Goat Anti-Cannabinoid Receptor 1 Antibody
Peptide-affinity purified goat antibody
Catalog #: AF1185a

**Specification**

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**Gene ID** 1268

**Other Names**
Cannabinoid receptor 1, CB-R, CB1, CANN6, CNR1, CNR

**Format**
0.5 mg IgG/ml in Tris saline (20mM Tris pH 7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**
Goat Anti-Cannabinoid Receptor 1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-Cannabinoid Receptor 1 Antibody - Background**

This gene encodes one of two cannabinoid receptors. The cannabinoids, principally delta-9-tetrahydrocannabinol and synthetic analogs, are psychoactive ingredients of marijuana. The cannabinoid receptors are members of the guanine-nucleotide-binding protein (G-protein) coupled receptor family, which inhibit adenylate cyclase activity in a dose-dependent, stereoselective and pertussis toxin-sensitive manner. The two receptors have been found to be involved in the cannabinoid-induced CNS effects (including alterations in mood and cognition) experienced by users of marijuana. Multiple transcript variants encoding two different protein isoforms have been described for this gene.

**Goat Anti-Cannabinoid Receptor 1 Antibody - References**


Variation at the NFATC2 Locus Increases the Risk of Thiazolidinedione-Induced Edema in the Diabetes REDuction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID
adipocytes and reduces LRP2-mediated leptin clearance in the kidney, hence participating in hyperleptinemia. In adipose tissue, CNR1 signaling leads to increased expression of SREBF1, ACACA and FASN genes (By similarity). In the liver, activation by endocannabinoids leads to increased de novo lipogenesis and reduced fatty acid catabolism, associated with increased expression of SREBF1/SREBP-1, GCK, ACACA, ACACB and FASN genes. May also affect de novo cholesterol synthesis and HDL-cholesteryl ether uptake. Peripherally modulates energy metabolism (By similarity). In high carbohydrate diet-induced obesity, may decrease the expression of mitochondrial dehydrogenase/DLD in striated muscles, as well as that of selected glucose/ pyruvate metabolic enzymes, hence affecting energy expenditure through mitochondrial metabolism (By similarity). In response to cannabinoid anandamide, elicits a proinflammatory response in macrophages, which involves NLRP3 inflammasome activation and IL1B and IL18 secretion (By similarity). In macrophages infiltrating pancreatic islets, this process may participate in the progression of type-2 diabetes and associated loss of pancreatic beta-cells (PubMed:<a href="http://www.uniprot.org/citations/23955712" target="_blank">23955712</a>).

Cellular Location
Cell membrane; Multi-pass membrane protein. Membrane raft. Mitochondrion outer membrane
{ECO:0000250|UniProtKB:P47746}. Cell projection, axon
{ECO:0000250|UniProtKB:P20272}
Note=Unexpectedly, in the mitochondria, the C-terminus is located in the mitochondrial intermembrane space, a compartment topologically considered as extracellular. In canonical seven-transmembrane G-protein coupled receptors, the C-terminus is cytosolic (By similarity). Found on presynaptic axon terminals in some GABAergic neurons in the somatosensory cortex (By similarity)
{ECO:0000250|UniProtKB:P20272, ECO:0000250|UniProtKB:P47746}

Tissue Location
Widely expressed, with highest levels in fetal and adult brain. Expression levels of isoform 2 and isoform 3 are much lower than those of isoform 1.

Goat Anti-Cannabinoid Receptor 1 Antibody - Protocols
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
• Immunofluorescence
• Immunoprecipitation
• Flow Cytometry
• Cell Culture

Goat Anti-Cannabinoid Receptor 1 Antibody - Citations

• Cannabinoid Receptors Are Overexpressed in CLL but of Limited Potential for Therapeutic Exploitation.