

SPARCL1 (G-5): sc-514275

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.

CHROMOSOMAL LOCATION

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

SOURCE

SPARCL1 (G-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 586-600 within a C-terminal extracellular domain of SPARCL1 of mouse 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.

Blocking peptide available for competition studies, sc-514275 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

SPARCL1 (G-5) is recommended for detection of SPARCL1 of human and rat origin and Sc1 of mouse 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, 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.

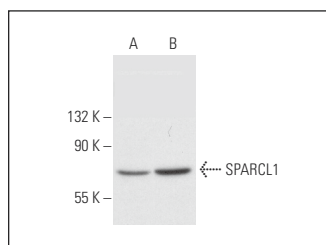
Molecular Weight of SPARCL1: 75 kDa.

Positive Controls: EOC 20 whole cell lysate: sc-364187 or NCI-H460 whole cell lysate: sc-364235.

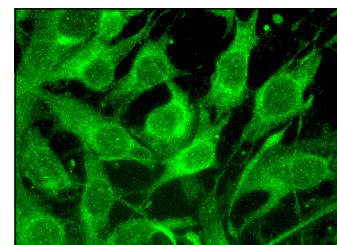
RECOMMENDED SUPPORT REAGENTS

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



SPARCL1 (G-5): sc-514275. Western blot analysis of SPARCL1 expression in EOC 20 (A) and NCI-H460 (B) whole cell lysates.



SPARCL1 (G-5): sc-514275. Immunofluorescence staining of formalin-fixed NIH/3T3 cells showing cytoplasmic and membrane localization.

SELECT PRODUCT CITATIONS

1. Schumacher, E., et al. 2017. Combined methylome and transcriptome analysis during rat hepatic stellate cell activation. *Stem Cells Dev.* 26: 1759-1770.
2. Rohn, F., et al. 2018. Laminin-521 promotes quiescence in isolated stellate cells from rat liver. *Biomaterials* 180: 36-51.
3. Nuñez-delMoral, A., et al. 2021. Characterization of hevin (SPARCL1) immunoreactivity in postmortem human brain homogenates. *Neuroscience* 467: 91-109.
4. Wu, J., et al. 2022. TNF antagonist sensitizes synovial fibroblasts to ferroptotic cell death in collagen-induced arthritis mouse models. *Nat. Commun.* 13: 676.
5. Li, M., et al. 2023. Assessing the effects of aging on the renal endothelial cell landscape using single-cell RNA sequencing. *Front. Genet.* 14: 1175716.

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.