

Datasheet for ABIN7554688 NAT10 Protein (AA 1-1025) (His tag)



Overview

Quantity:	1 mg
Target:	NAT10
Protein Characteristics:	AA 1-1025
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This NAT10 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant NAT10 Protein expressed in mammalian cells.
Sequence:	MHRKKVDNRI RILIENGVAE RQRSLFVVVG DRGKDQVVIL HHMLSKATVK ARPSVLWCYK
	KELGFSSHRK KRMRQLQKKI KNGTLNIKQD DPFELFIAAT NIRYCYYNET HKILGNTFGM
	CVLQDFEALT PNLLARTVET VEGGGLVVIL LRTMNSLKQL YTVTMDVHSR YRTEAHQDVV
	GRFNERFILS LASCKKCLVI DDQLNILPIS SHVATMEALP PQTPDESLGP SDLELRELKE
	SLQDTQPVGV LVDCCKTLDQ AKAVLKFIEG ISEKTLRSTV ALTAARGRGK SAALGLAIAG
	AVAFGYSNIF VTSPSPDNLH TLFEFVFKGF DALQYQEHLD YEIIQSLNPE FNKAVIRVNV
	FREHRQTIQY IHPADAVKLG QAELVVIDEA AAIPLPLVKS LLGPYLVFMA STINGYEGTG
	RSLSLKLIQQ LRQQSAQSQV STTAENKTTT TARLASARTL YEVSLQESIR YAPGDAVEKW
	LNDLLCLDCL NITRIVSGCP LPEACELYYV NRDTLFCYHK ASEVFLQRLM ALYVASHYKN
	SPNDLQMLSD APAHHLFCLL PPVPPTQNAL PEVLAVIQVC LEGEISRQSI LNSLSRGKKA
	SGDLIPWTVS EQFQDPDFGG LSGGRVVRIA VHPDYQGMGY GSRALQLLQM YYEGRFPCLE
	EKVLETPQEI HTVSSEAVSL LEEVITPRKD LPPLLLKLNE RPAERLDYLG VSYGLTPRLL

KFWKRAGFVP VYLRQTPNDL TGEHSCIMLK TLTDEDEADQ GGWLAAFWKD FRRRFLALLS
YQFSTFSPSL ALNIIQNRNM GKPAQPALSR EELEALFLPY DLKRLEMYSR NMVDYHLIMD
MIPAISRIYF LNQLGDLALS AAQSALLLGI GLQHKSVDQL EKEIELPSGQ LMGLFNRIIR
KVVKLFNEVQ EKAIEEQMVA AKDVVMEPTM KTLSDDLDEA AKEFQEKHKK EVGKLKSMDL
SEYIIRGDDE EWNEVLNKAG PNASIISLKS DKKRKLEAKQ EPKQSKKLKN RETKNKKDMK LKRKK
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.

Specificity:

If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.

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.

Purity:

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

Grade:

custom-made

Target Details

Target:	NAT10
Alternative Name:	NAT10 (NAT10 Products)
Background:	RNA cytidine acetyltransferase (EC 2.3.1) (18S rRNA cytosine acetyltransferase) (N-
	acetyltransferase 10) (N-acetyltransferase-like protein) (hALP),FUNCTION: RNA cytidine
	acetyltransferase that catalyzes the formation of N(4)-acetylcytidine (ac4C) modification on

mRNAs, 18S rRNA and tRNAs (PubMed:25411247, PubMed:25653167, PubMed:30449621, PubMed:35679869). Catalyzes ac4C modification of a broad range of mRNAs, enhancing mRNA stability and translation (PubMed:30449621, PubMed:35679869). mRNA ac4C modification is frequently present within wobble cytidine sites and promotes translation efficiency (PubMed:30449621). Mediates the formation of ac4C at position 1842 in 18S rRNA (PubMed:25411247). May also catalyze the formation of ac4C at position 1337 in 18S rRNA (By similarity). Required for early nucleolar cleavages of precursor rRNA at sites A0, A1 and A2 during 18S rRNA synthesis (PubMed:25411247, PubMed:25653167). Catalyzes the formation of ac4C in serine and leucine tRNAs (By similarity). Requires the tRNA-binding adapter protein THUMPD1 for full tRNA acetyltransferase activity but not for 18S rRNA acetylation (PubMed:25653167). In addition to RNA acetyltransferase activity, also able to acetylate lysine residues of proteins, such as histones, microtubules, p53/TP53 and MDM2, in vitro (PubMed:14592445, PubMed:17631499, PubMed:19303003, PubMed:26882543, PubMed:27993683, PubMed:30165671). The relevance of the protein lysine acetyltransferase activity is however unsure in vivo (PubMed:30449621). Activates telomerase activity by stimulating the transcription of TERT, and may also regulate telomerase function by affecting the balance of telomerase subunit assembly, disassembly, and localization (PubMed:14592445, PubMed:18082603). Involved in the regulation of centrosome duplication by acetylating CENATAC during mitosis, promoting SASS6 proteasome degradation (PubMed:31722219). Part of the small subunit (SSU) processome, first precursor of the small eukaryotic ribosomal subunit. During the assembly of the SSU processome in the nucleolus, many ribosome biogenesis factors, an RNA chaperone and ribosomal proteins associate with the nascent prerRNA and work in concert to generate RNA folding, modifications, rearrangements and cleavage as well as targeted degradation of pre-ribosomal RNA by the RNA exosome (PubMed:34516797). {ECO:0000250|UniProtKB:P53914, ECO:0000269|PubMed:14592445, ECO:0000269|PubMed:17631499, ECO:0000269|PubMed:18082603, ECO:0000269|PubMed:19303003, ECO:0000269|PubMed:25411247, ECO:0000269|PubMed:25653167, ECO:0000269|PubMed:26882543, ECO:0000269|PubMed:27993683, ECO:0000269|PubMed:30165671, ECO:0000269|PubMed:30449621, ECO:0000269|PubMed:31722219, ECO:0000269|PubMed:34516797, ECO:0000269|PubMed:35679869}.

Molecular Weight:

115.7 kDa

UniProt:

09H0A0

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.
Expiry Date:	12 months