# SANTA CRUZ BIOTECHNOLOGY, INC.

# CNRIP1 (Y-12): sc-137401



# BACKGROUND

The cannabinoid receptors (CB1 and CB2) are G protein-coupled receptors that inhibit adenylate 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. CNRIP1 (cannabinoid receptor interacting protein 1), also known as CRIP1 (CB1 cannabinoid receptor-interacting protein 1), is a 164 amino acid protein and G protein-coupled receptor that belongs to the CNRIP family. Involved in appetite, synaptic plasticity, neuroprotection and analgesia, CNRIP1 exists as two alternatively spliced isoforms which have been designated CNRIP1 isoforms 1 and 2, or CRIP1a and CRIP1b, respectively. CNRIP1 isoform 1 is known to interact with CB1 but not CB2, thereby suppressing the inhibition of voltage-gated calcium channels. CNRIP1 isoform 2 does not have the same effect.

# CHROMOSOMAL LOCATION

Genetic locus: CNRIP1 (human) mapping to 2p14; Cnrip1 (mouse) mapping to 11 A2.

## SOURCE

CNRIP1 (Y-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of CNRIP1 of human origin.

### PRODUCT

Each vial contains 100  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-137401 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **RESEARCH USE**

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

#### **APPLICATIONS**

CNRIP1 (Y-12) is recommended for detection of CNRIP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

CNRIP1 (Y-12) is also recommended for detection of CNRIP1 in additional species, including porcine.

Suitable for use as control antibody for CNRIP1 siRNA (h): sc-94765, CNRIP1 siRNA (m): sc-142443, CNRIP1 shRNA Plasmid (h): sc-94765-SH, CNRIP1 shRNA Plasmid (m): sc-142443-SH, CNRIP1 shRNA (h) Lentiviral Particles: sc-94765-V and CNRIP1 shRNA (m) Lentiviral Particles: sc-142443-V.

Molecular Weight of CNRIP1: 18 kDa.

Positive Controls: mouse brain extract: sc-2253, mouse cerebellum extract: sc-2403 or IMR-32 cell lysate: sc-2409.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

#### DATA



CNRIP1 (Y-12): sc-137401. Western blot analysis of CNRIP1 expression in IMR-32 (A) and SH-SY5Y (B) whole cell lysates and mouse brain (C) and mouse cerebellum (D) tissue extracts.

#### **STORAGE**

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

# PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

# MONOS Satisfation Guaranteed

Try **CNRIP1 (H-1): sc-515504**, our highly recommended monoclonal alternative to CNRIP1 (Y-12).