

SREB3 (C-8): sc-518232

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

1. O'Dowd, B.F., Nguyen, T., Marchese, A., Cheng, R., Lynch, K.R., Heng, H.H., Kolakowski, L.F. and George, S.R. 1998. Discovery of three novel G-protein-coupled receptor genes. *Genomics* 47: 310-313.
2. 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.
3. 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.
4. Hellebrand, S., Wittenberger, T., Schaller, H.C. and Hermans-Borgmeyer, I. 2004. expressed in the developing mouse cerebral cortex. *Brain Res. Gene Expr. Patterns* 1: 13-16.
5. 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.

SOURCE

SREB3 (C-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 166-186 of SREB3 of human origin.

PRODUCT

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

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 for detailed protocols and support products.

APPLICATIONS

SREB3 (C-8) is recommended for detection of SREB3 of 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 SREB3 siRNA (h): sc-61614, SREB3 shRNA Plasmid (h): sc-61614-SH and SREB3 shRNA (h) Lentiviral Particles: sc-61614-V.

Molecular Weight of SREB3: 43 kDa.

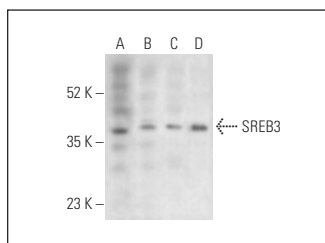
Positive Controls: K-562 whole cell lysate: sc-2203, THP-1 cell lysate: sc-2238 or MEG-01 cell lysate: sc-2283.

RECOMMENDED SUPPORT REAGENTS

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

1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz 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 L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



SREB3 (C-8): sc-518232. Western blot analysis of SREB3 expression in U-2 OS (A), K-562 (B), THP-1 (C) and MEG-01 (D) whole cell lysates. Detection reagent used: m-IgGκ BP-HRP: sc-516102.

RESEARCH USE

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