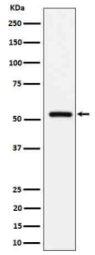
FETUB Antibody / Fetuin B [clone 31F67] (FY12821)

Catalog No.	Formulation	Size
FY12821	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human, Rat
Format	Liquid
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	31F67
Purity	Affinity-chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	Q9UGM5
Applications	Western Blot : 1:500-1:2000 Immunohistochemistry : 1:50-1:200
Limitations	This FETUB antibody is available for research use only.



Western blot analysis of Fetuin B expression in human serum cell lysate using FETUB antibody. A band just above 50 kDa is observed. The higher apparent size relative to the predicted ~42 kDa is consistent with glycosylated, secreted Fetuin-B.

Description

FETUB antibody detects FETUIN B, encoded by the FETUB gene. Alternate names include FETUB protein, Fetuin 2, and Fetuin like glycoprotein. FETUIN B is a secreted plasma glycoprotein belonging to the cystatin superfamily of cysteine protease inhibitors. Although structurally related to FETUIN A, FETUIN B has distinct biological functions. It is primarily expressed in the liver and secreted into the bloodstream, where it regulates protease activity, fertilization, and metabolic

signaling. FETUB contains cystatin like domains that inhibit specific proteases, contributing to extracellular proteolysis control.

FETUB antibody is widely applied in metabolism, reproduction, and protease biology. A key role of FETUIN B is in fertilization, where it inhibits the protease ovastacin, preventing premature hardening of the zona pellucida and ensuring successful sperm penetration. Loss of FETUB function results in female infertility due to zona pellucida hardening defects. By detecting FETUB, researchers can explore how this protein supports reproductive biology and fertility.

Beyond reproduction, FETUIN B regulates extracellular proteases involved in tissue remodeling, inflammation, and fibrosis. Studies in liver biology reveal that altered FETUB expression contributes to chronic liver disease and cancer. Because it is secreted into blood, FETUB is measurable in plasma, making it a potential biomarker for disease diagnosis and prognosis.

Applications of FETUB antibody include western blotting, immunohistochemistry, immunofluorescence, and ELISA. Western blotting detects FETUB in serum and liver extracts, immunohistochemistry maps expression in hepatocytes and ovarian tissues, and immunofluorescence highlights its localization in secretory pathways. ELISA enables quantification of circulating FETUB, linking research findings to clinical diagnostics. These methods provide powerful approaches for studying this multifunctional glycoprotein.

Altered FETUB expression has been implicated in metabolic disease, including obesity, insulin resistance, and type 2 diabetes. Elevated circulating levels may reflect metabolic stress and inflammation. In oncology, FETUB has been reported as a prognostic biomarker in hepatocellular carcinoma and other cancers. By applying FETUB antibody, scientists can study its dual roles in fertility and systemic disease.

FETUB is also a subject of evolutionary biology research. While related to FETUIN A, its divergence highlights specialized reproductive functions. This specialization underscores the importance of studying FETUB independently of FETUIN A. Antibody based detection allows researchers to dissect these evolutionary adaptations. NSJ Bioreagents provides FETUB antibody with validated specificity and sensitivity, supporting reliable detection across molecular and clinical research.

Application Notes

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

Immunogen

A synthesized peptide derived from human Fetuin B was used as the immunogen for the FETUB antibody.

Storage

Store the FETUB antibody at -20oC.

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