

SPARC. Rabbit Antigen Immunoaffinity Purified Polyclonal

Secreted Protein Acidic and Rich in Cysteine, SPARC, SPARC-related modular calcium-binding protein 2 [Precursor], Secreted modular calcium-binding protein 2, SMOC-2, Smooth muscle-associated protein 2, SMAP-2

BACKGROUND

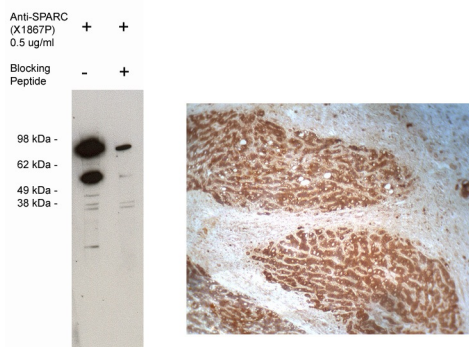
SPARC is a key factor in cell-matrix interactions and possibly tumour aggressiveness. The SPARC gene, which encodes a multifunctional glycoprotein with roles in tissue development, remodelling and fibrosis. A regulator of cell-extracellular matrix (ECM) interactions, SPARC represents a major factor in the ECM remodelling occurring during tumour invasion. *in silico* analysis reveals 4 UTR-SNPs located in the 3'-UTR of the SPARC gene, corresponding to 1474 g a, 1551 g c, 1922 t g and 2072 c t changes, which are significantly associated with tumoral state of the tissue. Of all hits, the 2072 SPARC polymorphism had the best association with cancer.

SPARC therefore is a gene involved in a number of diseases including rheumatoid arthritis, scleroderma, tumor development and metastasis. SPARC variants have been detected in tumour samples of patients with acute myeloblastic leukemia (AML).

IMMUNOGEN

Synthetic peptide derived from the human SPARC protein.

Western Blot- Detection of endogenous SPARC in mouse heart lysate using X1867P (0.75 ug/ml) and anti-rabbit HRP (1:75k) and using Pierce's Super Signal West Femto. IHC- Detection of endogenous SPARC in human hepatocellular carcinoma (HCC). 2 ug/ml X1867P, developed with Vector ImmPress anti-rabbit HRP and DAB substrate.



ORDERING INFORMATION

CATALOG NUMBER

X1867P

SIZE

70 µg

FORM

Affinity Purified

HOST/CLONE

Rabbit

FORMULATION

Provided as ligand affinity purified antibody in phosphate buffered saline with 0.08% sodium azide

CONCENTRATION

Lot specific, see vial

ISOTYPE

APPLICATIONS

Western Blot, Immunohistochemistry, ELISA

SPECIES REACTIVITY

Human SPARC, may cross react with SPARCL1

ACCESSION NUMBER

Human P09486

POSITIVE CONTROL/TISSUE EXPRESSION

Antibody has been tested on mouse heart lysate.

COMMENTS

Antibody can be used for Western blotting (0.5-1 μ g/ml). Optimal concentration should be evaluated by serial dilutions.

PURIFICATION

Antigen Immunoaffinity Purification

SHIP CONDITIONS

Ship on dry ice, freeze upon arrival

STORAGE CUSTOMER

Product should be stored at -70°C. Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

REFERENCES

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2. Aouacheria A, et al. 'In silico whole-genome screening for cancer-related single-nucleotide polymorphisms located in human mRNA untranslated regions.' *BMC Genomics*. 2007 Jan 3;8(1):2 [Epub ahead of print] PMID: 17201911
3. Xue LY, et al. 'Tissue microarray analysis reveals a tight correlation between protein expression pattern and progression of esophageal squamous cell carcinoma.' *BMC Cancer*. 2006 Dec 22;6(1):296 [Epub ahead of print] PMID: 17187659
4. Arp HP, et al. 'Predicting the partitioning behavior of various highly fluorinated compounds.' *Environ Sci Technol*. 2006 Dec 1;40(23):7298-304. PMID: 17180981
5. Kelly KA, et al. 'SPARC is a VCAM-1 counter-ligand that mediates leukocyte transmigration.' *J Leukoc Biol*. 2006 Dec 18; [Epub ahead of print]
6. Markovic, S., et al. 'Tumor SPARC microenvironment signature (SMS) and plasma levels in a phase II trial of unresectable stage IV melanoma treated with *nab*-paclitaxel and carboplatin: A translational study of NCCTG trial N057E.' *J. Clin. Oncol*. 2010, Vol. 28, No. 15, 8578
7. Weiss, G.J., et al. 'Molecular characterization of interdigitating dendritic cell sarcoma.' *Rare Tumors*, 2010, 2:e50
8. Alonso, E.N., et al. 'Genes Related to Suppression of Malignant Phenotype Induced by Maitake D-Fraction in Breast Cancer Cells.' *J. Med. Food.*, 16, 602-617 (2013).

PRODUCT SPECIFIC REFERENCES

1. Kelly, Kimberly A. et al, 'SPARC is a VCAM-1 counter-ligand that mediates leukocyte transmigration' *Journal of Leukocyte Biology* 2007, 81, 3, 748-756