SANTA CRUZ BIOTECHNOLOGY, INC.

SREB1 (C-13): sc-66403

BACKGROUND

G protein-coupled receptors (GPRs) are a protein family of transmembrane receptors that transmit an extracellular signal (ligand binding) into an intracellular signal (G protein activation). GPR signaling is an evolutionarily ancient mechanism used by all eukaryotes to sense environmental stimuli and mediate cell-cell communication. GPRs all have seven membrane-spanning domains and extracellular loops that can be glycosylated. These extracellular loops also contain two highly conserved cysteine residues which create disulfide bonds to stabilize the receptor structure. SREB1 (super conserved receptor expressed in brain 1), also known as GPR27 (G protein-coupled receptor 27), belongs to the SREB subfamily of GPRs that are expressed in the central nervous system. SREB1 may function as an amine-like GPR.

REFERENCES

1. O'Dowd, B.F., et al. 1998. Discovery of three novel G protein-coupled receptor genes. Genomics 47: 310-313.
2. Matsumoto, M., et al. 2000. An evolutionarily conserved G protein-coupled receptor family, SREB, expressed in the central nervous system. Biochem. Biophys. Res. Commun. 272: 576-582.
3. Hellebrand, S., et al. 2001. GPR85, a novel member of the G protein-coupled receptor family, prominently expressed in the developing mouse cerebral cortex. Brain Res. Gene Expr. Patterns 1: 13-16.

CHROMOSOMAL LOCATION

Genetic locus: GPR27 (human) mapping to 3p13; Gpr27 (mouse) mapping to 6 D3.

SOURCE

SREB1 (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of SREB1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-66403 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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

APPLICATIONS

SREB1 (C-13) is recommended for detection of SREB1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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 SREB1 siRNA (h): sc-63064, SREB1 siRNA (m): sc-63065, SREB1 shRNA Plasmid (h): sc-63064-SH, SREB1 shRNA (h) Lentiviral Particles: sc-63064-V and SREB1 shRNA (m) Lentiviral Particles: sc-63065-V.

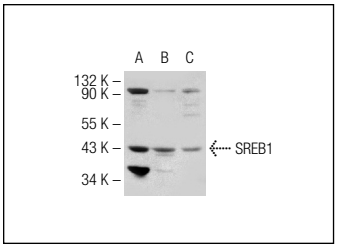
Molecular Weight of SREB1: 40 kDa.

Positve Controls: T24 cell lysate: sc-2292, MIA PaCa-2 cell lysate: sc-2285 or mouse testis extract: sc-2405.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



SREB1 (C-13): sc-66403. Western blot analysis of SREB1 expression in T24 (**A**), MIA PaCa-2 (**B**) and AMI-193 (**C**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Shen, K.P., et al. 2009. Eugenosedin-A prevents hyperglycaemia, hyperlipidaemia and lipid peroxidation in C57BL/6J mice fed a high-fat diet. J. Pharm. Pharmacol. 61: 517-525.