

Datasheet for ABIN3137642  
**HDAC6 Protein (AA 1-1149) (His tag)**[Go to Product page](#)

## 1 Image

## Overview

Quantity:	1 mg
Target:	HDAC6
Protein Characteristics:	AA 1-1149
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This HDAC6 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

## Product Details

Sequence:	MTSTGQDSST RQRKSRHNPQ SPLQESSATL KRGGKKCAVP HSSPNLAEVK KKGKMKKLSQ PAEEDLVVGL QGLDLNPETR VPVGTGLVFD EQLNDFHCLW DDSFPESPER LHAIREQLIL EGLLGRCVSF QARFAEKEEL MLVHSLEYID LMETTQYMNE GELRVLAETY DSVYLHPNSY SCACLATGSV LRLVDALMGA EIRNGMAVIR PPGHHAQHNL MDGYCMFNHL AVAARYAQKK HRIQRLIVD WDVHHGQGTQ FIFDQDPSVL YFSIHRYEHG RFWPHLKASN WSTIGFGQGQ GYTINVPWNQ TGMRDADYIA AFLHILLPVA SEFQPQLVLV AAGFDALHGD PKGEMAATPA GFAHLTHLLM GLAGGKLILS LEGGYNLRAL AKGVSASLHT LLGDPCPMLE SCVPCASAQ TSIYCTLEAL EPFWEVLERS VETQEEDEVE EAVLEEEEEEE GGWEATALPM DTWPLLQNRT GLVYDEKMMS HCNLWDNHHHP ETPQRILRIM CHLEEVGLAA RCLILPARPA LDSELLTCHS AEYVEHLRTT EKMKTRDLHR EGANFDSIYI CPSTFACAKL ATGAACRLVE AVLSGEVLNG IAVVRPPGHH AEPNAACGFC FFNSVAVAAR HAQIIAGRAL RILIVDWDVH HGNGTQHIFE DDPSVLYVSL HRYDRGTFFP MGDEGASSQV GRDAGIGFTV NVPWNGPRMG DADYLAAWHR
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LVLPIAYEFN PELVLISAGF DAAQGDPLGG CQVTPEGYAH LTHLLMGLAG GRIILILEGG  
YNLASISESM AACTHSLLDG PPPQLTLLRP PQSGALVSIS EVIQVHRKYW RSLRLMKMED  
KEECSSRLV IKKLPPTASP VSAKEMTTTPK GKVPEESVRK TIAALPGKES TLGQAKSKMA  
KAVLAQQQSS EQAAKGTTLD LATSKETVGG ATTDLWASAA APENFPNQTT SVEALGETEP  
TPPASHTNKQ TTGASPLQGV TAQQSLQLGV LSTLELSREA EEAHDSEEG LGEAAGGQDM  
NSLMLTQGFG DFNTQDVFYA VTPLSWCPHL MAVCPIPAAG LDVSQPCKTC GTVQENWVCL  
TCYQVYCSRY VNAHMOVCHHE ASEHPLVLSC VDLSTWCYVC QAYVHHEDLQ DVKNAAHQNK  
FGEDMPHSH

**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 Hdac6 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.

## Product Details

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.

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: HDAC6

Alternative Name: Hdac6 ([HDAC6 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 (By similarity). Plays a central role in microtubule-dependent cell motility via deacetylation of tubulin. {ECO:0000250, ECO:0000269|PubMed:19893491, ECO:0000269|PubMed:22819792}., In addition to its protein deacetylase activity, plays a key role in the degradation of misfolded proteins: when misfolded proteins are too abundant to be degraded by the chaperone refolding system and the ubiquitin-proteasome, mediates the transport of misfolded proteins to a cytoplasmic juxtanuclear structure called aggresome. Probably acts as an adapter that recognizes polyubiquitinated misfolded proteins and target them to the aggresome, facilitating their clearance by autophagy (By similarity). {ECO:0000250}.

Molecular Weight: 126.7 kDa Including tag.

UniProt: [Q9Z2V5](#)

Pathways: [Intracellular Steroid Hormone Receptor Signaling Pathway](#), [Regulation of Intracellular Steroid Hormone Receptor Signaling](#)

## 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.

## Application Details

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