

Datasheet for ABIN3136548  
**NAT10 Protein (AA 1-1024) (His tag)**[Go to Product page](#)

## 1 Image

## Overview

Quantity:	1 mg
Target:	NAT10
Protein Characteristics:	AA 1-1024
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This NAT10 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

## Product Details

Sequence:	MNRKKVDNRI RILIENGVAE RQRSLFVVVG DRGKDQVVIL HHMSKATVK ARPSVLWCYK KELGFSSHRK KRMRQLQKKI KSGTLNLKQD DPFELFVAAT NIRYCYNET HKILGNTFGM CVLQDFEALT PNLLARTVET VEGGGLVVIL LRTMNSLKQL YTM TMDVHSR YRTEAHQDVV GRFNERFILS LASCKKCLVI DDQLDILPIS SHVASIEALP PQAPDENLSP AAELLELKE SLQDTQPVGV LVDCKTLDQ AKAVLKFIEG ISEKTLRSTV ALTAARGRGK SAALGLAIAG AVAFGYSNIF VTSPSPDNLH TLFEFVFKGF DALQYQEHLD YEIVQSLNPE FNKAVIRVNV FREHRQTIQY IHPADAVKLG QAELVVIDEA AAIPPLVKS LLGPYLVFMA STINGYEGTG RSLSLKLIQQ LRQQAQSQV STTAENKTTT TARLASARTL HEVSLQESIR YAPGDAVEKW LNDLLCLDCL NITRIVSGCP LPEACELYV NRDTLFCYHK ASEVFLQRLM ALYVASHYKN SPNDLQMLSD APAHHLFCLL PPVPPTQNAL PEVLAVVQVC LEGEISRQSI LNSLSRGKKA SGDLIPWTVS EQFQDPDFGG LSGGRVVRIA VHPDYQGMGY GSRALQLQM YYEGKFPCLE EKVLETPQEI RTVSSEAVSL LEEVITPRKD LPPLLLKLNE RPAERLDYLG VSYGLTPRL
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KFWKRAGFVP VYLRQTPNDL TGEHSCIMLK TLADEDEAEQ GAWLAAFWKD FRRRFLALLS  
YQFSTFSPAL SLNIIQNRNV AKSALPALGR EHLEALFLPY DLKRLEMYSR NMVDYHLIMD  
LIPASRLYF LNQLGDLCLS AAQSALLLGI GLQHKSVQDL EKEIELPSGQ LMGLFNRIIR  
KVVKLFNDVQ EKAIEEQMVA VKDVVMEPTM KTLSDDLDEA AKEFQEKHKK EVGKLKMDL  
SQYVIRGDDE EWNEVLSKAG QNASIVSLKS DKKRKLETQ EPKQSKKLKK RDNNRKDMKL KRKK

**Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**

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### Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Mouse Nat10 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- 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 will ensure that you receive a correctly folded protein.

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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm.

The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the ExPASy's protParam tool to determine the absorption coefficient of each protein.

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### Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

## Product Details

Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

## Target Details

Target:	NAT10
Alternative Name:	Nat10 ( <a href="#">NAT10 Products</a> )
Background:	RNA cytidine acetyltransferase with specificity toward both 18S rRNA and tRNAs. Catalyzes the formation of N(4)-acetylcytidine (ac4C) in 18S rRNA. Required for early nucleolar cleavages of precursor rRNA at sites A0, A1 and A2 during 18S rRNA synthesis. Catalyzes the formation of ac4C in serine and leucine tRNAs. Requires the tRNA-binding adapter protein THUMBD1 for full tRNA acetyltransferase activity but not for 18S rRNA acetylation (Probable). Can acetylate both histones and microtubules. Histone acetylation may regulate transcription and mitotic chromosome de-condensation. 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. Acetylates alpha-tubulin, which may affect microtubule stability and cell division (By similarity). {ECO:0000250 UniProtKB:Q9H0A0, ECO:0000255 HAMAP-Rule:MF_03211}.
Molecular Weight:	116.4 kDa Including tag.
UniProt:	<a href="#">Q8K224</a>

## Application Details

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.
Comment:	Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

## Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value 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:	Unlimited (if stored properly)

## Images



**Image 1.** „Crystallography Grade“ protein due to multi-step, protein-specific purification process