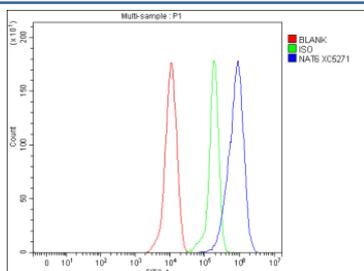


NAA80 Antibody / N-acetyltransferase 80 / NAT6 / FUS2 (FY12063)

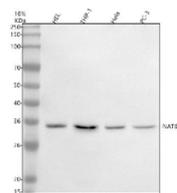
Catalog No.	Formulation	Size
FY12063	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

[Bulk quote request](#)

Availability	1-2 days
Species Reactivity	Human, Mouse
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 Na ₂ HPO ₄ .
UniProt	Q93015
Applications	Western Blot : 0.25-0.5ug/ml Flow Cytometry : 1-3ug/million cells ELISA : 0.1-0.5ug/ml
Limitations	This NAA80 antibody is available for research use only.



Flow Cytometry analysis of THP-1 cells using anti-NAA80 antibody. Overlay histogram showing THP-1 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-NAA80 antibody (1 ug/million cells) for 30 min at 20°C. DyLight 488 conjugated goat anti-rabbit IgG (5-10 ug/million cells) was used as secondary antibody for 30 minutes at 20°C. 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 NAA80 using anti-NAA80 antibody. Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. Lane 1: human HEL whole cell lysates, Lane 2: human THP-1 whole cell lysates, Lane 3: human Hela whole cell lysates, Lane 4: human PC-3 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-NAA80 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 an ECL Plus Western Blotting Substrate. The expected band size for NAA80 is at 31 kDa.

Description

NAA80 antibody detects N-acetyltransferase 80, also known as NAT6 or FUS2, encoded by the NAA80 gene. N-acetyltransferase 80 is an enzyme responsible for acetylating the N-terminus of actin, making it unique among N-acetyltransferases in directly modifying one of the most abundant and essential cytoskeletal proteins. NAA80 antibody provides researchers with a specialized reagent for studying actin regulation, cytoskeletal organization, and post-translational modification.

N-acetyltransferase 80 belongs to the GNAT (GCN5-related N-acetyltransferase) superfamily. Research using NAA80 antibody has shown that its primary substrate is actin, which requires acetylation of its N-terminal methionine for proper filament assembly and function. This modification influences actin polymerization dynamics, cell motility, and stability of actin filaments, positioning NAA80 as a critical regulator of cytoskeletal behavior.

Studies with NAA80 antibody have revealed that deletion or loss of NAA80 activity results in defects in actin filament organization, impaired migration, and altered cell morphology. These findings highlight its unique and non-redundant role among acetyltransferases. Furthermore, its specificity toward actin suggests a tightly controlled regulatory mechanism essential for cell function.

Dysregulation of NAA80 has been associated with human disease. Research using NAA80 antibody has shown that genetic mutations can lead to developmental delay, intellectual disability, and impaired muscle function. These phenotypes result from widespread disruption of actin-dependent processes, including vesicle trafficking, adhesion, and signal transduction. In cancer research, altered expression of NAA80 has been observed in tumors, linking cytoskeletal remodeling to oncogenesis.

NAA80 antibody is widely applied in western blotting, immunohistochemistry, and immunofluorescence. Western blotting quantifies enzyme levels across tissues, immunohistochemistry highlights expression in developing muscle and neurons, and immunofluorescence reveals subcellular localization within the cytoplasm. These applications make NAA80 antibody valuable for cytoskeletal and post-translational modification research.

By supplying validated NAA80 antibody reagents, NSJ Bioreagents supports studies into actin acetylation, cytoskeletal dynamics, and disease. Detection of N-acetyltransferase 80 provides researchers with insight into how post-translational regulation of actin influences cell biology and pathology.

Application Notes

Optimal dilution of the NAA80 antibody should be determined by the researcher.

Immunogen

E.coli-derived human NAT6/FUS2/NAA80 recombinant protein (Position: M1-I286) was used as the immunogen for the NAA80 antibody.

Storage

After reconstitution, the NAA80 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.