Datasheet for ABIN7117078

anti-NUDT16 antibody

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Overview

Quantity:	100 µg
Target:	NUDT16
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This NUDT16 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunoprecipitation (IP), Immunofluorescence (IF)

Product Details

Immunogen:	nudix(nucleoside diphosphate linked moiety X)-type motif 16
Isotype:	IgG
Purification:	Immunogen affinity purified
Purity:	≥95 % as determined by SDS-PAGE

Target Details

Target:	NUDT16
Alternative Name:	NUDT16 (NUDT16 Products)
Background:	Synonyms:Nudix motif 16, NUDT16, U8 snoRNA binding protein H29K, U8 snoRNA decapping enzyme 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

Target Details

	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).
Molecular Weight:	21 kDa
Gene ID:	131870
UniProt:	Q96DE0
Pathways:	Positive Regulation of Response to DNA Damage Stimulus

Application Details

Application Notes:	WB: 1:1000-1:4000, IP: 1:500-1:2000, IHC: 1:20-1:200, IF: 1:20-1:200
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	PBS with 0.02 % sodium azide and 50 % glycerol pH 7.3,
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which

Handling

	should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	-20°C for 12 months (Avoid repeated freeze / thaw cycles.)
Expiry Date:	12 months

