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NUDT5 Rabbit mAb

Catalog # AP78736

Product Information

Application	WB, IHC-P
Primary Accession	Q9UKK9
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Immunogen	A synthesized peptide derived from human NUDT5
Purification	Affinity Chromatography
Calculated MW	24328

Additional Information

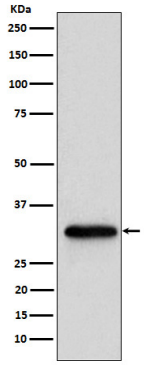
Gene ID	11164
Other Names	NUDT5
Dilution	WB~~1/500-1/1000 IHC-P~~N/A
Format	Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

Name	NUDT5 (HGNC:8052)
Function	Enzyme that can either act as an ADP-sugar pyrophosphatase in absence of diphosphate or catalyze the synthesis of ATP in presence of diphosphate (PubMed:27257257). In absence of diphosphate, hydrolyzes with similar activities various modified nucleoside diphosphates such as ADP-ribose, ADP-mannose, ADP-glucose, 8-oxo-GDP and 8-oxo-dGDP (PubMed:10567213, PubMed:10722730, PubMed:17052728, PubMed:12717453, PubMed:19699693, PubMed:21389046, PubMed:38635563). Can also hydrolyze other nucleotide sugars with low activity (PubMed:12717453, PubMed:19699693, PubMed:21389046). In presence of diphosphate, mediates the synthesis of ATP in the nucleus by catalyzing the conversion of ADP-ribose to ATP and ribose 5-phosphate. Nuclear ATP synthesis takes place when dephosphorylated at Thr-45 (PubMed:27257257). Nuclear ATP generation is required for extensive chromatin remodeling events that are energy-consuming (PubMed:27257257). In vitro, it has decapping activity on

	11-mer RNA capped with uridine diphosphate N- acetylglucosamine (UDP-GlcNAc) by hydrolyzing the pyrophosphate bridge of the sugar cap (PubMed:38716860). Does not play a role in U8 snoRNA decapping (By similarity). Binds U8 snoRNA (By similarity).
Cellular Location	Nucleus.
Tissue Location	Widely expressed. Most abundant in liver.

Images



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