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CB2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10674b

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P34972
Other Accession	NP_001832.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	39681
Antigen Region	329-356

Additional Information

Gene ID	1269
Other Names	Cannabinoid receptor 2, CB-2, CB2, hCB2, CX5, CNR2, CB2A, CB2B
Target/Specificity	This CB2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 329-356 amino acids from the C-terminal region of human CB2.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CB2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CNR2
Synonyms	CB2A, CB2B
Function	Heterotrimeric G protein-coupled receptor for endocannabinoid 2-arachidonoylglycerol mediating inhibition of adenylate cyclase. May

	function in inflammatory response, nociceptive transmission and bone homeostasis.
Cellular Location	Cell membrane; Multi-pass membrane protein. Cell projection, dendrite. Perikaryon Note=Localizes to apical dendrite of pyramidal neurons.
Tissue Location	Preferentially expressed in cells of the immune system with higher expression in B-cells and NK cells (at protein level). Expressed in skin in suprabasal layers and hair follicles (at protein level). Highly expressed in tonsil and to a lower extent in spleen, peripheral blood mononuclear cells, and thymus. PubMed:14657172 could not detect expression in normal brain. Expressed in brain by perivascular microglial cells and dorsal root ganglion sensory neurons (at protein level). Two isoforms are produced by alternative promoter usage and differ only in the 5' UTR: isoform CB2A is observed predominantly in testis with some expression in brain, while isoform CB2B is predominant in spleen and leukocytes

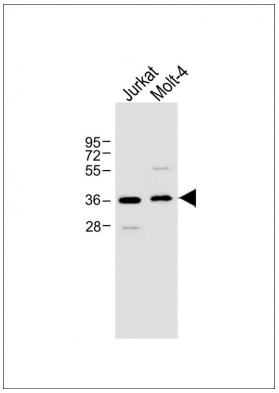
Background

The cannabinoid delta-9-tetrahydrocannabinol is the principal psychoactive ingredient of marijuana. The proteins encoded by this gene and the cannabinoid receptor 1 (brain) (CNR1) gene have the characteristics of a guanine nucleotide-binding protein (G-protein)-coupled receptor for cannabinoids. They inhibit adenylate cyclase activity in a dose-dependent, stereoselective, and pertussis toxin-sensitive manner. These proteins have been found to be involved in the cannabinoid-induced CNS effects (including alterations in mood and cognition) experienced by users of marijuana. The cannabinoid receptors are members of family 1 of the G-protein-coupled receptors.

References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Larrinaga, G., et al. Histol. Histopathol. 25(9):1133-1138(2010)
Pinheiro, A.P., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 153B (5), 1070-1080 (2010) :
Taylor, A.H., et al. Histochem. Cell Biol. 133(5):557-565(2010)
De Jesus, M.L., et al. Neurochem. Int. 56 (6-7), 829-833 (2010) :

Images



All lanes : Anti-CB2 Antibody (C-term) at 1:1000 dilution Lane 1: Jurkat whole cell lysate Lane 2: Molt-4 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Observed band size : 36 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Citations

- Effects of Δ(9)-tetrahydrocannabinol (THC) on human amniotic epithelial cell proliferation and migration.
- N-stearoyl-l-Tyrosine inhibits the cell senescence and apoptosis induced by H2O2 in HEK293/Tau cells via the CB2 receptor.

- β-Caryophyllene attenuates palmitate-induced lipid accumulation through AMPK signaling by activating CB2 receptor in human HepG2 hepatocytes.