Datasheet for ABIN3092932

HDAC5 Protein (AA 1-1122) (Strep Tag)

Go to Product page

Overview

Quantity:	250 µg
Target:	HDAC5
Protein Characteristics:	AA 1-1122
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This HDAC5 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	MNSPNESDGM SGREPSLEIL PRTSLHSIPV TVEVKPVLPR AMPSSMGGGG GGSPSPVELR GALVGSVDPT LREQQLQQEL LALKQQQQLQ KQLLFAEFQK QHDHLTRQHE VQLQKHLKQQ QEMLAAKQQQ EMLAAKRQQE LEQQRQREQQ RQEELEKQRL EQQLLILRNK EKSKESAIAS TEVKLRLQEF LLSKSKEPTP GGLNHSLPQH PKCWGAHHAS LDQSSPPQSG PPGTPPSYKL PLPGPYDSRD DFPLRKTASE PNLKVRSRLK QKVAERRSSP LLRRKDGTVI STFKKRAVEI TGAGPGASSV CNSAPGSGPS SPNSSHSTIA ENGFTGSVPN IPTEMLPQHR ALPLDSSPNQ FSLYTSPSLP NISLGLQATV TVTNSHLTAS PKLSTQQEAE RQALQSLRQG GTLTGKFMST SSIPGCLLGV ALEGDGSPHG HASLLQHVLL LEQARQQSTL IAVPLHGQSP LVTGERVATS MRTVGKLPRH RPLSRTQSSP LPQSPQALQQ LVMQQQHQQF LEKQKQQQLQ LGKILTKTGE LPRQPTTHPE ETEEELTEQQ EVLLGEGALT MPREGSTESE STQEDLEEED EEDDGEEEED CIQVKDEEGE SGAEEGPDLE EPGAGYKKLF SDAQPLQPLQ VYQAPLSLAT VPHQALGRTQ

SSPAAPGGMK SPPDQPVKHL FTTGVVYDTF MLKHQCMCGN THVHPEHAGR IQSIWSRLQE TGLLSKCERI RGRKATLDEI QTVHSEYHTL LYGTSPLNRQ KLDSKKLLGP ISQKMYAVLP CGGIGVDSDT VWNEMHSSSA VRMAVGCLLE LAFKVAAGEL KNGFAIIRPP GHHAEESTAM GFCFFNSVAI TAKLLQQKLN VGKVLIVDWD IHHGNGTQQA FYNDPSVLYI SLHRYDNGNF FPGSGAPEEV GGGPGVGYNV NVAWTGGVDP PIGDVEYLTA FRTVVMPIAH EFSPDVVLVS AGFDAVEGHL SPLGGYSVTA RCFGHLTRQL MTLAGGRVVL ALEGGHDLTA ICDASEACVS ALLSVELQPL DEAVLQQKPN INAVATLEKV IEIQSKHWSC VQKFAAGLGR SLREAQAGET EEAETVSAMA LLSVGAEQAQ AAAAREHSPR PAEEPMEQEP AL

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:

Product Details

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- 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:	HDAC5
Alternative Name:	HDAC5 (HDAC5 Products)
Background:	Histone deacetylase 5 (HD5) (EC 3.5.1.98) (Antigen NY-CO-9),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 by repressing transcription of myocyte enhancer MEF2C. During muscle differentiation, it shuttles into the cytoplasm, allowing the expression of myocyte enhancer factors. Involved in the MTA1-mediated epigenetic regulation of ESR1 expression in breast cancer. Serves as a corepressor of RARA and causes its deacetylation (PubMed:28167758). In association with RARA, plays a role in the repression of microRNA-10a and thereby in the inflammatory response (PubMed:28167758). {ECO:0000269|PubMed:24413532, ECO:0000269|PubMed:28167758}.
Molecular Weight:	122.0 kDa
UniProt:	Q9UQL6
Pathways:	Regulation of Muscle Cell Differentiation, Skeletal Muscle Fiber Development, Monocarboxylic Acid Catabolic 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

Application Details

	guarantee though.
Comment:	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!
Restrictions:	For Research Use only

Handling

Format:	Liquid
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.**
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months