

Anti-NUDT19 Antibody [JE64-49]

HA721101



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IF-Cell, IHC-P, FC
Molecular Wt:	Predicted band size: 42 kDa
Clone number:	JE64-49

Description: NUDT19 (Nudix Hydrolase 19) is a Protein Coding gene. Among its related pathways are Peroxisomal lipid metabolism and Metabolism. Gene Ontology (GO) annotations related to this gene include signaling receptor binding and hydrolase activity. Fatty acyl-coenzyme A (CoA) diphosphatase that hydrolyzes fatty acyl-CoA to yield acyl-4'-phosphopantetheine and adenosine 3',5'-bisphosphate. Coenzyme A diphosphatase that mediates the hydrolysis of a wide range of CoA esters, including choloyl-CoA and branched-chain fatty-acyl-CoA esters. At low substrate concentrations medium and long-chain fatty-acyl-CoA esters are the primary substrates. Highest activity seen with medium-chain acyl-CoA esters and higher rates of activity seen with the unsaturated acyl-CoA esters compared with the saturated esters. Exhibits decapping activity towards dpCoA-capped RNAs in vitro.

Immunogen: Recombinant protein within human NUDT19 aa 50-200/375.

Positive control: 293T cell lysates, human kidney tissue, HeLa, SiHa.

Subcellular location: Peroxisome.

Database links: SwissProt: A8MXV4 Human

Recommended Dilutions:

WB	1:500
IF-Cell	1:50
IHC-P	1:100
FC	1:1,000

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20°C long term.

Purity: Protein A affinity purified.

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Orders:0086-571-88062880

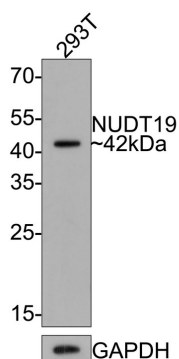
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Images

Fig1: Western blot analysis of NUDT19 on 293T cell lysates with Rabbit anti-NUDT19 antibody (HA721101) at 1/500 dilution.



Lysates/proteins at 10 µg/Lane.

Predicted band size: 42 kDa

Observed band size: 42 kDa

Exposure time: 2 minutes;

12% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDN/TBST for 1 hour at room temperature. The primary antibody (HA721101) at 1/500 dilution was used in 5% NFDN/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:200,000 dilution was used for 1 hour at room temperature.

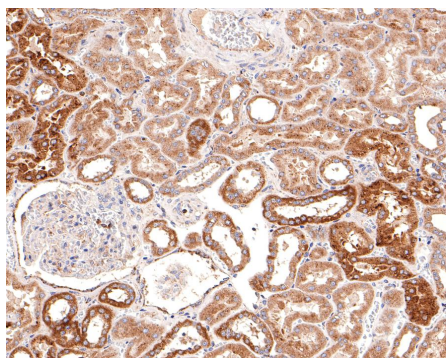
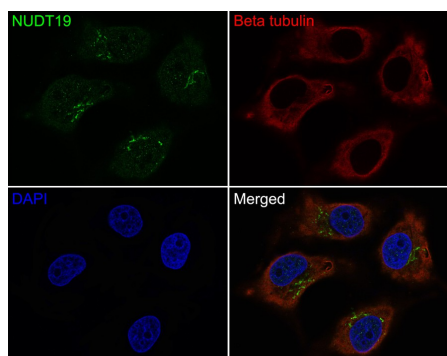


Fig2: Immunohistochemical analysis of paraffin-embedded human kidney tissue with Rabbit anti-NUDT19 antibody (HA721101) at 1/100 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA721101) at 1/100 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Fig3: Immunocytochemistry analysis of HeLa cells labeling NUDT19 with Rabbit anti-NUDT19 antibody (HA721101) at 1/50 dilution.



Cells were fixed in 4% paraformaldehyde for 10 minutes at 37 °C, permeabilized with 0.05% Triton X-100 in PBS for 20 minutes, and then blocked with 2% negative goat serum for 30 minutes at room temperature. Cells were then incubated with Rabbit anti-NUDT19 antibody (HA721101) at 1/50 dilution in 2% negative goat serum overnight at 4 °C. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (M1305-2, red) was stained at 1/200 dilution overnight at +4 °C. Goat Anti-Mouse IgG H&L (iFluor™ 647, HA1127) were used as the secondary antibody at 1/1,000 dilution.

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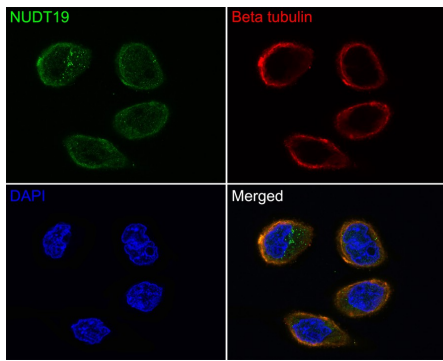
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Fig4: Immunocytochemistry analysis of SiHa cells labeling NUDT19 with Rabbit anti-NUDT19 antibody (HA721101) at 1/50 dilution.



Cells were fixed in 4% paraformaldehyde for 10 minutes at 37 °C, permeabilized with 0.05% Triton X-100 in PBS for 20 minutes, and then blocked with 2% negative goat serum for 30 minutes at room temperature. Cells were then incubated with Rabbit anti-NUDT19 antibody (HA721101) at 1/50 dilution in 2% negative goat serum overnight at 4 °C. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (M1305-2, red) was stained at 1/200 dilution overnight at +4 °C. Goat Anti-Mouse IgG H&L (iFluor™ 647, HA1127) were used as the secondary antibody at 1/1,000 dilution.

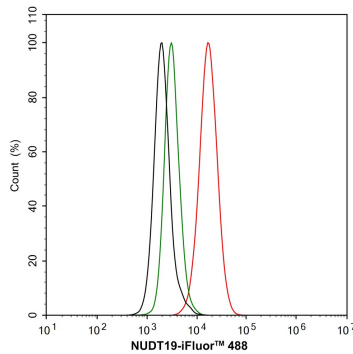


Fig5: Flow cytometric analysis of HeLa cells labeling NUDT19.

Cells were fixed and permeabilized. Then stained with the primary antibody (HA721101, 1/1,000) (red) compared with Rabbit IgG Isotype Control (green). After incubation of the primary antibody at +4 °C for an hour, the cells were stained with a iFluor™ 488 conjugate-Goat anti-Rabbit IgG Secondary antibody (HA1121) at 1/1,000 dilution for 30 minutes at +4 °C. Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Shumar SA. et. al. Nudt19 is a renal CoA diphosphohydrolase with biochemical and regulatory properties that are distinct from the hepatic Nudt7 isoform. J Biol Chem. 2018 Mar

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