

MKS1 Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22330a

Specification

MKS1 Antibody (N-Term) - Product Information

Application IF, WB, FC,E
Primary Accession O9NXB0
Reactivity Human
Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Calculated MW 64528

MKS1 Antibody (N-Term) - Additional Information

Gene ID 54903

Other Names

Meckel syndrome type 1 protein, MKS1

Target/Specificity

This MKS1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 90-124 amino acids from the human region of human MKS1.

Dilution

IF~~1:25 WB~~1:2000 FC~~1:25

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

MKS1 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

MKS1 Antibody (N-Term) - Protein Information

Name MKS1

Function Component of the tectonic-like complex, a complex localized at the transition zone of primary cilia and acting as a barrier that prevents diffusion of transmembrane proteins between





the cilia and plasma membranes. Involved in centrosome migration to the apical cell surface during early ciliogenesis. Required for ciliary structure and function, including a role in regulating length and appropriate number through modulating centrosome duplication. Required for cell branching morphology.

Cellular Location

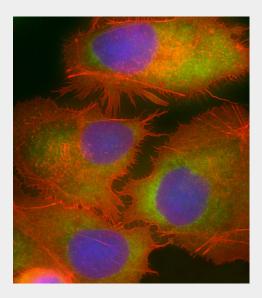
Cytoplasm, cytoskeleton, cilium basal body. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome Note=Localizes at the transition zone, a region between the basal body and the ciliary axoneme.

MKS1 Antibody (N-Term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

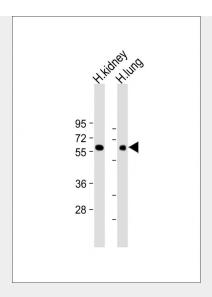
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MKS1 Antibody (N-Term) - Images

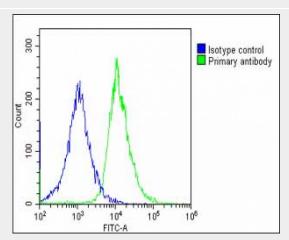


Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HepG2 (human liver hepatocellular carcinoma cell line) cells labeling MKS1 with AP22330a at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-rabbit IgG (NK179883) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoplasm staining on HepG2 cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin (PD18466410) at 1/100 dilution (red). The nuclear counter stain is DAPI (blue).





All lanes : Anti-MKS1 Antibody (N-Term) at 1:2000 dilution Lane 1: Human kidney lysate Lane 2: Human lung lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 65 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Overlay histogram showing HepG2 cells stained with AP22330a(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP22330a, 1:25 dilution) for 60 min at 37 $^{\circ}$ C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OE188374) at 1/200 dilution for 40 min at 37 $^{\circ}$ C. Isotype control antibody (blue line) was rabbit IgG1 (1 μ g/1x10 $^{\circ}$ 6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

MKS1 Antibody (N-Term) - Background

Component of the tectonic-like complex, a complex localized at the transition zone of primary cilia and acting as a barrier that prevents diffusion of transmembrane proteins between the cilia and plasma membranes. Involved in centrosome migration to the apical cell surface during early ciliogenesis. Required for ciliary structure and function, including a role in regulating length and appropriate number through modulating centrosome duplication. Required for cell branching morphology.

MKS1 Antibody (N-Term) - References





Kyttaelae M., et al. Nat. Genet. 38:155-157(2006). Ota T., et al. Nat. Genet. 36:40-45(2004). Zody M.C., et al. Nature 440:1045-1049(2006). Ebert L.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases. Dawe H.R., et al. Hum. Mol. Genet. 16:173-186(2007).