

#5420 Store at -20C

**SPARC Antibody**

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**For Research Use Only. Not for Use in Diagnostic Procedures.**

<b>Applications:</b> W, IP	<b>Reactivity:</b> H M Mk	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 42	<b>Source/Isotype:</b> Rabbit	<b>UniProt ID:</b> #P09486	<b>Entrez-Gene Id:</b> 6678
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**Product Usage Information****Application**

Western Blotting  
Immunoprecipitation

**Dilution**

1:1000  
1:50

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

**Specificity/Sensitivity**

SPARC Antibody detects endogenous levels of total SPARC protein.

**Source / Purification**

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly53 of human SPARC. Antibodies are purified by protein A and peptide affinity chromatography.

**Background**

SPARC (secreted protein acidic and rich in cysteine), also known as osteonectin and BM40, is a secreted matricellular glycoprotein that belongs to a group of functionally related glycoproteins that includes tenascins C and X, thrombospondins 1 and 2, and osteopontin (1). Members in this class of glycoproteins are involved in tissue renewal, tissue remodeling, and embryonic development and work by exerting counter-adhesive and antiproliferative effects that lead to changes in cell shape, disruption of cell adhesion, and inhibition of the cell cycle (2). SPARC is expressed at high levels in bone tissue but is widely distributed in many other tissues and cell types (3), and is known to be associated with tissues undergoing morphogenesis, angiogenesis, mineralization, and other pathological responses to injury and tumorigenesis (4,5). SPARC has also been linked with obesity and diabetes (6).

**Background References**

1. Fukunaga-Kalabis, M. et al. (2008) *Cancer Microenviron* 1, 93-102.
2. Yan, Q. and Sage, E.H. (1999) *J Histochem Cytochem* 47, 1495-506.
3. Maillard, C. et al. (1992) *Bone* 13, 257-64.
4. Sage, E.H. (1997) *Nat Med* 3, 144-6.
5. Bradshaw, A.D. and Sage, E.H. (2001) *J Clin Invest* 107, 1049-54.
6. Kos, K. and Wilding, J.P. (2010) *Nat Rev Endocrinol* 6, 225-35.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting **IP:** Immunoprecipitation

**Cross-Reactivity Key**

**H:** Human **M:** Mouse **Mk:** Monkey

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