**BACKGROUND**

The cannabinoid receptors (CB1 and CB2) are G protein-coupled receptors that inhibit adenylyl cyclase activity in response to psychoactive cannabinoids. CB1 is expressed in brain tissue and, in low levels, in testis. CB2 has been shown to be expressed only by cells of the immune system, specifically by HL-60 cells. The cannabinoid receptors mediate most of the cannabinoid-induced responses in a dose-dependent, stereoselective manner. Phosphorylation of CB1 on serine 316 leads to a disruption of CB1-mediated inhibition of calcium channels and activation of potassium currents. This response system is thought to be involved in specific brain functions, such as nociception, control of movement, memory, and neuroendocrine regulation as well as having a possible role in brain development. In addition, CB1 may mediate the addictive behavior involved with the use of psychoactive cannabinoids, such as THC in marijuana.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: CNR1 (human) mapping to 6q15; Cnr1 (mouse) mapping to 4 A5.

**SOURCE**

CB1 (C-11) is a mouse monoclonal antibody raised against amino acids 1-150 of CB1 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG, kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

CB1 (C-11) is available conjugated to agarose (sc-518035 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-518035 HRP), 200 µg/ml, for WB, IHC(+) and ELISA; to either phycoerythrin (sc-518035 PE), fluorescein (sc-518035 FITC), Alexa Fluor® 488 (sc-518035 AF488), Alexa Fluor® 546 (sc-518035 AF546), Alexa Fluor® 594 (sc-518035 AF594) or Alexa Fluor® 647 (sc-518035 AF647), 200 µg/ml, for WB (RGB), IF, IHC(+) and FCM; and to either Alexa Fluor® 680 (sc-518035 AF680) or Alexa Fluor® 790 (sc-518035 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**APPLICATIONS**

CB1 (C-11) is recommended for detection of CB1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CB1 siRNA (h): sc-39910, CB1 siRNA (m): sc-39911, CB1 shRNA Plasmid (h): sc-39910-SH, CB1 shRNA Plasmid (m): sc-39911-SH, CB1 shRNA (h) Lentiviral Particles: sc-39910-V and CB1 shRNA (m) Lentiviral Particles: sc-39911-V. Molecular Weight: 63/54 kDa.

Positive Controls: Neuro-2A whole cell lysate: sc-364185, RAW 264.7 whole cell lysate: sc-2211 or THP-1 cell lysate: sc-2238.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1. Western Blotting: use m-IgG (sc-24941 or UltraCruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2. Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).


**DATA**

CB1 (C-11): sc-518035, Western blot analysis of CB1 expression in RAW 264.7 (A), Neuro-2A (B), F9 (C) and c4 (D) whole cell lysates and mouse cerebellum tissue extract (E).

CB1 (C-11): sc-518035, Western blot analysis of CB1 expression in HeLa (A), HEL 92127 (B) and THP-1 (C) whole cell lysates and human cerebellum tissue extract (D).

**SELECT PRODUCT CITATIONS**


**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.