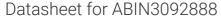
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# HDAC7 Protein (AA 1-952) (His tag)



**Image** 



#### Overview

Quantity:	1 mg
Target:	HDAC7
Protein Characteristics:	AA 1-952
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This HDAC7 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), ELISA, Western Blotting (WB), Crystallization (Crys)

#### **Product Details**

Sequence:

MDLRVGQRPP VEPPPEPTLL ALQRPQRLHH HLFLAGLQQQ RSVEPMRLSM DTPMPELQVG PQEQELRQLL HKDKSKRSAV ASSVVKQKLA EVILKKQQAA LERTVHPNSP GIPYRTLEPL ETEGATRSML SSFLPPVPSL PSDPPEHFPL RKTVSEPNLK LRYKPKKSLE RRKNPLLRKE SAPPSLRRRP AETLGDSSPS SSSTPASGCS SPNDSEHGPN PILGSEALLG QRLRLQETSV APFALPTVSL LPAITLGLPA PARADSDRRT HPTLGPRGPI LGSPHTPLFL PHGLEPEAGG TLPSRLQPIL LLDPSGSHAP LLTVPGLGPL PFHFAQSLMT TERLSGSGLH WPLSRTRSEP LPPSATAPPP PGPMQPRLEQ LKTHVQVIKR SAKPSEKPRL RQIPSAEDLE TDGGGPGQVV DDGLEHRELG HGQPEARGPA PLQQHPQVLL WEQQRLAGRL PRGSTGDTVL LPLAQGGHRP LSRAQSSPAA PASLSAPEPA SQARVLSSSE TPARTLPFTT GLIYDSVMLK HQCSCGDNSR HPEHAGRIQS IWSRLQERGL RSQCECLRGR KASLEELQSV HSERHVLLYG TNPLSRLKLD NGKLAGLLAQ RMFVMLPCGG VGVDTDTIWN ELHSSNAARW AAGSVTDLAF KVASRELKNG FAVVRPPGHH ADHSTAMGFC FFNSVAIACR QLQQQSKASK ILIVDWDVHH GNGTQQTFYQ

DPSVLYISLH RHDDGNFFPG SGAVDEVGAG SGEGFNVNVA WAGGLDPPMG DPEYLAAFRI VVMPIAREFS PDLVLVSAGF DAAEGHPAPL GGYHVSAKCF GYMTQQLMNL AGGAVVLALE GGHDLTAICD ASEACVAALL GNRVDPLSEE GWKQKPNLNA IRSLEAVIRV HSKYWGCMQR LASCPDSWVP RVPGADKEEV EAVTALASLS VGILAEDRPS EQLVEEEPM NL

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.
- Human HDAC7 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.

# **Product Details** Sterility: 0.22 µm filtered Protein is endotoxin free. Endotoxin Level: Grade: Crystallography grade **Target Details** HDAC7 Target: Alternative Name: HDAC7 (HDAC7 Products) Background: Responsible for the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4). Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events. Histone deacetylases act via the formation of large multiprotein complexes. Involved in muscle maturation by repressing transcription of myocyte enhancer factors such as MEF2A, MEF2B and MEF2C. During muscle differentiation, it shuttles into the cytoplasm, allowing the expression of myocyte enhancer factors (By similarity). May be involved in Epstein-Barr virus (EBV) latency, possibly by repressing the viral BZLF1 gene. Positively regulates the transcriptional repressor activity of FOXP3 (PubMed:17360565). {ECO:0000250|UniProtKB:Q8C2B3, ECO:0000269|PubMed:12239305, ECO:0000269|PubMed:17360565}. Molecular Weight: 103.9 kDa Including tag. UniProt: Q8WUI4 Pathways: Regulation of Muscle Cell Differentiation, Cell-Cell Junction Organization, Skeletal Muscle Fiber Development Application Details In addition to the applications listed above we expect the protein to work for functional studies **Application Notes:** as well. As the protein has not been tested for functional studies yet we cannot offer a gurantee though. Comment: In cases in which it is highly likely that the recombinant protein with the default tag will be

# Restrictions: For Research Use only

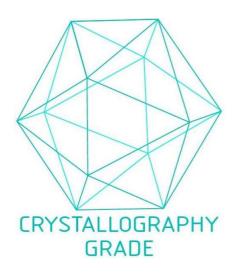
insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to

increase solubility. We will discuss all possible options with you in detail to assure that you

### 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