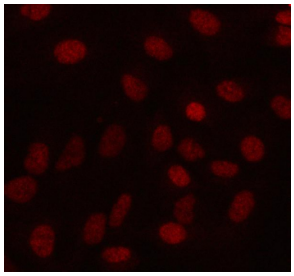
MAMDC4 Antibody / MAM domain-containing protein 4 (FY12307)

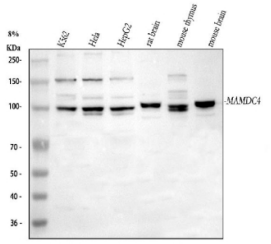
Catalog No.	Formulation	Size
FY12307	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

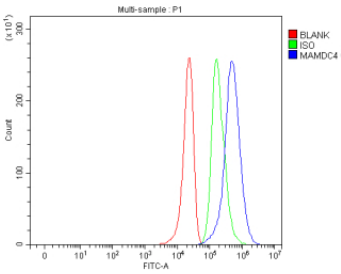
Availability	1-2 days
Species Reactivity	Human, Mouse, Rat
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q6UXC1
Localization	Nuclear, cytoplasmic
Applications	Western Blot : 0.25-0.5ug/ml Immunocytochemistry : 5ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells ELISA : 0.1-0.5ug/ml
Limitations	This MAMDC4 antibody is available for research use only.



Immunofluorescent staining of MAMDC4 using anti-MAMDC4 antibody (red). MAMDC4 was detected in an immunocytochemical section of 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-MAMDC4 antibody overnight at 4oC. Cy3 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37oC. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Western blot analysis of MAMDC4 using anti-MAMDC4 antibody. Lane 1: human K562 whole cell lysates, Lane 2: human Hela whole cell lysates, Lane 3: human HepG2 whole cell lysates, Lane 4: rat brain tissue lysates, Lane 5: mouse thymus tissue lysates, Lane 6: mouse brain tissue 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-MAMDC4 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. The expected molecular weight of MAMDC4 is 104-131 kDa (multiple isoforms) and the protein may be observed at higher moleuclar weights due to glycosylation.



Flow Cytometry analysis of HepG2 cells using anti-MAMDC4 antibody. Overlay histogram showing HepG2 cells stained with (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-MAMDC4 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 (Red line) was also used as a control.

Description

MAMDC4 antibody detects MAM domain-containing protein 4, encoded by the MAMDC4 gene on chromosome 9q34.3. MAMDC4 antibody is commonly used in cell adhesion, signaling, and developmental biology research. MAMDC4 is a transmembrane glycoprotein characterized by the presence of MAM domains (meprin, A5, mu), which mediate cell adhesion and protein-protein interactions. Although its precise functions are not fully defined, MAMDC4 is thought to participate in epithelial integrity, neuronal development, and cell signaling.

Structurally, MAMDC4 is a 104-131 kDa protein with multiple MAM domains, immunoglobulin-like domains, and a single transmembrane segment. These structural motifs are shared with proteins involved in cell adhesion and neural guidance. MAMDC4 localizes to the plasma membrane and may be secreted in some contexts. Expression is enriched in epithelial tissues and developing nervous system.

Functionally, MAMDC4 contributes to cell-cell interactions, adhesion, and extracellular signaling. Its MAM domains mediate protein binding that influences cellular communication and tissue organization. Researchers use MAMDC4 antibody to study epithelial biology, neurodevelopment, and signaling networks.

Clinically, MAMDC4 has been implicated in cancer progression, particularly in colorectal and gastric cancers, where altered expression correlates with invasion and metastasis. Variants in MAMDC4 may also influence susceptibility to developmental disorders and neurological disease, though further research is needed. NSJ Bioreagents provides MAMDC4 antibody to support studies of adhesion, signaling, and disease biology.

Experimentally, MAMDC4 antibody is used in western blotting to detect the 104-131 kDa protein, in immunohistochemistry to analyze epithelial expression, and in immunofluorescence microscopy to visualize membrane localization. Co-immunoprecipitation with MAMDC4 antibody helps identify adhesion and signaling partners.

Application Notes

Optimal dilution of the MAMDC4 antibody should be determined by the researcher.

Immunogen

E.coli-derived human MAMDC4 recombinant protein (Position: N26-R744) was used as the immunogen for the MAMDC4 antibody.

Storage

After reconstitution, the MAMDC4 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.