### For Research Use Only

# SPARC Monoclonal antibody

Catalog Number:66426-1-lg 5 Publications



**Basic Information** 

**Applications** 

Catalog Number: 66426-1-lg

Size: 1200 µg/ml Source: Mouse Isotype:

Immunogen Catalog Number:

AG7390

**Tested Applications:** WB, IF/ICC, IHC, ELISA

Cited Applications:

IgG2a

Species Specificity: human, rat **Cited Species:** human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

GenBank Accession Number: **Purification Method:** 

BC004974 Protein A purification GeneID (NCBI): CloneNo.: 6678 1A2C1

**UNIPROT ID:** Recommended Dilutions: P09486 WB 1:2000-1:10000 IHC 1:1000-1:4000 Full Name: secreted protein, acidic, cysteine-rich IF/ICC 1:400-1:1600

(osteonectin)

Calculated MW: 35 kDa Observed MW: 38 kDa. 52 kDa

Positive Controls:

WB: A375 cells, human testis tissue, NCCIT cell

IHC: human placenta tissue,

IF/ICC: C6 cells,

# **Background Information**

SPARC, also known as ON (Osteonectin) or BM-40 (Basement-membrane protein 40), is an extracellular glycoprotein with the calculated molecular mass of 35 kDa and the apparent molecular mass of 40-43 kDa and 50 kDa (PMID: 7495300, 12365801). SPARC belongs to a group of matricellular proteins defined as secreted components that do not contribute directly to the formation of structural elements but serve to modulate cell-matrix interactions and cellular functions (PMID: 7542656; 12231357). SPARC is expressed at high levels in bone tissue, is distributed widely in many other tissues and cell types, and is associated generally with tissues undergoing morphogenesis, remodeling and wound repair (PMID: 10567433). It elicits changes in cell shape, inhibits cell-cycle progression, and influences the synthesis of extracellular matrix (PMID: 12721366). Altered expression of SPARC has been reported in a variety of cancers, which include breast, ovarian, colorectal, and pancreatic cancer as well as melanoma and glioblastomas (PMID: 18849185).

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Liying Luo	35721704	Front Endocrinol (Lausanne)	WB
Wei Huang	34089726	Exp Cell Res	WB
Bo Li	31819181	Br J Cancer	WB

Storage

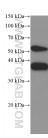
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

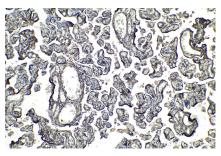
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

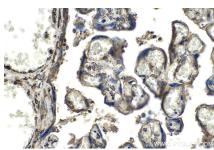
## **Selected Validation Data**



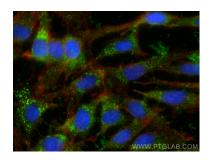
A375 cells were subjected to SDS PAGE followed by western blot with 66426-1-Ig (SPARC Antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human placenta tissue slide using 66426-1-1g (SPARC antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human placenta tissue slide using 66426-1-Ig (SPARC antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed C6 cells using SPARC antibody (66426-1-lg, Clone: 1A2C1) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red).