

Product Information



CB₁ Receptor (C-Term) Polyclonal Antibody

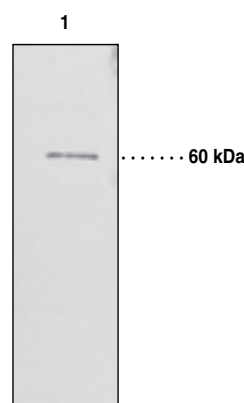
Item No. 10006590 • Lot No. XXXXX

- Synonym:** Cannabinoid Receptor 1
- Contents:** This vial contains *lot specific* µg peptide affinity-purified IgG in *lot specific* µl TBS, pH 7.4, containing 50% glycerol, 0.5 mg/ml BSA, and 0.02% sodium azide
- Host:** Rabbit
- Antigen:** Human CB₁ receptor amino acids 461-472 (MSVSTDTSAEAL). This antigen is identical to the corresponding sequence in mouse, rat, canine, and bovine species.
- Cross Reactivity:** Human, rat, and mouse CB₁ receptor; other species not tested
- Stability:** ≥1 year at -20°C
- Applications:** For detection of CB₁ receptor by western blot (WB) and immunohistochemistry (IHC). Recommended starting dilution for WB is *lot specific* µg/ml and IHC (paraffin-embedded sections) is 1:50 (4 µg/ml). Other applications were not attempted and therefore optimal working dilutions should be determined empirically.

The CB₁ receptor is a G-protein coupled receptor that binds the active component of cannabis, Δ⁹-tetrahydrocannabinol. This antibody has been raised against the C-terminal (amino acids 461-472) intracellular region of the human CB₁ receptor.^{1,2} 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.^{3,4} This peptide exhibits no homology with the CB₂ receptor. Based on the amino acid sequence, the CB₁ receptor has a molecular weight of approximately 52,800.⁴ The CB₁ receptor and the splice variant CB_{1a} are localized mainly in the brain, whereas the CB₂ receptor is localized predominantly in peripheral tissues, including the spleen and hemopoietic cells.³⁻⁶

References

- Howlett, A.C., Song, C., Berglund, B.A., *et al.* Characterization of CB₁ cannabinoid receptors using receptor peptide fragments and site-directed antibodies. *Mol. Pharmacol.* **53**, 504-510 (1998).
- McIntosh, H.H., Song, C., and Howlett, A.C. CB₁ cannabinoid receptor: Cellular regulation and distribution in N18TG2 neuroblastoma cells. *Mol. Brain Res.* **53**, 163-173 (1998).
- 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**, 129-134 (1991).
- 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**, 561-564 (1990).
- 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**, 3726-3731 (1995).
- Shire, D., Calandra, B., Rinaldi-Carmona, M., *et al.* Molecular cloning, expression and function of the murine CB₂ peripheral cannabinoid receptor. *Biochim. Biophys. Acta* **1307**, 132-136 (1996).



Lane 1: Human cerebellum (30 µg)

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/10006590

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

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