molecular Biology of Histamine Systems 2024

Message from the Guest Editor

Histamine is arguably the most pleiotropic transmitter in the human body, and is synthesized from the amino acid histidine via the enzyme, histidine decarboxylase (HDC). The histamine receptors are classic G-protein coupled receptors. The pharmacological heterogeneity displayed by the histamine receptors are thought in part to be a result of alternative splicing which generates a number of possible splice variants, some of which have been shown to be functional and others which appear to be non-functional in terms of ligand binding and signal transduction. mRNA encoding the different isoforms has been shown to be distributed throughout the central nervous system in a region specific manner, but their relevance is yet to be established. Despite the importance of histamine, transcriptional regulation of histamine receptor and HDC gene expression in mammals is still poorly understood. Furthermore, there are significant deficits in our knowledge regarding native histamine signalling pathways. This themed volume will endeavour to extend our understanding of these important issues.

Guest Editor

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