

Datasheet for ABIN3136365
HDAC7 Protein (AA 1-938) (His tag)[Go to Product page](#)

1 Image

Overview

| | |
|-------------------------------|--|
| Quantity: | 1 mg |
| Target: | HDAC7 |
| Protein Characteristics: | AA 1-938 |
| Origin: | Mouse |
| 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

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| Sequence: | MHSPGAGCPA LQPDTPGSQP QPMDLRVGQR PTVEPPPEPA LLTLQHPQRL HRHLFLAGLH QQQRSAEPMR LSMDDPPMPEL QGGQQEQELR QLLNKDKSKR SAVASSVVKQ KLAEVILKKQ QAALERTVHP SSPSIPYRTL EPLDTEGAAR SVLSSFLPPV PSLPTEPPEH FPLRKTVSEP NLKLRYKPKK SLERRKNPLL RKESAPPSLR RRPATLGDS SPSSSSTPAS GCSSPNDSEH GPNPALGSEA DGDRRTHSTL GPRGPVLGNP HAPLFLHHGL EPEAGGTLPS RLQPILLDLP SVSHAPLWTV PGLGPLPFHF AQPLLTTERL SGSGLHRPLN RTRSEPLPPS ATASPLLAPL QPRQDRCLKPH VQLIKPAISP PQRPAKPSEK PRLRQIPSAE DLETGGGGVG PMANDGLEHR ESGRGPPEGR GSISLQQHQQ VPPWEQQHLA GRLSQGSPGD SVLIPLAQVG HRPLSRTQSS PAAPVSLLSLSP EPTCQTQVLN SSETPATGLV YDSVMLKHQC SCGDNSKHPE HAGRIQSIWS RLQERGLRSQ CECLRGRKAS LEELQSVHSE RHVLLYGTNP LSRLKLDNGK LTGLLAQRTF VMLPCGGVGV DTDTIWNLH SSNAARWAAG SVTDLAFKVA SRELKNGFAV VRPPGHHADH STAMGFCFFN SVAIACRQLQ QHGKASKILI VDWDVHHGNG TQQTFYQDPS VLYISLHRHD |
|-----------|--|

DGNFFPGSGA VDEVTGSGE GFNVNVAWAG GLDPPMGDPE YLAAFRIVVM PIAREFAPDL
VLVSAGFDAA EGHPAPLGGY HVSACFCGYM TQQLMNLAGG AVVLALEGGH DLTAICDASE
ACVAALLGNK VDPLSEESWK QKPNLSAIRS LEAVVRVHRK YWGCMQRLAS CPDSWLPRVP
GADAEVEAVT ALASLSVGIL AEDRPSERLV EEEPMNL

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 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 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.

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.

Product Details

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| Sterility: | 0.22 µm filtered |
| Endotoxin Level: | Protein is endotoxin free. |
| Grade: | Crystallography grade |

Target Details

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|-------------------|---|
| Target: | HDAC7 |
| Alternative Name: | Hdac7 (HDAC7 Products) |
| Background: | <p>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. Positively regulates the transcriptional repressor activity of FOXP3 (By similarity). {ECO:0000250 UniProtKB:Q8WUI4, ECO:0000269 PubMed:10640276}.</p> |
| Molecular Weight: | 102.2 kDa Including tag. |
| UniProt: | Q8C2B3 |
| Pathways: | Regulation of Muscle Cell Differentiation , Cell-Cell Junction Organization , Skeletal Muscle Fiber Development |

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. |
| 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

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| 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