

Anti-SPARC Antibody Picoband®

Catalog Number: A00862-1

About SPARC

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.

Overview

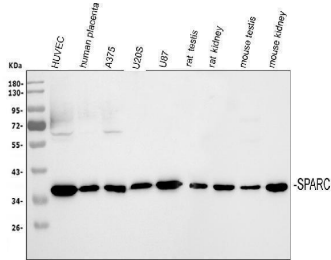
Product Name	Anti-SPARC Antibody Picoband®
Reactive Species	Human, Mouse, Rat, Zebrafish
Description	Boster Bio Anti-SPARC Antibody Picoband® catalog # A00862-1. Tested in WB applications. This antibody reacts with Human, Mouse, Rat, Zebrafish. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P09486

Technical Details

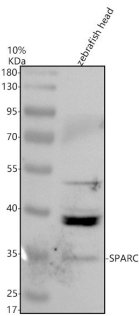
Immunogen	E.coli-derived human SPARC recombinant protein (Position: E107-I303). Human SPARC shares 97% amino acid (aa) sequence identity with both mouse and rat SPARC.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG

Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat

Anti-SPARC Antibody Picoband® (A00862-1) Images



Western blot analysis of SPARC using anti-SPARC antibody (A00862-1). 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 30ug of sample under reducing conditions. Lane 1: human HUVEC whole cell lysates, Lane 2: human placenta tissue lysates, Lane 3: human A375 whole cell lysates, Lane 4: human U20S whole cell lysates, Lane 5: human U87 whole cell lysates, Lane 6: rat testis tissue lysates, Lane 7: rat kidney tissue lysates, Lane 8: mouse testis tissue lysates, Lane 9: mouse kidney tissue 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 # A00862-1) at 0.5 ug/mL overnight at 4°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 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for SPARC at approximately 35 kDa. The expected band size for SPARC is at 35 kDa.



Western blot analysis of SPARC using anti-SPARC antibody (A00862-1). Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: Zebrafish head tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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 (A00862-1) at 0.5 ug/ml overnight at 4°C, then washed with TBS-0.1%Tween-20 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054) at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an ECL Plus Western Blotting Substrate (Catalog # AR1196-200) with Tanon 5200 system. A specific band was detected for SPARC at approximately 35 kDa. The expected band size for SPARC is at 35 kDa.

1 Publications Citing This Product

1. PubMed ID: 26329007, CD90 is upregulated in gastric cancer tissues and inhibits gastric cancer cell apoptosis by modulating the expression level of SPARC protein

Visit bosterbio.com/anti-sparc-picoband-trade-antibody-a00862-1-boster.html to see all 1 publications.

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Anti-SPARC Antibody

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