

SorCS2 (A-10): sc-398412

BACKGROUND

There are three SorCS genes that have diverse, partially overlapping functions in the central nervous system. In the developing and mature central nervous system, SorCS1, SorCS2 and SorCS3 genes are expressed in a combinatorial, non-overlapping pattern. SorCS proteins show homology to the mosaic receptor SorLA and the neurotensin receptor sortilin, based on a common VPS10 domain, which is the hallmark of the SorCS receptor family. SorCS2 (sortilin-related VPS10 domain containing receptor 2) is a 1,150 amino acid single-pass type I membrane protein that is highly expressed in brain and kidney. Containing six BNR repeats and a single PKD domain, SorCS2 is encoded by a gene that maps to human chromosome 4, which encodes nearly 6% of the human genome and has the largest gene deserts (regions of the genome with no protein encoding genes) of all of the human chromosomes.

REFERENCES

1. Hermey, G., et al. 1999. Identification and characterization of SorCS, a third member of a novel receptor family. *Biochem. Biophys. Res. Commun.* 266: 347-351.
2. Hermey, G. and Schaller, H.C. 2000. Alternative splicing of murine SorCS leads to two forms of the receptor that differ completely in their cytoplasmic tails. *Biochim. Biophys. Acta* 1491: 350-354.
3. Rezgaoui, M., et al. 2001. Identification of SorCS2, a novel member of the VPS10 domain containing receptor family, prominently expressed in the developing mouse brain. *Mech. Dev.* 100: 335-338.
4. Hermey, G., et al. 2001. Transient expression of SorCS in developing telencephalic and mesencephalic structures of the mouse. *Neuroreport* 12: 29-32.
5. Online Mendelian Inheritance in Man, OMIM™. 2001. Johns Hopkins University, Baltimore, MD. MIM Number: 606284. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: SORCS2 (human) mapping to 4p16.1.

SOURCE

SorCS2 (A-10) is a mouse monoclonal antibody raised against amino acids 755-1012 mapping within an internal region of SorCS2 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SorCS2 (A-10) is available conjugated to agarose (sc-398412 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398412 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398412 PE), fluorescein (sc-398412 FITC), Alexa Fluor® 488 (sc-398412 AF488), Alexa Fluor® 546 (sc-398412 AF546), Alexa Fluor® 594 (sc-398412 AF594) or Alexa Fluor® 647 (sc-398412 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398412 AF680) or Alexa Fluor® 790 (sc-398412 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

SorCS2 (A-10) is recommended for detection of SorCS2 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 SorCS2 siRNA (h): sc-88953, SorCS2 shRNA Plasmid (h): sc-88953-SH and SorCS2 shRNA (h) Lentiviral Particles: sc-88953-V.

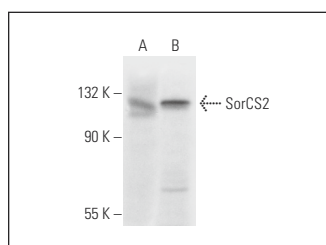
Molecular Weight of SorCS2: 128 kDa.

Positive Controls: CCRF-CEM cell lysate: sc-2225 or Caki-1 cell lysate: sc-2224.

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 A/G PLUS-Agarose: sc-2003 (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



SorCS2 (A-10): sc-398412. Western blot analysis of SorCS2 expression in Caki-1 (A) and CCRF-CEM (B) whole cell lysates.

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 for detailed protocols and support products.

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