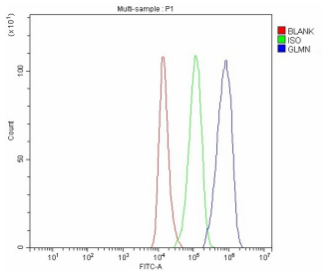
GLMN Antibody / Glomulin (FY12816)

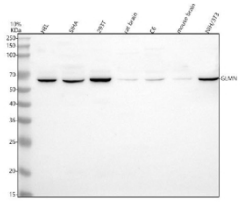
Catalog No.	Formulation	Size
FY12816	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Human, Mouse, Rat
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q92990
Applications	Western Blot: 0.25-0.5ug/ml Flow cytometry: 1-3ug/million cells ELISA: 0.1-0.5ug/ml
Limitations	This GLMN antibody is available for research use only.



Flow Cytometry analysis of 293T cells using anti-GLMN antibody. Overlay histogram showing 293T cells stained with (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-GLMN antibody (1 ug/million cells) for 30 min at 20oC. DyLight 488 conjugated goat anti-rabbit IgG (5-10 ug/million cells) was used as secondary antibody for 30 minutes at 20oC. Isotype control antibody (Green line) was rabbit IgG (1 ug/million cells) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



Western blot analysis of GLMN using anti-GLMN antibody. Lane 1: human HEL whole cell lysates, Lane 2: human SiHa whole cell lysates, Lane 3: human 293T whole cell lysates, Lane 4: rat brain tissue lysates, Lane 5: rat C6 whole cell lysates, Lane 6: mouse brain tissue lysates, Lane 7: mouse NIH/3T3 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-GLMN antibody at 0.5 ug/ml overnight at 4oC, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal was developed using enhanced chemiluminescent. A specific band was detected for GLMN at approximately 68 kDa. The expected molecular weight of GLMN is ~68 kDa.

Description

GLMN antibody detects Glomulin, a cytoplasmic protein involved in ubiquitin-mediated protein degradation, vascular development, and smooth muscle cell regulation. Encoded by the GLMN gene on chromosome 1p22.1, this protein functions as an essential component of the E3 ubiquitin ligase complex that controls the turnover of signaling proteins in vascular and developmental pathways. GLMN acts as a suppressor of angiogenic signaling and maintains vascular integrity by promoting proper endothelial and smooth muscle interactions.

Glomulin interacts with Cullin-RING ligases and the SKP1-CUL1-F-box (SCF) complex, regulating substrate ubiquitination and degradation. By controlling ubiquitin homeostasis, it helps maintain cellular proteostasis and vessel wall stability. GLMN localizes to the cytoplasm and perinuclear regions, consistent with its role in ubiquitin regulation and protein quality control.

The GLMN antibody is used in vascular biology, developmental, and protein degradation research to investigate ubiquitination processes, angiogenesis, and smooth muscle differentiation. Western blot analysis identifies a 68 kilodalton band corresponding to Glomulin, while immunofluorescence shows cytoplasmic and perinuclear localization in endothelial and fibroblast cells. This antibody supports the study of vascular signaling and ubiquitin regulation mechanisms.

Mutations in GLMN cause glomuvenous malformations (glomangiomas), benign vascular lesions characterized by aberrant smooth muscle proliferation due to disrupted ubiquitin signaling. GLMN also participates in cell cycle regulation and differentiation, linking protein degradation to tissue morphogenesis. The GLMN antibody provides a robust reagent for studying ubiquitin-related vascular disorders and developmental signaling. NSJ Bioreagents validates this antibody for its applications, ensuring high specificity and reproducibility for vascular and ubiquitin pathway research.

Application Notes

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

Immunogen

E.coli-derived human GLMN recombinant protein (Position: Q153-R574) was used as the immunogen for the GLMN antibody.

Storage

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

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