

Datasheet for ABIN7549946 **NUDT5 Protein (AA 1-219) (His tag)**



Overview

Quantity:	1 mg
Target:	NUDT5
Protein Characteristics:	AA 1-219
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This NUDT5 protein is labelled with His tag.

Product Details

Product Details	
Purpose:	Custom-made recombinant NUDT5 Protein expressed in mammalian cells.
Sequence:	MESQEPTESS QNGKQYIISE ELISEGKWVK LEKTTYMDPT GKTRTWESVK RTTRKEQTAD
	GVAVIPVLQR TLHYECIVLV KQFRPPMGGY CIEFPAGLID DGETPEAAAL RELEEETGYK
	GDIAECSPAV CMDPGLSNCT IHIVTVTING DDAENARPKP KPGDGEFVEV ISLPKNDLLQ
	RLDALVAEEH LTVDARVYSY ALALKHANAK PFEVPFLKF Sequence without tag. The proposed
	REDALVACED LIVDARVIST ALALNDANAN PREVPRENT Sequence without tag. The proposed
	Purification-Tag is based on experiences with the expression system, a different complexity
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Specificity:	Purification-Tag is based on experiences with the expression system, a different complexit of the protein could make another tag necessary. In case you have a special request, please
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Specificity: Characteristics:	Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us. If you are looking for a specific domain and are interested in a partial protein or a different

- · Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:

> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade:

custom-made

Target Details

Target:	NUDT5

Alternative Name: NUDT5 (NUDT5 Products)

Background:

ADP-sugar pyrophosphatase (EC 3.6.1.13) (8-oxo-dGDP phosphatase) (EC 3.6.1.58) (Nuclear ATP-synthesis protein NUDIX5) (EC 2.7.7.96) (Nucleoside diphosphate-linked moiety X motif 5) (Nudix motif 5) (hNUDT5) (YSA1H),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:19699693, PubMed:21389046, PubMed:17052728). Can also hydrolyze other nucleotide sugars with low activity (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). Does not play a role in U8 snoRNA decapping activity (By similarity). Binds U8 snoRNA (By similarity).

Target Details

Expiry Date:

12 months

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	ECO:0000269 PubMed:10722730, ECO:0000269 PubMed:17052728,
	ECO:0000269 PubMed:19699693, ECO:0000269 PubMed:21389046,
	ECO:0000269 PubMed:27257257}.
Molecular Weight:	24.3 kDa
UniProt:	Q9UKK9
Application Details	
Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for
	functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.