

Datasheet for ABIN7554090  
**HDAC2 Protein (AA 1-488) (His tag)**



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## Overview

Quantity:	1 mg
Target:	HDAC2
Protein Characteristics:	AA 1-488
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This HDAC2 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

## Product Details

Purpose:	Custom-made recombinat HDAC2 Protein expressed in mammalien cells.
Sequence:	MAYSQGGGKK KVCYYYDGGI GNYYYYGQGHP MKPHRIRMTH NLLLNYGLYR KMEIYRPHKA TAEEMTKYHS DEYIKFLRSI RPDNMSEYSK QMQRFNVED CPVFDGLFEF CQLSTGGSVA GAVKLNRRQT DMAVNWAGGL HHAKKSEASG FCYVNDIVLA ILELLKYHQR VLYIDIDIHH GDGVVEAFYT TDRVMTVSFH KYGEYFPGTG DLRDIGAGKG KYYAVNFPMR DGIDDESYGQ IFKPIISKVM EMYQPSAVVL QCGADSLSGD RLGCNLTVK GHAKCVEVVK TFNLPLMLG GGGYTIRNVA RCWTYETAVA LDCEIPNELP YNDYFEYFGP DFKLHISPSN MTNQNTPEYM EKIKQRLFEN LRMLPHAPGV QMQAIPEDAV HEDSGDEDE DPDKRISIRA SDKRIACDEE FSDSEDEGEG GRRNVADHKK GAKKARIEED KKETEDKKT VKEEDKSKDN SGEKTDTKGT KSEQLSNP <b>Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.</b>

## Product Details

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### Characteristics:

#### Key Benefits:

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- 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 try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

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### Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

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### Grade:

custom-made

## Target Details

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### Target:

HDAC2

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### Alternative Name:

HDAC2 ([HDAC2 Products](#))

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### Background:

Histone deacetylase 2 (HD2) (EC 3.5.1.98) (Protein deacetylase HDAC2) (EC 3.5.1.-),FUNCTION: Histone deacetylase that catalyzes the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4) (PubMed:28497810). Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events (By similarity). 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 (PubMed:12724404). 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 (By similarity). Acts as a component of the histone deacetylase NuRD complex which participates in the remodeling of chromatin (PubMed:16428440, PubMed:28977666). Component of the SIN3B complex that represses transcription and counteracts the histone acetyltransferase activity of EP300 through the recognition H3K27ac marks by PHF12 and the activity of the

## Target Details

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histone deacetylase HDAC2 (PubMed:37137925). Also deacetylates non-histone targets: deacetylates TSHZ3, thereby regulating its transcriptional repressor activity (PubMed:19343227). May be involved in the transcriptional repression of circadian target genes, such as PER1, mediated by CRY1 through histone deacetylation (By similarity). Involved in MTA1-mediated transcriptional corepression of TFF1 and CDKN1A (PubMed:21965678). In addition to protein deacetylase activity, also acts as a protein-lysine deacylase by recognizing other acyl groups: catalyzes removal of (2E)-butenoyl (crotonyl) and 2-hydroxyisobutanoyl (2-hydroxyisobutyryl) acyl groups from lysine residues, leading to protein decrotonylation and de-2-hydroxyisobutyrylation, respectively (PubMed:28497810, PubMed:29192674). {ECO:0000250|UniProtKB:P70288, ECO:0000269|PubMed:12724404, ECO:0000269|PubMed:16428440, ECO:0000269|PubMed:19343227, ECO:0000269|PubMed:21965678, ECO:0000269|PubMed:28497810, ECO:0000269|PubMed:28977666, ECO:0000269|PubMed:29192674, ECO:0000269|PubMed:37137925}.

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Molecular Weight: 55.4 kDa

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UniProt: [Q92769](#)

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Pathways: [Neurotrophin Signaling Pathway](#), [Regulation of Muscle Cell Differentiation](#), [Negative Regulation of intrinsic apoptotic Signaling](#), [SARS-CoV-2 Protein Interactome](#), [The Global Phosphorylation Landscape of SARS-CoV-2 Infection](#)

## Application Details

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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.

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Restrictions: For Research Use only

## Handling

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Format: Liquid

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Buffer: The buffer composition is at the discretion of the manufacturer.

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Handling Advice: Avoid repeated freeze-thaw cycles.

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Storage: -80 °C

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Storage Comment: Store at -80°C.

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## Handling

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Expiry Date: 12 months