

CB1 Polyclonal Antibody

Catalog No: YT0687

Reactivity: Human; Mouse; Rat; Monkey

Applications: WB;IHC;IF;ELISA

Target: CB1

Fields: >>Rap1 signaling pathway;>>Neuroactive ligand-receptor

interaction;>>Thermogenesis;>>Retrograde endocannabinoid signaling

Gene Name: CNR1

Protein Name: Cannabinoid receptor 1

P21554

P47746

Human Gene Id: 1268

Human Swiss Prot

No:

Mouse Gene ld: 12801

Mouse Swiss Prot

No:

Rat Gene Id: 25248

Rat Swiss Prot No: P20272

Immunogen : The antiserum was produced against synthesized peptide derived from human

CNR1. AA range:151-200

Specificity: CB1 Polyclonal Antibody detects endogenous levels of CB1 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not

yet tested in other applications.



Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 53kD

Cell Pathway: Neuroactive ligand-receptor interaction;

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. [provided by

RefSeq, May 2009],

Function: function:Involved in cannabinoid-induced CNS effects. Acts by inhibiting

adenylate cyclase. Could be a receptor for anandamide. Inhibits L-type Ca(2+)

channel current. Isoform 2 and isoform 3 have altered ligand binding.,similarity:Belongs to the G-protein coupled receptor 1

family., subunit: Interacts (via C-terminus) with CNRIP1., tissue specificity: Widely

expressed.,

Subcellular Cell membrane; Multi-pass membrane protein. Membrane raft. Mitochondrion outer membrane. Cell projection, axon. Cell junction, synapse, presynapse.

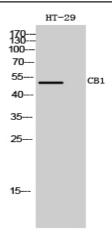
Unexpectedly, in the mitochondria, the C-terminus is located in the mitochondrial intermembrane space, a compartment topologically considered as extracellular. In canonical seven-transmembrane G-protein coupled receptors, the C-terminus is cytosolic (By similarity). Found on presynaptic axon terminals in some GABAergic

neurons in the somatosensory cortex (By similarity). .

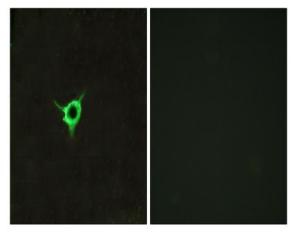
Expression: Widely expressed, with highest levels in fetal and adult brain. Expression levels

of isoform 2 and isoform 3 are much lower than those of isoform 1.

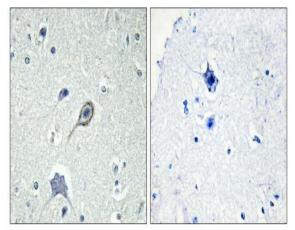
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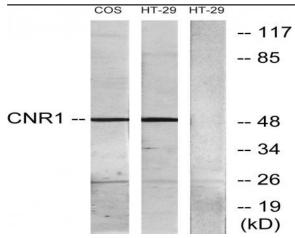
Western Blot analysis of HT-29 cells using CB1 Polyclonal Antibody



Immunofluorescence analysis of LOVO cells, using CNR1 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using CNR1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HT-29 and COS7 cells, using CNR1 Antibody. The lane on the right is blocked with the synthesized peptide.