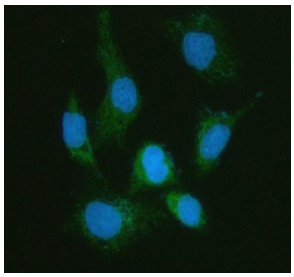
MFAP3L Antibody / Microfibril-associated protein 3-like (FY13029)

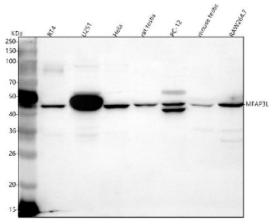
Catalog No.	Formulation	Size
FY13029	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

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	O75121
Applications	Western Blot : 0.25-0.5ug/ml Immunocytochemistry : 5ug/ml Immunofluorescence : 5ug/ml ELISA : 0.1-0.5ug/ml
Limitations	This MFAP3L antibody is available for research use only.



Immunofluorescent staining of MFAP3L using anti-MFAP3L antibody (green). MFAP3L was detected in an immunocytochemical section of human HELA cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/ml rabbit anti-MFAP3L antibody overnight at 4oC. DyLight 488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37oC. The section was counterstained with DAPI nuclear stain (blue). Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Western blot analysis of MFAP3L using anti-MFAP3L antibody. Lane 1: human RT4 whole cell lysates, Lane 2: human U251 whole cell lysates, Lane 3: human Hela whole cell lysates, Lane 4: rat testis tissue lysates, Lane 5: rat PC-12 whole cell lysates, Lane 6: mouse testis tissue lysates, Lane 7: mouse RAW264.7 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-MFAP3L 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 MFAP3L at approximately 45 kDa. The expected molecular weight of MFAP3L is ~45 kDa.

Description

MFAP3L antibody detects Microfibril-associated protein 3-like, a cytoplasmic adaptor protein involved in cell signaling, cytoskeletal regulation, and extracellular matrix organization. The UniProt recommended name is Microfibril-associated protein 3-like (MFAP3L). Although its precise function remains under study, MFAP3L has been implicated in modulating cell adhesion and motility through protein-protein interactions within signaling networks.

Functionally, MFAP3L antibody identifies a 386-amino-acid cytoplasmic protein that associates with signaling molecules such as small GTPases, actin-binding proteins, and scaffolding complexes. MFAP3L contributes to cytoskeletal organization and may facilitate communication between extracellular matrix components and intracellular signaling pathways. Its expression has been linked to the regulation of cell migration, proliferation, and differentiation.

The MFAP3L gene is located on chromosome 4q32.1 and encodes a protein expressed in diverse tissues, including heart, lung, and skeletal muscle. MFAP3L shares sequence similarity with other microfibril-associated proteins but lacks classical extracellular matrix domains, suggesting a distinct intracellular regulatory role. It has been proposed to interact with Rho family GTPases and participate in actin cytoskeleton remodeling during cell movement and adhesion.

In cancer biology, elevated MFAP3L expression has been observed in certain epithelial tumors, including breast and colorectal cancer, where it may contribute to increased motility and invasive potential. Conversely, in cardiac and skeletal muscle, MFAP3L may assist in maintaining structural stability under mechanical stress. Although its specific mechanisms remain to be fully elucidated, MFAP3L appears to function at the interface of cytoskeletal dynamics and signal transduction.

MFAP3L antibody is widely used in cell biology, oncology, and signal transduction research. It is suitable for immunoblotting, immunofluorescence, and co-immunoprecipitation to study MFAP3L localization and binding partners. This antibody supports research into cytoskeletal control, extracellular matrix signaling, and tumor progression. In developmental studies, MFAP3L serves as a marker of cytoplasmic microfibril-associated proteins involved in tissue structure and mechanical adaptation.

Structurally, MFAP3L contains multiple coiled-coil regions that promote protein complex formation and interaction with cytoskeletal regulators. Its expression may be modulated by growth factor signaling and mechanical cues. NSJ Bioreagents provides MFAP3L antibody reagents validated for use in cytoskeletal organization, signaling regulation, and cancer research.

Application Notes

Optimal dilution of the MFAP3L antibody should be determined by the researcher.

Immunogen

E.coli-derived human MFAP3L recombinant protein (Position: K29-V409) was used as the immunogen for the MFAP3L

antibody.

Storage

After reconstitution, the MFAP3L antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.