

## Datasheet for ABIN3154979

# DNAJC10 Protein (AA 33-793) (His tag)



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### Overview

Quantity:	2 mg
Target:	DNAJC10
Protein Characteristics:	AA 33-793
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This DNAJC10 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), ELISA, Western Blotting (WB), Crystallization (Crys)

### **Product Details**

#### Sequence:

DQNFYSLLGV SKTASSREIR QAFKKLALKL HPDKNPNNPN AHGDFLKINR AYEVLKDEDL
RKKYDKYGEK GLEDNQGGQY ESWSYYRYDF GIYDDDPEII TLERREFDAA VNSGELWFVN
FYSPGCSHCH DLAPTWREFA KEVDGLLRIG AVNCGDDRML CRMKGVNSYP SLFIFRSGMA
AVKYNGDRSK ESLVAFAMQH VRSTVTELST GNFVNAIETA FAAGVGWLIT FCSKGEDCLT
SQTRLRLSGM LDGLVNVGWV DCDAQDSLCK SLDTTASTTA YFPPGATLND REKSSVLFLN
SLDAKEIYME IIHNLPDFEL LSANQLEDRL AHHRWLVFFH FGKNENANDP ELKKLKTLLK
NEHIQVGRFD CSSAPGICSD LYVFQPCLAV FKGQGTKEYE IHHGKKILYD ILAFAKESVN
SHVTTLGPQN FPASDKEPWL VDFFAPWCPP CRALLPELRK ASTLLYGQLK VGTLDCTIHE
GLCNMYNIQA YPTTVVFNQS SIHEYEGHHS AEQILEFIED LRNPSVVSLT PSTFNELVKQ
RKHDEVWMVD FYSPWCHPCQ VLMPEWKRMA RTLTGLINVG SVDCQQYHSF CTQENVQRYP
EIRFYPQKSS KAYQYHSYNG WNRDAYSLRS WGLGFLPQAS IDLTPQTFNE KVLQGKTHWV
VDFYAPWCGP CQNFAPEFEL LARMIKGKVR AGKVDCQAYP OTCOKAGIKA YPSVKLYQYE

RAKKSIWEEQ INSRDAKTIA ALIYGKLETL QSQVKRNKDE L

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

#### Characteristics:

- Made in Germany from design to production by highly experienced protein experts.
- Mouse Dnajc10 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 receival 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.

## 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.
- 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.

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:	DNAJC10
Alternative Name:	Dnajc10 (DNAJC10 Products)
Background:  Molecular Weight:	Endoplasmic reticulum disulfide reductase involved both in the correct folding of proteins and degradation of misfolded proteins. Required for efficient folding of proteins in the endoplasmic reticulum by catalyzing the removal of non-native disulfide bonds formed during the folding of proteins, such as LDLR. Also involved in endoplasmic reticulum-associated degradation (ERAD) by reducing incorrect disulfide bonds in misfolded glycoproteins recognized by EDEM1. Interaction with HSPA5 is required its activity, not for the disulfide reductase activity, but to facilitate the release of DNAJC10 from its substrate. Promotes apoptotic signaling pathway in response to endoplasmic reticulum stress. (ECO:0000269 PubMed:12411443, ECO:0000269 PubMed:12446677, ECO:0000269 PubMed:18653895, ECO:0000269 PubMed:21329881}.
UniProt:	Q9DC23
Pathways: Application Details	Cell RedoxHomeostasis
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 gurantee 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

Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)