10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

# Anti-SPARC Antibody
**Catalog # ABO10899**

## Specification

### Anti-SPARC Antibody - Product Information

| | |
|---|---|
| Application | **WB, IHC-P** |
| Primary Accession | P09486 |
| Host | **Rabbit** |
| Reactivity | **Human** |
| Clonality | **Polyclonal** |
| Format | **Lyophilized** |

**Description**
Rabbit IgG polyclonal antibody for SPARC(SPARC) detection. Tested with WB, IHC-P in Human.

**Reconstitution**
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

### Anti-SPARC Antibody - Additional Information

**Gene ID** 6678

**Other Names**
SPARC, Basement-membrane protein 40, BM-40, Osteonectin, ON, Secreted protein acidic and rich in cysteine, SPARC, ON

**Calculated MW**
34632 MW KDa

**Application Details**
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human<br>

**Subcellular Localization**
Secreted, extracellular space, extracellular matrix, basement membrane . In or around the basement membrane.

**Protein Name**
SPARC

**Contents**
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

**Immunogen**
A synthetic peptide corresponding to a sequence at the C-terminus of human SPARC(284-303aa DEWAGCFGIKQKDIDKDLVI).

**Purification**
Immunogen affinity purified.

**Cross Reactivity**
No cross reactivity with other proteins

Storage

**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

**Sequence Similarities**
Belongs to the SPARC family.

## Anti-SPARC Antibody - Protein Information

**Name** SPARC

**Synonyms** ON

**Function**
Appears to regulate cell growth through interactions with the extracellular matrix and cytokines. Binds calcium and copper, several types of collagen, albumin, thrombospondin, PDGF and cell membranes. There are two calcium binding sites; an acidic domain that binds 5 to 8 Ca(2+) with a low affinity and an EF-hand loop that binds a Ca(2+) ion with a high affinity.

**Cellular Location**
Secreted, extracellular space, extracellular matrix, basement membrane. Note=In or around the basement membrane

## Anti-SPARC Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Anti-SPARC Antibody - Images

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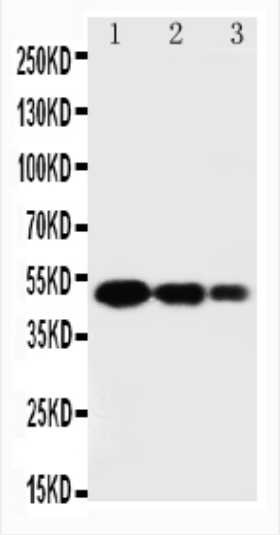
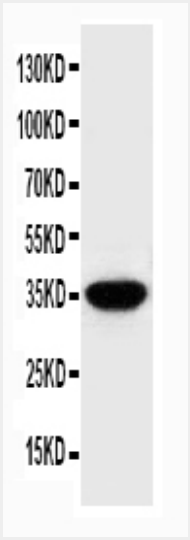
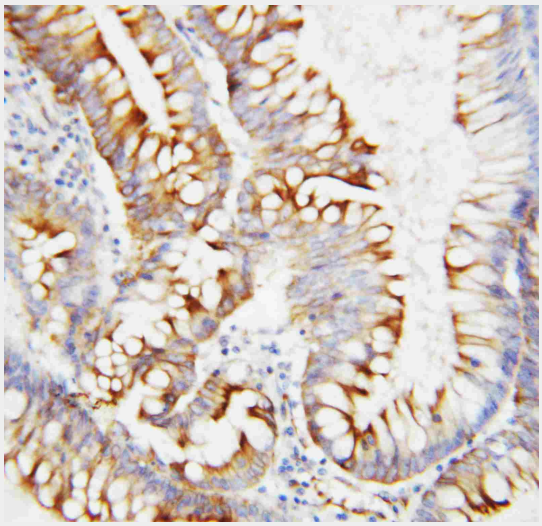



Anti-SPARC antibody, ABO10899, Western blottingLane 1: Recombinant Human SPARC Protein 10ngLane 2: Recombinant Human SPARC Protein 5ngLane 3: Recombinant Human SPARC Protein 2.5ng




Anti-SPARC antibody, ABO10899, Western blottingWB: HELA Cell Lysate



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Anti-SPARC antibody, ABO10899, IHC(P)IHC(P): Human Intestinal Cancer Tissue

**Anti-SPARC Antibody - Background**

SPARC, secreted protein acidic and rich in cysteine, also known as Osteonectin is a protein that in humans is encoded by the SPARC gene. The human SPARC gene is 26.5 kb long, and contains 10 exons and 9 introns and is located on chromosome 5q31-q33. SPARC is a glycoprotein of 40 kD. SPARC is an acidic, cysteine-rich glycoprotein consisting of a single polypeptide chain that can be broken into 4 domains: 1) an Ca++ binding domains near the glutamic acidic-rich region at the amino terminus(domain I), 2) a cysteine- rich(domain II), 3) a hydrophilic region(domain III) and 4) an EF hand motif at the carboxy terminus region(domain IV). Osteonectin is a glycoprotein in the bone that binds sodium. It is secreted by osteoblasts during bone formation, initiating mineralization and promoting mineral crystal formation. Osteonectin also shows affinity for collagen in addition to bone mineral calcium. A correlation between osteonectin over expression and ampullary cancers and chronic pancreatitis has been found.