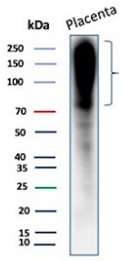
Fibronectin Antibody / 8th Type III Repeat [clone 568] (V2503)

Catalog No.	Formulation	Size
V2503-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2503-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2503SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2503IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

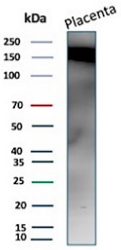
Citations (11)

Bulk quote request

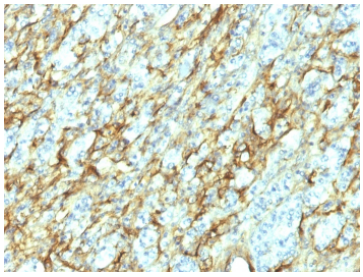
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	568
Purity	Protein G affinity chromatography
UniProt	P02751
Localization	Connective tissue matrix
Applications	Flow Cytometry : 1-2ug/million cells Immunofluorescence : 1-3ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT Western Blot : 2-4ug/ml
Limitations	This Fibronectin antibody is available for research use only.



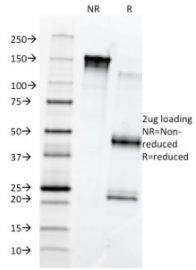
Western blot analysis of fibronectin in human placenta tissue lysate using Fibronectin antibody (clone 568). Proteins were resolved by SDS-PAGE and transferred to membrane prior to immunodetection. A strong signal is observed in the high molecular weight region, consistent with the predicted molecular weight of fibronectin and its known tendency to migrate as a broad, high-MW species due to extensive glycosylation and alternative splicing.



Western blot analysis of fibronectin in human placenta tissue lysate using Fibronectin antibody (clone 568). Proteins were separated by SDS-PAGE and transferred to membrane prior to probing. A detectable high molecular weight band is present near the predicted molecular weight of fibronectin, consistent with fibronectin expression in placental tissue.



Immunohistochemical analysis of fibronectin in FFPE human renal cell carcinoma using Fibronectin antibody (clone 568). Brown chromogenic staining is observed predominantly in the extracellular matrix and along stromal regions, consistent with fibronectin localization in tumor-associated stroma. Heat-induced epitope retrieval was performed by boiling tissue sections in 10 mM Tris with 1 mM EDTA, pH 9, for 10â€“20 minutes, followed by cooling at room temperature for 20 minutes.



SDS-PAGE analysis of purified, BSA-free Fibronectin antibody (clone 568) as confirmation of integrity and purity.

Description

Fibronectin antibody targets Fibronectin, a large extracellular matrix glycoprotein encoded by the FN1 gene that plays a central role in cell adhesion, migration, and tissue organization. Fibronectin is widely distributed in the extracellular matrix and plasma, where it exists as a dimeric protein assembled into fibrillar networks on cell surfaces and within connective tissues. It is expressed by many cell types, including fibroblasts, endothelial cells, and epithelial cells, and is a key structural and signaling component of the extracellular environment.

Functionally, Fibronectin mediates interactions between cells and the extracellular matrix by binding integrins, collagen, fibrin, and other matrix components. A short functional summary is that Fibronectin regulates cell attachment and migration while providing structural support for tissue architecture. Through these interactions, Fibronectin influences wound healing, embryonic development, angiogenesis, and maintenance of tissue integrity.

At the molecular level, Fibronectin is composed of multiple repeating domains classified as type I, type II, and type III repeats. The epitope recognized by clone 568 is located within the 8th type III repeat of Fibronectin, a region that lies within the well-characterized cell-binding domain of the protein. This domain is critical for integrin-mediated adhesion and downstream signaling, making the 8th type III repeat a biologically significant region for studying Fibronectin function and matrix-cell interactions. Fibronectin antibody reagents recognizing defined structural repeats are valuable tools for

dissecting domain-specific roles of this multifunctional protein.

From a biological and disease relevance perspective, Fibronectin expression and organization are frequently altered in cancer, fibrosis, and inflammatory conditions. Increased Fibronectin deposition is associated with tumor progression, epithelial-mesenchymal transition, and stromal remodeling, while aberrant matrix assembly contributes to tissue stiffness and disease pathology. Antibodies targeting Fibronectin are therefore widely used in research focused on extracellular matrix dynamics, tumor microenvironment studies, and cell adhesion biology. Clone 568 provides a targeted reagent for detecting Fibronectin through its 8th type III repeat in these research contexts.

Developmentally, Fibronectin is essential for normal morphogenesis and vascular development, with tightly regulated expression during embryogenesis and tissue repair. Fibronectin antibodies from NSJ Bioreagents are supplied for research use to support investigations into extracellular matrix biology, cell-matrix signaling, and disease-associated matrix remodeling.

Application Notes

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

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

High molecular weight proteins secreted by cultivated human fibroblasts were used as the immunogen for the Fibronectin antibody. The epitope of this MAb is located in the 8th type III repeat in the cell-binding region of fibronectin.

Storage

Store the Fibronectin antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).