# SPARCL1 (N-12): sc-165539



The Power to Question

#### **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/
- Lau, C.P., et al. 2006. SPARC and Hevin expression correlate with tumour angiogenesis in hepatocellular carcinoma. J. Pathol. 210: 459-468.
- Lively, S., et al. 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., et al. 2007. Tumor-suppressor function of SPARC-like protein 1/Hevin in pancreatic cancer. Neoplasia 9: 8-17.
- Weimer, J.M., et al. 2008. A BAC transgenic mouse model to analyze the function of astroglial SPARCL1 (SC1) in the central nervous system. Glia 56: 935-941.
- Lively, S., et al. 2008. Extracellular matrix protein SC1/hevin in the hippocampus following pilocarpine-induced status epilepticus. J. Neurochem. 107: 1335-1346.
- Lively, S., et al. 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.

#### CHROMOSOMAL LOCATION

Genetic locus: SPARCL1 (human) mapping to 4q22.1.

### **SOURCE**

SPARCL1 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of SPARCL1 of human origin.

#### **PRODUCT**

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

Blocking peptide available for competition studies, sc-165539 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **RESEARCH USE**

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

#### **APPLICATIONS**

SPARCL1 (N-12) is recommended for detection of SPARCL1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

SPARCL1 (N-12) is also recommended for detection of SPARCL1 in additional species, including canine.

Suitable for use as control antibody for SPARCL1 siRNA (h): sc-89018, SPARCL1 shRNA Plasmid (h): sc-89018-SH and SPARCL1 shRNA (h) Lentiviral Particles: sc-89018-V.

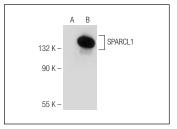
Molecular Weight of SPARCL1: 75 kDa.

Positive Controls: SPARCL1 (h): 293T Lysate: sc-114975.

#### **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**



SPARCL1 (N-12): sc-165539. Western blot analysis of SPARCL1 expression in non-transfected: sc-117752 (A) and human SPARCL1 transfected: sc-114975 (B) 293T whole cell Ivsates.

### **STORAGE**

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



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