# SANTA CRUZ BIOTECHNOLOGY, INC.

# SREB3 (K-14): sc-47424



## BACKGROUND

G protein-coupled receptors (GPRs or GPCRs), are members of the largest protein family and play a role in many different stimulus-response pathways. G protein-coupled receptors mediate extracellular signals into intracellular signals (G protein activation). They respond to a great variety of signaling molecules, including hormones, neurotransmitters and other proteins and peptides. GPR173 is also known as super conserved receptor expressed in brain 3 (SREB3). It is an orphan receptor that is expressed primarily in brain and ovary tissues.

#### REFERENCES

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- Hellebrand, S., Schaller, H.C. and Wittenberger, T. 2000. The brain-specific G protein-coupled receptor GPR85 with identical protein sequence in man and mouse maps to human chromosome 7q31. Biochim. Biophys. Acta 1493: 269-272.
- Matsumoto, M., Saito, T., Takasaki, J., Kamohara, M., Sugimoto, T., Kobayashi, M., Tadokoro, M., Matsumoto, S., Ohishi, T. and Furuichi, K. 2000. An evolutionarily conserved G protein-coupled receptor family, SREB, expressed in the central nervous system. Biochem. Biophys. Res. Commun. 272: 576-582.
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- Matsumoto, M., Beltaifa, S., Weickert, C.S., Herman, M.M., Hyde, T.M., Saunders, R.C., Lipska, B.K., Weinberger, D.R. and Kleinman, J.E. 2005. A conserved mRNA expression profile of SREB2 (GPR85) in adult human, monkey, and rat forebrain. Brain Res. Mol. Brain Res. 138: 58-69.

#### CHROMOSOMAL LOCATION

Genetic locus: GPR173 (human) mapping to Xp11.22; Gpr173 (mouse) mapping to X F3.

### SOURCE

SREB3 (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SREB3 of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-47424 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### APPLICATIONS

SREB3 (K-14) is recommended for detection of SREB3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

SREB3 (K-14) is also recommended for detection of SREB3 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for SREB3 siRNA (h): sc-61614, SREB3 siRNA (m): sc-61615, SREB3 shRNA Plasmid (h): sc-61614-SH, SREB3 shRNA Plasmid (m): sc-61615-SH, SREB3 shRNA (h) Lentiviral Particles: sc-61614-V and SREB3 shRNA (m) Lentiviral Particles: sc-61615-V.

Molecular Weight of SREB3: 43.4 kDa.

#### **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) Immunofluo-rescence: 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.

#### **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.