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# HDAC2 Protein (AA 1-488) (His tag)



**Image** 



## Overview

Quantity:	1 mg
Target:	HDAC2
Protein Characteristics:	AA 1-488
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This HDAC2 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA, Crystallization (Crys)

## **Product Details**

Sequence:

MAYSQGGKK KVCYYYDGDI GNYYYGQGHP MKPHRIRMTH NLLLNYGLYR KMEIYRPHKA
TAEEMTKYHS DEYIKFLRSI RPDNMSEYSK QMQRFNVGED CPVFDGLFEF CQLSTGGSVA
GAVKLNRQQT DMAVNWAGGL HHAKKSEASG FCYVNDIVLA ILELLKYHQR VLYIDIDIHH
GDGVEEAFYT TDRVMTVSFH KYGEYFPGTG DLRDIGAGKG KYYAVNFPMR DGIDDESYGQ
IFKPIISKVM EMYQPSAVVL QCGADSLSGD RLGCFNLTVK GHAKCVEVAK TFNLPLLMLG
GGGYTIRNVA RCWTYETAVA LDCEIPNELP YNDYFEYFGP DFKLHISPSN MTNQNTPEYM
EKIKQRLFEN LRMLPHAPGV QMQAIPEDAV HEDSGDEDGE DPDKRISIRA SDKRIACDEE
FSDSEDEGEG GRRNVADHKK GAKKARIEED KKETEDKKTD VKEEDKSKDN SGEKTDPKGA
KSEQLSNP

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 Hdac2 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 protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

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

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.
- 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

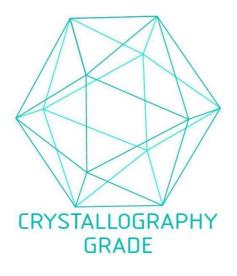
# **Target Details**

Target:	HDAC2
Alternative Name:	Hdac2 (HDAC2 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).
	Forms transcriptional repressor complexes by associating with MAD, SIN3, YY1 and N-COR.
	Interacts in the late S-phase of DNA-replication with DNMT1 in the other transcriptional
	repressor complex composed of DNMT1, DMAP1, PCNA, CAF1. Deacetylates TSHZ3 and
	regulates its transcriptional repressor activity. Component of a RCOR/GFI/KDM1A/HDAC
	complex that suppresses, via histone deacetylase (HDAC) recruitment, a number of genes
	implicated in multilineage blood cell development. May be involved in the transcriptional
	repression of circadian target genes, such as PER1, mediated by CRY1 through histone
	deacetylation. Involved in MTA1-mediated transcriptional corepression of TFF1 and CDKN1A.
	{ECO:0000250, ECO:0000269 PubMed:15226430, ECO:0000269 PubMed:17707228,
	ECO:0000269 PubMed:20071335}.
Molecular Weight:	56.3 kDa Including tag.
	P70288
UniProt:	170200
UniProt: Pathways:	Neurotrophin Signaling Pathway, Regulation of Muscle Cell Differentiation, Negative Regulation
	Neurotrophin Signaling Pathway, Regulation of Muscle Cell Differentiation, Negative Regulation
	Neurotrophin Signaling Pathway, Regulation of Muscle Cell Differentiation, Negative Regulation of intrinsic apoptotic Signaling, SARS-CoV-2 Protein Interactome, The Global Phosphorylation
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## 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