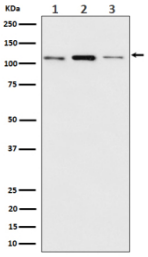
TMEM67 Antibody / Meckelin [clone 30T77] (FY12642)

Catalog No.	Formulation	Size
FY12642	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

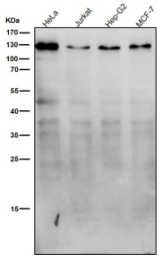
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human, Mouse, Rat
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	30T77
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	Q5HYA8
Applications	Western blot: 1:500-1:2000 Immunohistochemistry: 1:50-1:200 Immunocytochemistry/Immunofluorescence: 1:50-1:200 Flow Cytometry: 1:50
Limitations	This TMEM67 antibody is available for research use only.



Western blot analysis of Meckelin/TMEM67 expression in (1) human MCF7 cell lysate; (2) mouse RAW 264.7 cell lysate; (3) rat C6 cell lysate using TMEM67 antibody. Expected molecular weight ~111 kDa, corresponding the the unglycosylated form of the protein.



All lanes use the TMEM67 antibody at 1:3000 dilution for 1 hour at room temperature. Western blot probed with anti-TMEM67 shows a major band just below the 130 kDa marker, higher than the predicted ~111 kDa, consistent with the mature, N-glycosylated form of the TMEM67 ciliary membrane protein.

Description

TMEM67 antibody detects meckelin, a transmembrane protein encoded by the TMEM67 gene. Meckelin localizes to primary cilia and the plasma membrane, where it contributes to ciliary structure and signaling. Mutations in TMEM67 cause Meckel syndrome type 3 and Joubert syndrome type 6, autosomal recessive ciliopathies characterized by developmental abnormalities, cystic kidneys, and neurological defects. Meckelin is therefore essential for cilia based signaling pathways, including Wnt and Hedgehog.

TMEM67 antibody is widely applied in developmental biology, nephrology, and neurogenetics. By detecting meckelin, researchers can study how ciliary proteins regulate organ development and signaling. Ciliary dysfunction underlies a spectrum of disorders known as ciliopathies, linking TMEM67 research to human disease mechanisms.

Western blot assays detect meckelin in tissue lysates, while immunohistochemistry maps expression in kidney, brain, and liver. Immunofluorescence highlights punctate staining at primary cilia, consistent with its functional localization. These applications provide robust tools for examining ciliary protein biology.

Meckelin plays roles in regulating planar cell polarity, neuronal migration, and renal morphogenesis. Its dysfunction disrupts signaling and tissue organization, causing developmental defects and organ pathology. By applying TMEM67 antibody, scientists can investigate pathways linking ciliary function to embryogenesis, neurodevelopment, and kidney disease.

TMEM67 antibody from NSJ Bioreagents delivers dependable specificity for studying meckelin function. Its strong performance ensures accurate detection across developmental and disease contexts.

Application Notes

Optimal dilution of the TMEM67 antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human Meckelin was used as the immunogen for the TMEM67 antibody.

Storage

Store the TMEM67 antibody at -20oC.

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