

# Datasheet for ABIN3092878

# HDAC10 Protein (AA 1-669) (Strep Tag)



## Overview

Quantity:	250 μg
Target:	HDAC10
Protein Characteristics:	AA 1-669
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This HDAC10 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details		
Brand:	AliCE®	
Sequence:	MGTALVYHED MTATRLLWDD PECEIERPER LTAALDRLRQ RGLEQRCLRL SAREASEEEL	
	GLVHSPEYVS LVRETQVLGK EELQALSGQF DAIYFHPSTF HCARLAAGAG LQLVDAVLTG	
	AVQNGLALVR PPGHHGQRAA ANGFCVFNNV AIAAAHAKQK HGLHRILVVD WDVHHGQGIQ	
	YLFEDDPSVL YFSWHRYEHG RFWPFLRESD ADAVGRGQGL GFTVNLPWNQ VGMGNADYVA	
	AFLHLLLPLA FEFDPELVLV SAGFDSAIGD PEGQMQATPE CFAHLTQLLQ VLAGGRVCAV	
	LEGGYHLESL AESVCMTVQT LLGDPAPPLS GPMAPCQSAL ESIQSARAAQ APHWKSLQQQ	
	DVTAVPMSPS SHSPEGRPPP LLPGGPVCKA AASAPSSLLD QPCLCPAPSV RTAVALTTPD	
	ITLVLPPDVI QQEASALREE TEAWARPHES LAREEALTAL GKLLYLLDGM LDGQVNSGIA	
	ATPASAAAAT LDVAVRRGLS HGAQRLLCVA LGQLDRPPDL AHDGRSLWLN IRGKEAAALS	
	MFHVSTPLPV MTGGFLSCIL GLVLPLAYGF QPDLVLVALG PGHGLQGPHA ALLAAMLRGL	
	AGGRVLALLE ENSTPQLAGI LARVLNGEAP PSLGPSSVAS PEDVQALMYL RGQLEPQWKM	

#### LOCHPHLVA

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 posttranslational 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.
- · 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®).

# **Product Details** > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC). Purity: Grade: custom-made Target Details Target: HDAC10 HDAC10 (HDAC10 Products) Alternative Name: Background: Polyamine deacetylase HDAC10 (EC 3.5.1.48) (EC 3.5.1.62) (Histone deacetylase 10) (HD10), FUNCTION: Polyamine deacetylase (PDAC), which acts preferentially on N(8)acetylspermidine, and also on acetylcadaverine and acetylputrescine (PubMed:28516954). Exhibits attenuated catalytic activity toward N(1),N(8)-diacetylspermidine and very low activity, if any, toward N(1)-acetylspermidine (PubMed:28516954). Histone deacetylase activity has been observed in vitro (PubMed:11861901, PubMed:11726666, PubMed:11677242, PubMed:11739383). Has also been shown to be involved in MSH2 deacetylation (PubMed:26221039). The physiological relevance of protein/histone deacetylase activity is unclear and could be very weak (PubMed:28516954). May play a role in the promotion of late stages of autophagy, possibly autophagosome-lysosome fusion and/or lysosomal exocytosis in neuroblastoma cells (PubMed:23801752, PubMed:29968769). May play a role in homologous recombination (PubMed:21247901). May promote DNA mismatch repair (PubMed:26221039). {ECO:0000269|PubMed:11677242, ECO:0000269|PubMed:11726666, ECO:0000269|PubMed:11739383, ECO:0000269|PubMed:11861901, ECO:0000269|PubMed:21247901, ECO:0000269|PubMed:23801752, ECO:0000269|PubMed:26221039, ECO:0000269|PubMed:28516954, ECO:0000269|PubMed:29968769}. Molecular Weight: 71.4 kDa UniProt: Q969S8 **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 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

## **Application Details**

modifications.

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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 <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months