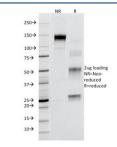


# Fas Antibody / CD95 [clone B-R18] (V2633)

Catalog No.	Formulation	Size
V2633-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2633-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2633SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

## **Bulk quote request**

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	B-R18
Purity	Protein G affinity chromatography
UniProt	P25445
Localization	Cytoplasmic, membranous
Applications	Immunohistochemistry : 1-2ug/ml Flow Cytometry : 1-2ug/million cells Immunofluorescence : 1-3ug/ml
Limitations	This Fas antibody is available for research use only.



SDS-PAGE Analysis of Purified, BSA-Free Fas Antibody (B-R18). Confirmation of Integrity and Purity of the Antibody.

Fas antibody (clone B-R18) detects Fas, also known as CD95 or apoptosis antigen 1, a type I transmembrane receptor that plays a central role in the regulation of programmed cell death. The UniProt recommended name is Tumor necrosis factor receptor superfamily member 6 (FAS). This receptor belongs to the TNF receptor family and is expressed on a wide range of cell types, including lymphocytes, hepatocytes, and epithelial cells, where it functions as a key mediator of apoptosis and immune homeostasis.

Functionally, Fas antibody identifies a 335-amino-acid receptor with an extracellular cysteine-rich ligand-binding domain, a single transmembrane helix, and a cytoplasmic death domain essential for apoptotic signaling. Upon binding to its natural ligand FasL (Fas ligand or CD95L), Fas trimerizes and recruits the adaptor protein FADD (Fas-associated death domain protein), initiating the formation of the death-inducing signaling complex (DISC). This complex activates caspase-8 and downstream effector caspases, resulting in controlled cellular apoptosis. Through this mechanism, Fas ensures elimination of damaged, infected, or autoreactive cells, maintaining immune balance and tissue integrity.

The FAS gene is located on chromosome 10q23.31 and is constitutively expressed in many tissues, with highest levels in immune and epithelial cells. Its expression is tightly regulated by cytokines, stress, and immune activation signals. Beyond its apoptotic function, Fas also contributes to non-apoptotic signaling, including cell proliferation, migration, and inflammation, depending on cellular context and cofactor availability.

Pathologically, dysregulation of Fas signaling is associated with autoimmune lymphoproliferative syndrome (ALPS), systemic lupus erythematosus, and cancer. Mutations that impair Fas receptor function lead to defective apoptosis of autoreactive lymphocytes, resulting in lymphadenopathy and autoantibody production. Conversely, excessive Fas activation can contribute to tissue injury in hepatitis and graft-versus-host disease. In cancer, tumor cells often evade Fasmediated apoptosis by downregulating CD95 or altering downstream signaling components.

Clone B-R18 provides reliable detection of both membrane-bound and soluble forms of Fas, supporting research in apoptosis regulation, immune signaling, and cancer biology.

Fas antibody (clone B-R18) is validated for use in relevant research applications to detect CD95 and investigate mechanisms of programmed cell death and immune regulation. NSJ Bioreagents provides this monoclonal antibody optimized for immunology, oncology, and cell signaling research.

#### **Application Notes**

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

### Immunogen

Recombinant human protein was used as the immunogen for the Fas antibody.

#### **Storage**

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