

Product Information



CB₂ Receptor Blocking Peptide Catalog No. 301550

The CB₁ and CB₂ receptors are G-protein coupled receptors that bind the active ingredient of cannabis, D9-THC, as well as anandamide, which is an endogenous CB receptor ligand. Cayman Chemical's CB₂ receptor polyclonal antiserum has been raised against a sequence between the N-terminus and the first transmembrane domain of the protein of the human CB₂ receptor.¹ Conserved amino acids between the CB₁ and CB₂ receptors in this region are minimal thereby preventing cross-reactivity of this antibody with the CB₁ receptor.² Human and murine CB₂ receptors exhibit 82% homology at the amino acid level over the complete protein.² The CB₂ receptor is localized predominantly in peripheral tissues, including the spleen and hemopoietic cells.¹

Laboratory Procedures

This vial contains 200 µg of lyophilized peptide derived from the human CB₂ receptor sequence. This peptide was used as an antigen for production of Cayman's CB₂ Receptor Polyclonal Antibody (Catalog No. 101550) and can be used in conjunction with this antibody to block antibody/protein complex formation during immunohistochemical analysis for this protein.

Reconstitute the lyophilized peptide with 200 µl of PBS or distilled water. Store this peptide solution at -20°C. It will be stable for at least two years. To block antibody/protein complex formation, the following procedure is recommended.

1. Mix the CB₂ Receptor Polyclonal Antibody (Catalog No. 101550) and blocking peptide together in a 1:1 (v/v) ratio in a microfuge tube. For example, mix 20 µl of antibody and 20 µl of peptide.*
2. Incubate for 1 hour at room temperature with occasional mixing prior to further dilution and application of the mixture to the immunoblot.
3. Dilute the mixture to the final working antibody concentration and apply to the slide or membrane as usual.

*This is a recommended mixture. The minimum amount of peptide needed for complete blocking has not been precisely determined and may vary depending on the sample being analyzed. The amount of peptide required may need to be increased if sufficient blocking does not occur.

References

1. Munro, S., Thomas, K.L., and Abu-Shaar, M. Molecular characterization of a peripheral receptor for cannabinoids. *Nature* **365**, 61-65 (1993).
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**, 3726-3731 (1995).

Related Product

CB₂ Receptor Polyclonal Antibody - Cat. No. 101550

WARNING: THIS PRODUCT IS NOT INTENDED OR APPROVED FOR HUMAN OR VETERINARY USE. USE OF THIS PRODUCT FOR HUMAN OR ANIMAL TESTING IS EXTREMELY HAZARDOUS AND MAY RESULT IN DISEASE, SEVERE INJURY, OR DEATH.

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 under separate cover to the MSDS supervisor at your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery.**

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees. Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a **refund** of the purchase price, or at Cayman's option, the **replacement**, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our **Warranty and Limitation of Remedy located on our website and in our catalog.**

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