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Anti-SPARC Picoband Antibody

Catalog # ABO10119

Specification

Anti-SPARC Picoband Antibody - Product Information

Application	**WB**
Primary Accession	P09486
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for SPARC(SPARC) detection. Tested with WB in Human;Mouse;Rat.

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

Anti-SPARC Picoband 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
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

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 NaN3.

Immunogen
E.coli-derived human SPARC recombinant protein (Position: E107-I303). Human SPARC shares 97% amino acid (aa) sequence identity with both mouse and rat SPARC.

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.**

Anti-SPARC Picoband 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 Picoband 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 Picoband Antibody - Images

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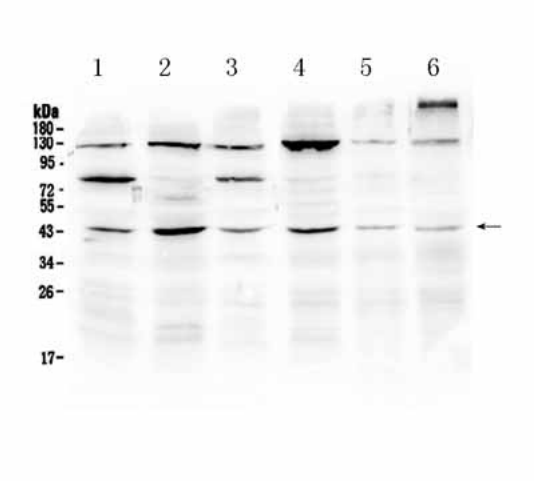

Figure 1. Western blot analysis of SPARC using anti-SPARC antibody (ABO10119). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat brain tissue lysates, Lane 2: rat testis tissue lysates, Lane 3: mouse brain tissue lysates, Lane 4: mouse testis tissue lysates, Lane 5: U20s whole Cell lysates, Lane 6: HEPG2 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-SPARC antigen affinity purified polyclonal antibody (Catalog # ABO10119) at 0.5 Î¼g/mL overnight at 4Â°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for SPARC at approximately 43KD. The expected band size for SPARC is at 35 KD.

Anti-SPARC Picoband 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 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). Furthermore, SPARC is a glycoprotein in the bone that binds sodium. It is secreted by osteoblasts during bone formation, initiating mineralization and promoting mineral crystal formation. SPARC also shows affinity for collagen in addition to bone mineral calcium. A correlation between SPARC over expression and ampullary cancers and chronic pancreatitis has been found.