

#5420 Store at -20C

SPARC Antibody

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

| Applications: | Reactivity: | Sensitivity: | MW (kDa): | Source: | UniProt ID: | Entrez-Gene Id: |
|---------------|-------------|--------------|-----------|---------|-------------|-----------------|
| WB, IP | H M Mk | Endogenous | 42 | Rabbit | #P09486 | 6678 |

Product Usage Information

Application

Western Blotting

Dilution

1:1000

Immunoprecipitation

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

WB: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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