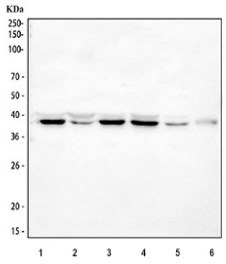
SPARC Antibody / Osteonectin (R30662)

Catalog No.	Formulation	Size
R30662	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P09486
Applications	Western Blot : 0.5-1ug/ml
Limitations	This SPARC antibody is available for research use only.



Western blot testing of 1) human U-251, 2) human U-2 OS, 3) rat testis, 4) rat C6, 5) mouse testis and 6) mouse C2C12 cell lysate with SPARC antibody. Expected molecular weight: 35-43 kDa depending on glycosylation level.

Description

SPARC, also known as Osteonectin, is a matricellular glycoprotein that plays a critical role in extracellular matrix organization and tissue remodeling. It binds to collagen and hydroxyapatite, contributing to the regulation of cell-matrix interactions, tissue repair, and mineral deposition. SPARC is expressed in many tissues, including bone, connective tissue, and the vasculature, where it influences cell adhesion, proliferation, and migration. Its activity is particularly significant in processes such as wound healing and angiogenesis, where modulation of the extracellular environment is essential.

Research has also implicated SPARC in pathological conditions, including fibrosis and tumor progression. By regulating interactions between cells and the matrix, SPARC can influence tumor cell adhesion, invasion, and metastasis. In addition, its function in bone biology is well established, where it assists in maintaining proper mineralization. This makes the study of SPARC valuable in both developmental biology and disease contexts.

A SPARC antibody is an important tool for investigating this proteinÃ¢Â€Â™s roles across different tissues. Applications include western blotting, immunohistochemistry, immunofluorescence, and ELISA, all of which can help define protein expression patterns and functional states. The use of a SPARC antibody is especially valuable in cancer research and studies of connective tissue diseases, providing insights into how SPARC contributes to structural integrity and remodeling. NSJ Bioreagents offers a SPARC antibody designed to support these diverse areas of research with high specificity and reliability.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the SPARC antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Amino acids 284-303 (DEWAGCFGIKQKDIDKDLVI-human) were used as the immunogen for this SPARC antibody.

Storage

After reconstitution, the SPARC antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.