

For Research Use Only

# SPARC Monoclonal antibody

Catalog Number: 66426-1-Ig **7 Publications**



## Basic Information

|   |   |  |
|---|---|--|
| <b>Catalog Number:</b><br>66426-1-Ig  | <b>GenBank Accession Number:</b><br>BC004974                                  | <b>Purification Method:</b><br>Protein A purification  |
| <b>Size:</b><br>150ul , Concentration: 1200 ug/ml by 6678<br>Nanodrop and 1000 ug/ml by Bradford<br>method using BSA as the standard; | <b>GeneID (NCBI):</b><br>6678   | <b>CloneNo.:</b><br>1A2C1  |
| <b>Source:</b><br>Mouse   | <b>UNIPROT ID:</b><br>P09486  | <b>Recommended Dilutions:</b><br>WB 1:2000-1:10000<br>IHC 1:1000-1:4000<br>IF/ICC 1:400-1:1600 |
| <b>Isotype:</b><br>IgG2a  | <b>Full Name:</b><br>secreted protein, acidic, cysteine-rich<br>(osteonectin) |  |
| <b>Immunogen Catalog Number:</b><br>AG7390  | <b>Calculated MW:</b><br>35 kDa   |  |
|   | <b>Observed MW:</b><br>38 kDa, 52 kDa   |  |

## Applications

|  |   |
|--|---|
| <b>Tested Applications:</b><br>WB, IHC, IF/ICC, ELISA  | <b>Positive Controls:</b><br>WB : A375 cells, human testis tissue, NCCIT cell<br>IHC : human placenta tissue,<br>IF/ICC : C6 cells, |
| <b>Cited Applications:</b><br>WB, IHC  |   |
| <b>Species Specificity:</b><br>human, rat  |   |
| <b>Cited Species:</b><br>human, mouse  |   |
| <b>Note-IHC: suggested antigen retrieval with<br/>TE buffer pH 9.0; (*) Alternatively, antigen<br/>retrieval may be performed with citrate<br/>buffer pH 6.0</b> |   |

## 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 |
|------------|-----------|-----------------------------|-------------|
| Liyang Luo | 35721704  | Front Endocrinol (Lausanne) | WB          |
| Wei Huang  | 34089726  | Exp Cell Res                | WB          |
| Bo Li      | 31819181  | Br J Cancer                 | WB          |

## Storage

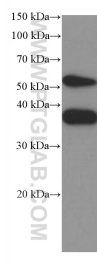
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

\*\*\* 20ul sizes contain 0.1% BSA

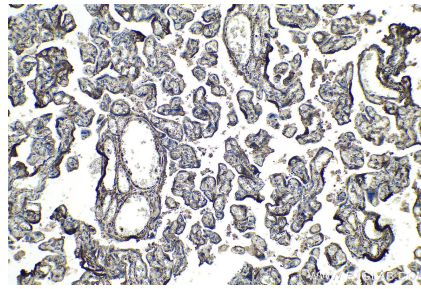
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

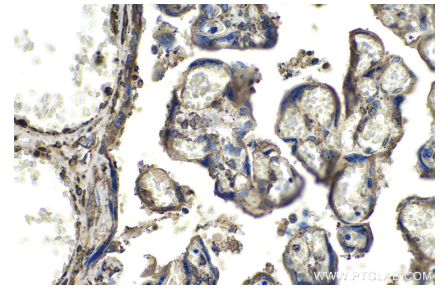
## Selected Validation Data



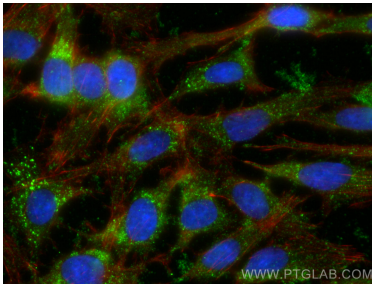
A375 cells were subjected to SDS PAGE followed by western blot with 66426-1-Ig (SPARC Antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



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



Immunohistochemical analysis of paraffin-embedded 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-Ig, Clone: 1A2C1) at dilution of 1:800 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red).