SANTA CRUZ BIOTECHNOLOGY, INC.

# SPARCL1 (D-1): sc-390199

## 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., et al. 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., et al. 2007. Tumor-suppressor function of SPARC-like protein 1/hevin in pancreatic cancer. Neoplasia 9: 8-17.
5. 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.
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.


## CHROMOSOMAL LOCATION

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

## SOURCE

SPARCL1 (D-1) is a mouse monoclonal antibody raised against a peptide mapping near the N-terminus of SPARCL1 of human origin.

## PRODUCT

Each vial contains 200 µg $IgG_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-390199 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## STORAGE

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

## APPLICATIONS

SPARCL1 (D-1) is recommended for detection of SPARCL1 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 SPARCL1 siRNA (h): sc-89018, SPARCL1 shRNA Plasmid (h): sc-89018-SH and SPARCL1 shRNA (h) Lentiviral Particles: sc-89018-V.

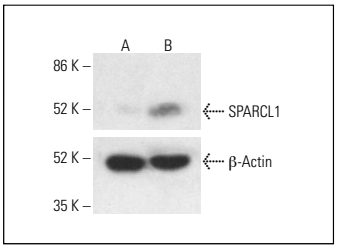
Molecular Weight of SPARCL1: 75 kDa.

Positive Controls: SPARCL1 (h): 293T Lysate: sc-114975 or chemically-treated HEK293T whole cell lysate.

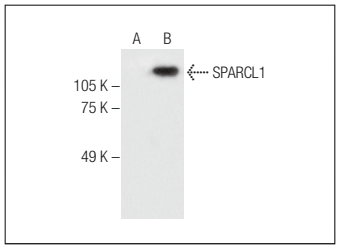
## RECOMMENDED SUPPORT REAGENTS

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




SPARCL1 (D-1): sc-390199. Western blot analysis of SPARCL1 expression in untreated (**A**) and chemically-treated (**B**) HEK293T whole cell lysates. β-Actin (C4): sc-47778 used as loading control. Detection reagent used: m-IgG Fc BP-HRP: sc-525409.




SPARCL1 (D-1): sc-390199. Western blot analysis of SPARCL1 expression in non-transfected: sc-117752 (**A**) and human SPARCL1 transfected: sc-114975 (**B**) 293T whole cell lysates.

## SELECT PRODUCT CITATIONS


1. Qin, E.Y., et al. 2017. Neural precursor-derived pleiotrophin mediates subventricular zone invasion by glioma. Cell 170: 845-859.e19.
2. Strunz, M., et al. 2019. Modulation of SPARC/Hevin proteins in Alzheimer's disease brain injury. J. Alzheimers Dis. 68: 695-710.


## RESEARCH USE

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