

SPARCL1 (Q-12): sc-165540

BACKGROUND

SPARC (secreted protein acidic and rich in cysteine) is a phosphorylated, acidic, glycine-rich glycoprotein that is secreted by endothelial cells and is present in large amounts in the parietal endoderm of mouse embryos and in human placenta. SPARC-like protein 1 (SPARCL1), also known as high endothelial venule protein (Hevin) or MAST9, is a 664 amino acid member of the SPARC family of proteins. Highly expressed in lymph node, heart, lung, brain, skeletal muscle, ovary, colon and small intestine, SPARCL1 is a secreted protein that contains one EF-hand domain, one follistatin-like domain and one Kazal-like domain. SPARCL1 is implicated to play a role in neuronal remodeling and tumor suppression. The gene encoding SPARCL1 maps to chromosome 4q22.1.

REFERENCES

1. Online Mendelian Inheritance in Man, OMIM™. 2001. Johns Hopkins University, Baltimore, MD. MIM Number: 606041. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
2. Lau, C.P., Poon, R.T., Cheung, S.T., Yu, W.C. and Fan, S.T. 2006. SPARC and Hevin expression correlate with tumour angiogenesis in hepatocellular carcinoma. *J. Pathol.* 210: 459-468.
3. Lively, S. and Brown, I.R. 2007. Analysis of the extracellular matrix protein SC1 during reactive gliosis in the rat lithium-pilocarpine seizure model. *Brain Res.* 1163: 1-9.
4. Esposito, I., Kayed, H., Keleg, S., Giese, T., Sage, E.H., Schirmacher, P., Friess, H. and Kleeff, J. 2007. Tumor-suppressor function of SPARC-like protein 1/Hevin in pancreatic cancer. *Neoplasia* 9: 8-17.
5. Weimer, J.M., Stanco, A., Cheng, J.G., Vargo, A.C., Voora, S. and Anton, E.S. 2008. A BAC transgenic mouse model to analyze the function of astroglial SPARCL1 (SC1) in the central nervous system. *Glia* 56: 935-941.
6. Lively, S. and Brown, I.R. 2008. Extracellular matrix protein SC1/hevin in the hippocampus following pilocarpine-induced status epilepticus. *J. Neurochem.* 107: 1335-1346.
7. Lively, S. and Brown, I.R. 2008. The extracellular matrix protein SC1/hevin localizes to excitatory synapses following status epilepticus in the rat lithium-pilocarpine seizure model. *J. Neurosci. Res.* 86: 2895-2905.
8. Lively, S. and Brown, I.R. 2008. Localization of the extracellular matrix protein SC1 coincides with synaptogenesis during rat postnatal development. *Neurochem. Res.* 33: 1692-1700.
9. Sullivan, M.M., Puolakkainen, P.A., Barker, T.H., Funk, S.E. and Sage, E.H. 2008. Altered tissue repair in hevin-null mice: inhibition of fibroblast migration by a matricellular SPARC homolog. *Wound Repair Regen.* 16: 310-319.

CHROMOSOMAL LOCATION

Genetic locus: SPARCL1 (human) mapping to 4q22.1; Sparcl1 (mouse) mapping to 5 E5.

STORAGE

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

SOURCE

SPARCL1 (Q-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal extracellular domain of SPARCL1 of mouse 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-165540 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SPARCL1 (Q-12) is recommended for detection of SPARCL1 of human origin and Sc1 of mouse origin of mouse 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 SPARCL1 siRNA (h): sc-89018, Sc1 siRNA (m): sc-153239, SPARCL1 shRNA Plasmid (h): sc-89018-SH, Sc1 shRNA Plasmid (m): sc-153239-SH, SPARCL1 shRNA (h) Lentiviral Particles: sc-89018-V and Sc1 shRNA (m) Lentiviral Particles: sc-153239-V.

Molecular Weight of SPARCL1: 75 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) 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.

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.


 MONOS
 Satisfaction
 Guaranteed

Try **SPARCL1 (G-5): sc-514275** or **SPARCL1 (F-8): sc-514262**, our highly recommended monoclonal alternatives to SPARCL1 (Q-12).