

PRODUCT INFORMATION



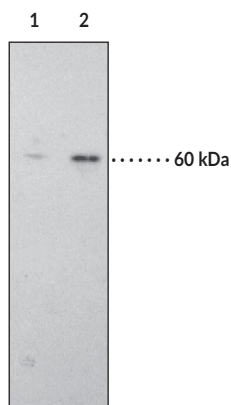
CB₁ Receptor Polyclonal Antibody

Item No. 101500

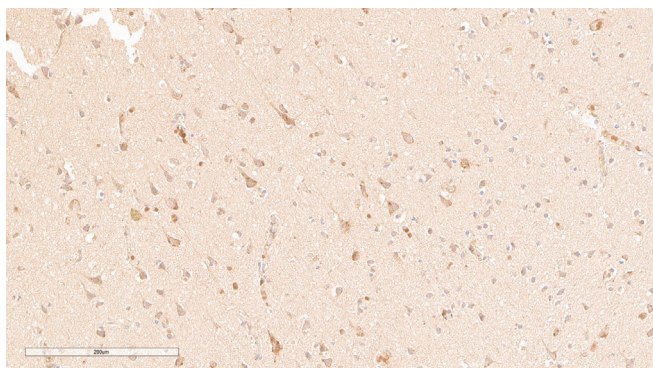
Overview and Properties

Contents:	This vial contains 500 µl of peptide affinity-purified polyclonal antibody.
Synonyms:	Cannabinoid Receptor 1, CNR ₁
Immunogen:	Synthetic peptide from the N-terminal extracellular region of human CB ₁ receptor
Species Reactivity:	(+) Human, mouse, and rat; other species not tested
Uniprot No.:	P21554
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	PBS, pH 7.2, with 50% glycerol and 0.02% sodium azide
Host:	Rabbit
Applications:	Immunohistochemistry (IHC) and Western blot (WB); the recommended starting dilution is 1:120 for IHC and 1:200 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Images



Lane 1: Rat brain homogenate (50 µg)
Lane 2: Rat brain homogenate (100 µg)



Immunohistochemistry analysis of formalin-fixed, paraffin-embedded (FFPE) human brain tissue after heat induced antigen retrieval in pH 6.0 citrate buffer. After incubation with CB₁ Receptor Polyclonal Antibody (Item No. 101500) at a 1:120 dilution, slides were incubated with biotinylated secondary antibody, followed by alkaline phosphatase-streptavidin and chromogen (DAB).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

The CB₁ receptor and the splice variant CB1a are localized mainly in the brain.¹⁻³ The CB₁ receptor is a G-protein coupled receptor that binds the active component of cannabis, Δ⁹-tetrahydrocannabinol. Human and rat CB₁ receptors exhibit 97.3% homology at the amino acid level over the complete protein, and 100% homology within the peptide sequence used to make this antibody.^{1,4} This peptide exhibits no homology with the CB₂ receptor. Based on the amino acid sequence, the CB₁ receptor has a molecular weight of approximately 52,800.¹ The CB₁ receptor and the splice variant CB1a are localized mainly in the brain, whereas the CB₂ receptor is localized predominantly in peripheral tissues, including the spleen and hemopoietic cells.¹⁻⁴ Cayman's CB₁ Receptor Polyclonal Antibody can be used for Western blot and immunohistochemistry applications. The antibody recognizes the N-terminal extracellular region of the CB₁ receptor at 40 kDa from human samples.

References

1. Matsuda, L.A., Lolait, S.J., Brownstein, M.J., *et al.* Structure of a cannabinoid receptor and functional expression of the cloned cDNA. *Nature* **346(6284)**, 561-564 (1990).
2. Shire, D., Carillon, C., Kaghad, M., *et al.* An amino-terminal variant of the central cannabinoid receptor resulting from alternative splicing. *J. Biol. Chem.* **270(8)**, 3726-3731 (1995).
3. Munro, S., Thomas, K.L., and Abu-Shaar, M. Molecular characterization of a peripheral receptor for cannabinoids. *Nature* **365(6441)**, 61-65 (1993).
4. Gérard, C.M., Mollereau, C., Vassart, G., *et al.* Molecular cloning of a human cannabinoid receptor which is also expressed in testis. *Biochem. J.* **279(Pt 1)**, 129-134 (1991).

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