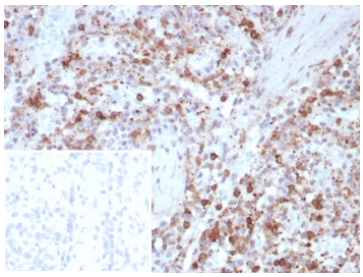
Osteonectin Antibody / SPARC [clone rOSTN/8527] (V5107)

Catalog No.	Formulation	Size
V5107-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5107-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5107SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

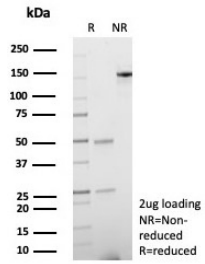
Recombinant MOUSE MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rOSTN/8527
Purity	Protein A/G affinity
UniProt	P09486
Localization	Secreted
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This Osteonectin antibody is available for research use only.



Immunohistochemistry analysis of Osteonectin antibody in human spleen tissue (clone rOSTN/8527). FFPE human spleen sections demonstrate HRP-DAB brown cytoplasmic and extracellular staining in stromal cells and matrix-rich areas within the splenic parenchyma. Numerous scattered positive cells are observed, consistent with Secreted protein acidic and rich in cysteine expression in the extracellular matrix and supporting stromal compartment. The inset shows PBS used in place of primary antibody, serving as a secondary antibody negative control with absence of specific brown staining. Heat induced epitope retrieval was performed by boiling tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 20 minutes followed by cooling prior to antibody incubation.



SDS-PAGE analysis of purified, BSA-free Osteonectin antibody (clone rOSTN/8527) as confirmation of integrity and purity.

Description

Osteonectin antibody, also known as SPARC antibody, recognizes Secreted protein acidic and rich in cysteine, a matricellular glycoprotein that regulates extracellular matrix organization and cell-matrix interactions. The human SPARC gene is located on chromosome 5q33.1 and encodes a secreted protein that localizes to the extracellular space and basement membranes. Secreted protein acidic and rich in cysteine is a member of the SPARC family of matricellular proteins and is widely referred to in the literature as Osteonectin and BM-40.

Secreted protein acidic and rich in cysteine plays a central role in modulating cell adhesion, migration, and proliferation through its effects on the extracellular matrix. It is highly expressed in bone, connective tissue, endothelial cells, and remodeling stroma. In skeletal biology, Osteonectin is abundant in osteoblasts and bone matrix, where it contributes to collagen organization and mineralization. An Osteonectin antibody is frequently used in studies focused on tumor stroma, fibrosis, angiogenesis, and tissue repair because SPARC influences matrix composition and growth factor signaling.

The SPARC protein contains an acidic N-terminal region, a follistatin-like domain, and a C-terminal extracellular calcium-binding domain with EF-hand motifs. These structural features enable calcium binding and facilitate interactions with collagens, albumin, and other matrix-associated proteins. Through these interactions, Secreted protein acidic and rich in cysteine participates in pathways such as TGF-beta signaling and integrin-mediated adhesion cascades, contributing to extracellular matrix remodeling and vascular responses.

In oncology research, SPARC expression is commonly associated with activated fibroblasts and desmoplastic stroma in tumors including breast, pancreatic, colorectal, and ovarian carcinomas. Depending on tumor type and microenvironment, SPARC may influence tumor progression, invasion, or stromal remodeling. Outside of cancer, SPARC is upregulated during wound healing and in fibrotic diseases affecting liver, lung, and kidney, where it supports collagen deposition and matrix reorganization. Developmentally, expression is observed during embryogenesis in tissues undergoing active morphogenesis and vascular development.

Clone rOSTN/8527 is a recombinant monoclonal antibody developed to recognize SPARC in research applications. An Osteonectin antibody supports investigation of extracellular matrix biology, stromal activation, and connective tissue remodeling. This antibody targets SPARC in research settings and is suitable for studies of fibrosis, angiogenesis, skeletal biology, and tumor-associated stromal dynamics.

Application Notes

Optimal dilution of the Osteonectin antibody should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 1-200) from the human protein was used as the immunogen for the Osteonectin antibody.

Storage

Aliquot the Osteonectin antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.