

NUDT16 antibody

Product Information

Catalog No.:	FNab05901
Size:	100µg
Form:	liquid
Purification:	Immunogen affinity purified
Purity:	≥95% as determined by SDS-PAGE
Host:	Rabbit
Clonality:	polyclonal
Clone ID:	None
IsoType:	IgG
Storage:	PBS with 0.02% sodium azide and 50% glycerol pH 7.3, -20°C for 12 months(Avoid repeated freeze / thaw cycles.)

Background

RNA-binding and decapping enzyme that catalyzes the cleavage of the cap structure of snoRNAs and mRNAs in a metal-dependent manner. Part of the U8 snoRNP complex that is required for the accumulation of mature 5.8S and 28S rRNA. Has diphosphatase activity and removes m7G and/or m227G caps from U8 snoRNA and leaves a 5'monophosphate on the RNA. Catalyzes also the cleavage of the cap structure on mRNAs. Does not hydrolyze cap analog structures like 7-methylguanosine nucleoside triphosphate(m7GpppG). Also hydrolysis m7G-and m227G U3-capped RNAs but with less efficiencies. Has broad substrate specificity with manganese or cobalt as cofactor and can act on various RNA species. Binds to the U8 snoRNA; metal is not required for RNA-binding. May play a role in the regulation of snoRNAs and mRNAs degradation. Acts also as a phosphatase; hydrolyzes the non-canonical purine nucleotides inosine diphosphate(IDP) and deoxyinosine diphosphate(dITP) as well as guanosine diphosphate(GDP), deoxyguanosine diphosphate(dGDP), xanthine diphosphate(XDP), inosine triphosphate(ITP) and deoxyinosine triphosphate(ITP) to their respective monophosphate derivatives and does not distinguish between the deoxy-and ribose forms(PubMed:20385596, PubMed:26121039). The order of activity with different substrates is IDP > dIDP >> GDP = dGDP > XDP = ITP = dITP(PubMed:20385596). Binds strongly to GTP, ITP and XTP. Participates in the hydrolysis of dIDP/IDP and probably excludes non-canonical purines from RNA and DNA precursor pools, thus preventing their incorporation into RNA and DNA and avoiding chromosomal lesions(PubMed:20385596).

Immunogen information

Immunogen:	nudix(nucleoside diphosphate linked moiety X)-type motif 16
Synonyms:	U8 snoRNA-decapping enzyme IDP phosphatase (IDPase) Inosine diphosphate phosphatase Nucleoside diphosphate-linked moiety X motif 16 (Nudix motif 16) Nudix hydrolase 16 U8 snoRNA-binding protein H29K m7GpppN-mRNA hydrolase NUDT16

Observed MW: 21 kDa
Uniprot ID : Q96DE0

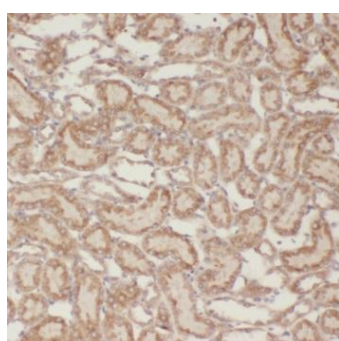
Application

Reactivity: Human

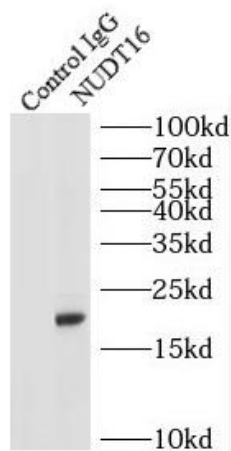
Tested Application: ELISA, WB, IHC, IP, IF

Recommended dilution: WB: 1:1000-1:4000; IP: 1:500-1:2000; IHC: 1:20-1:200; IF: 1:20-1:200

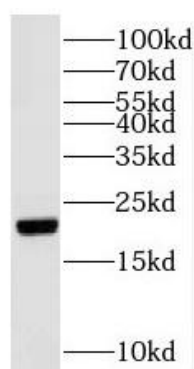
Image:



Immunohistochemistry of paraffin-embedded human kidney tissue slide using FNab05901(NUDT16 Antibody) at dilution of 1:50



IP Result of anti-NUDT16 (IP:FNab05901, 3ug; Detection:FNab05901 1:1000) with HEK-293 cells lysate 2400ug.



HeLa cells were subjected to SDS PAGE followed by western blot with FNab05901(NUDT16 antibody) at dilution of 1:2500