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Nota di contenuto	Preface; The Endocannabinoid System: A Look Back and Ahead; Contents; Endocannabinoids and Their Pharmacological Actions; 1 Introduction; 2 Evidence That Certain Endogenous Compounds Target Cannabinoid Receptors Orthosterically; 2.1 Evidence from Binding Assays; 2.2 Evidence from Two Functional Bioassays; 2.2.1 [35S] GTPgammaS Binding Assay; 2.2.2 Cyclic AMP Assay; 3 Non-Cannabinoid Receptors and Channels Targeted by Endogenous Cannabinoid Receptor Ligands at Submicromolar Concentrations; 3.1 Non-Cannabinoid G Protein-Coupled Receptors; 3.1.1 GPR55; 3.2 Ligand-Gated Ion Channels 3.2.1 5-HT3 Receptors3.2.2 Nicotinic Acetylcholine Receptors; 3.2.3 Glycine Receptors; 3.2.4 Ionotropic Glutamate NMDA Receptors; 3.3 Transient Receptor Potential Channels; 3.3.1 TRPV1; 3.3.2 TRPM8

Channels; 3.4 Voltage-Gated Calcium Channels; 3.4.1 T-Type Cav3 Calcium Channels; 3.5 Potassium Channels; 3.5.1 ATP-Sensitive Inward Rectifier KATP Channels of the 2TM Domain Family; 3.5.2 Voltage-Gated Kv and KCa Channels of the 6TM Domain Family; 4 Allosteric Endocannabinoids; 5 Conclusions; References; Biosynthesis and Fate of Endocannabinoids
1 Endocannabinoids and Endocannabinoid-Like Compounds2 Biosynthesis of the Endocannabinoids; 3 Uptake of the Endocannabinoids: Proposed Mechanisms; 4 Degradation of the Endocannabinoids; 4.1 FAAH and NAAA; 4.2 MGL, ABHD6 and ABHD12; 5 Conclusions; References; Distribution of the Endocannabinoid System in the Central Nervous System; 1 Introduction; 1.1 Overview; 1.2 Cells Expressing Components of the ECS; 1.3 Subcellular Localization of CB1 Cannabinoid Receptors; 2 Retina; 2.1 Receptors; 2.2 Synthetic Enzymes; 2.3 Degradative Enzymes; 3 Cerebral Cortex; 3.1 Neocortex; 3.1.1 Receptors
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6.1 Diencephalon

Sommario/riassunto

There is currently considerable interest in the development of medicines that would enhance endocannabinoid-induced “autoprotection”, for example through inhibition of endocannabinoid metabolizing enzymes or cellular uptake processes or that would oppose endocannabinoid-induced “autoimpairment”. This volume describes the physiology, pathophysiology and pharmacology of the endocannabinoid system and potential strategies for targeting this system in the clinic.