

Datasheet for ABIN7550196  
**NUDT12 Protein (AA 1-462) (His tag)**



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## Overview

Quantity:	1 mg
Target:	NUDT12
Protein Characteristics:	AA 1-462
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This NUDT12 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

## Product Details

Purpose:	Custom-made recombinat NUDT12 Protein expressed in mammalian cells.
Sequence:	MSSVKRSLKQ EIVTQFHCSA AEGDIAKLTG ILSHSPSLLN ETSNGWTAL MYAARNGHPE IVQFLLEKGC DRSIVNKSQR TALDIAVFWG YKHIANLLAT AKGGKKPWFL TNEVEECENY FSKTLDRKS EKRNSDWLL AKESHPATVF ILFSDLNPLV TLGGNKESFQ QPEVRLCQLN YTDIKDYLAQ PEKITLIFLG VELEIKDKLL NYAGEVPREE EDGLVAWFAL GIDPIAAEEF KQRHENCYFL HPPMPALLQL KEKEAGVVAQ ARSVLAWHSR YKFCPTCGNA TKIEEGGYKR LCLKEDCPSL NGVHNTSYPR VDPVIMQVI HPDGTKCLLG RQKRFPFGMF TCLAGFIEPG ETIEDAVRRE VEEESGVKVG HVQYVACQPW PMPSSLMIGC LALAVSTEIK VDKNEIEDAR WFTREQVLDV LTKGKQQAFF VPPSRAIAHQ LIKWIRINP NL <b>Sequence without tag. The proposed 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.</b>

## Product Details

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### Characteristics:

#### Key Benefits:

- Made to order protein - from design to production - by highly experienced protein experts.
- 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.

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### Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

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### Grade:

custom-made

## Target Details

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### Target:

NUDT12

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### Alternative Name:

NUDT12 ([NUDT12 Products](#))

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### Background:

NAD-capped RNA hydrolase NUDT12 (DeNADding enzyme NUDT12) (EC 3.6.1.-) (NADH pyrophosphatase NUDT12) (EC 3.6.1.22) (Nucleoside diphosphate-linked moiety X motif 12) (Nudix motif 12),FUNCTION: mRNA decapping enzyme that specifically removes the nicotinamide adenine dinucleotide (NAD) cap from a subset of mRNAs by hydrolyzing the diphosphate linkage to produce nicotinamide mononucleotide (NMN) and 5' monophosphate mRNA (PubMed:31101919, PubMed:31875550). The NAD-cap is present at the 5'-end of some RNAs, in contrast to the canonical N7 methylguanosine (m7G) cap, the NAD cap promotes mRNA decay (PubMed:31101919). Preferentially acts on NAD-capped transcripts in response to nutrient stress (PubMed:31101919). Also acts on free nicotinamide adenine dinucleotide molecules: hydrolyzes NAD(H) into NMN(H) and AMP, and NADPH into NMNH and 2',5'-ADP (PubMed:12790796). May act to regulate the concentration of peroxisomal nicotinamide nucleotide cofactors required for oxidative metabolism in this organelle (PubMed:12790796). Regulates the levels of circadian clock components PER1, PER2, PER3 and CRY2 in the liver (By

## Target Details

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similarity). {ECO:0000250|UniProtKB:Q9DCN1, ECO:0000269|PubMed:12790796, ECO:0000269|PubMed:31101919, ECO:0000269|PubMed:31875550}.

Molecular Weight: 52.1 kDa

UniProt: [Q9BQG2](#)

## Application Details

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Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

## Handling

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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.

Expiry Date: 12 months