Abstract

Cannabinoid receptors (nomenclature as agreed by the NC-IUPHAR Subcommittee on Cannabinoid Receptors [107]) are activated by endogenous ligands that include N-arachidonylethanolamine (anandamide), N-homo-γ-linolenoylethanolamine, N-docosatetra-7,10,13,16-enoylethanolamine and 2-arachidonoylglycerol. Potency determinations of endogenous agonists at these receptors are complicated by the possibility of differential susceptibility of endogenous ligands to enzymatic conversion [4].

There are currently three licenced cannabinoid medicines each of which contains a compound that can activate CB₁ and CB₂ receptors [104]. Two of these medicines were developed to suppress nausea and vomiting produced by chemotherapy. These are nabilone (Cesamet®), a synthetic CB₁/CB₂ receptor agonist, and synthetic Δ⁹-tetrahydrocannabinol (Marinol®; dronabinol), which can also be used as an appetite stimulant. The third medicine, Sativex®, contains mainly Δ⁹-tetrahydrocannabinol and cannabidiol, both extracted from cannabis, and is used to treat multiple sclerosis and cancer pain.
Contents

This is a citation summary for Cannabinoid receptors in the Guide to Pharmacology database (GtoPdb). It exists purely as an adjunct to the database to facilitate the recognition of citations to and from the database by citation analyzers. Readers will almost certainly want to visit the relevant sections of the database which are given here under database links.

GtoPdb is an expert-driven guide to pharmacological targets and the substances that act on them. GtoPdb is a reference work which is most usefully represented as an on-line database. As in any publication this work should be appropriately cited, and the papers it cites should also be recognized. This document provides a citation for the relevant parts of the database, and also provides a reference list for the research cited by those parts.

Please note that the database version for the citations given in GtoPdb are to the most recent preceding version in which the family or its subfamilies and targets were substantially changed. The links below are to the current version. If you need to consult the cited version, rather than the most recent version, please contact the GtoPdb curators.

Database links

Cannabinoid receptors
http://www.guidetopharmacology.org/GRAC/FamilyDisplayForward?familyId=13

Introduction to Cannabinoid receptors
http://www.guidetopharmacology.org/GRAC/FamilyIntroductionForward?familyId=13

Receptors

CB₁ receptor
http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=56

CB₂ receptor
http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=57

References


44. Gebremedhin D, Lange AR, Campbell WB, Hillard CJ and Harder DR. (1999) Cannabinoid CB1 receptor of cat cerebral arterial muscle functions to inhibit L-type Ca2+ channel current. *Am. J. Physiol.* **276:** H2085-93 [PMID:10362691]


80. Laprairie RB, Kulkarni AR, Kulkarni PM, Hurst DP, Lynch D, Reggio PH, Janero DR, Pertwee RG,
Stevenson LA and Kelly ME et al. (2016) Mapping Cannabinoid 1 Receptor Allosteric Site(s): Critical Molecular Determinant and Signaling Profile of GAT100, a Novel, Potent, and Irreversibly Binding Probe. ACS Chem Neurosci 7: 776-98 [PMID:27046127]


piperidinyl)-1H-pyrazole-3-carboxamide], a new potent and selective antagonist of the CB1 cannabinoid receptor: biochemical and pharmacological characterization. J. Pharmacol. Exp. Ther. 310: 905-14 [PMID:15131245]


136. Sim LJ, Hampson RE, Deadwyler SA and Childers SR. (1996) Effects of chronic treatment with delta9-


