

Datasheet for ABIN3135729

HDAC4 Protein (AA 1-1076) (Strep Tag)



[Go to Product page](#)

Overview

Quantity:	250 µg
Target:	HDAC4
Protein Characteristics:	AA 1-1076
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This HDAC4 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	MSSQSHPDGL SGRDQPVELL NPARVNHMPS TVDVATALPL QVAPTAVPMD LRLDHQFSLP LEPALREQQQL QQELLALKQK QQIQRQILIA EFQRQHEQLS RQHEAQLHEH IKQQQEMLAM KHQQELLEHQ RKLERHRREQ ELEKQHREQ LQQLKNKEKG KESAVASTEY KMKLQEFVLN KKKALAHNRL NHCISDPYR WYGKTHSSSL DQSSPPQSGV SASYNHPVLG MYDAKDDFPL RKTASEPNLK LRSRLKQKVA ERRSSPLLRR KDGPVATALK KRPLDVTDSA CSSAPGSGPS SPNSSSGNVS TENGIAPTVP SAPAETSLAH RLVTTREGSVA PLPLYTSPSL PNITLGLPAT GPAAGAAGQQ DAERLALPAL QQRILFPGTH LTPYLSTSP LERDGAHAHNP LLQHMVLLAQ PPTQTPLVTG LGALPLHSQS LVGADRVSPS IHKLRQHRPL GRTQSAPLPQ NAQALQHLVI QQQHQQFLEK HKQQFQQQQL HLSKIISKPS EPPRPQESH PEEEEELREH QALLDEPYLD RLPGQKEPSL AGVQVKQEP EEEEEAEAT RETEPGQRPA TEQELLFRQQ ALLLEQQRIH QLRNYQASME AAGIPVSFGS HRPLSRAQSS PASATFPMSV QEPPTKPRFT TGLVYDTLML

KHQCTCGNTN SHPEHAGRIQ SIWSRLQETG LRGKCECIRG RKATLEELQT VHSEAHTLLY
GTNPLNRQKL DSSLTSVFVR LPCGGVGVDG DTIWNEVHSS GAARLAVGCV VELVFKVATG
ELKNGFAVVR PPGHHAEEST PMGFCYFNSV AVAAKLLQQR LNVSKILVD WDVHHGNGTQ
QAFYNDPNVL YMSLHRYDDG NFFPGSGAPD EVGTGPGVGF NVNMAFTGGL EPPMGDAEYL
AAFRTVVMPI ANEFAPDVVL VSSGFDAVEG HPTPLGGYNL SAKCFGYLTK QLMGLAGGRL
VLALEGGHDL TAICDASEAC VSALLGNELE PLPEKVLHQR PNANAVHSME KVMDIHSKYW
RCLQRLSSTV GHSLIEAQKC EKEEAETVTA MASLSVGVPK AEKRSEEEPM EEEPPPL

Sequence without tag. The proposed Strep-Tag is based on experience s 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.

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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.

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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

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

Product Details

- The protein's absorbance will be measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	HDAC4
Alternative Name:	Hdac4 (HDAC4 Products)
Background:	Histone deacetylase 4 (HD4) (EC 3.5.1.98),FUNCTION: 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 via its interaction with the myocyte enhancer factors such as MEF2A, MEF2C and MEF2D. Deacetylates HSPA1A and HSPA1A at 'Lys-77' leading to their preferential binding to co-chaperone STUB1. {ECO:0000250 UniProtKB:P56524}.
Molecular Weight:	118.6 kDa
UniProt:	Q6NZM9
Pathways:	Regulation of Muscle Cell Differentiation , Skeletal Muscle Fiber Development , Regulation of Carbohydrate Metabolic Process

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.
Comment:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.

Application Details

During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Restrictions:	For Research Use only
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Handling

Format:	Liquid
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Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol Might differ depending on protein.
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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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Expiry Date:	12 months
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