

# Datasheet for ABIN3134367

# HSD17B4 Protein (AA 1-735) (Strep Tag)



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Quantity:	250 μg
Target:	HSD17B4
Protein Characteristics:	AA 1-735
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This HSD17B4 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), ELISA, Western Blotting (WB)

Brand:	AliCE®
Sequence:	MASPLREDGR VVLVTGAGGG LGRAYALAFA ERGALVIVND LGGDFKGIGK GSSAADKVVA
ocquerioc.	EIRRKGGKAV ANYDSVEAGE KLVKTALDTF GRIDVVVNNA GILRDRSFSR ISDEDWDIIH
	RVHLRGSFQV TRAAWDHMKK QNYGRILMTS SASGIYGNFG QANYSAAKLG ILGLCNTLAI
	EGRKNNIHCN TIAPNAGSRM TETVLPEDLV EALKPEYVAP LVLWLCHESC EENGGLFEVG
	AGWIGKLRWE RTLGAIVRKR NQPMTPEAVR DNWEKICDFS NASKPQTIQE STGGIVEVLH
	KVDSEGISPN RTSHAAPAAT SGFVGAVGHK LPSFSSSYTE LQSIMYALGV GASVKNPKDL
	KFVYEGSADF SCLPTFGVIV AQKSMMNGGL AEVPGLSFNF AKALHGEQYL ELYKPLPRSG
	ELKCEAVIAD ILDKGSGVVI VMDVYSYSGK ELICYNQFSV FVVGSGGFGG KRTSEKLKAA
	VAVPNRPPDA VLRDATSLNQ AALYRLSGDW NPLHIDPDFA SVAGFEKPIL HGLCTFGFSA
	RHVLQQFADN DVSRFKAIKV RFAKPVYPGQ TLQTEMWKEG NRIHFQTKVH ETGDVVISNA
	YVDLVPASGV STQTPSEGGE LQSALVFGEI GRRLKSVGRE VVKKANAVFE WHITKGGTVA

AKWTIDLKSG SGEVYQGPAK GSADVTIIIS DEDFMEVVFG KLDPQKAFFS GRLKARGNIM LSQKLQMILK DYAKL

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		
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).	
Grade:	custom-made	
Target Details		
Target:	HSD17B4	
Alternative Name:	Hsd17b4 (HSD17B4 Products)	
Background:	Peroxisomal multifunctional enzyme type 2 (MFE-2) (17-beta-hydroxysteroid dehydrogenase 4) (17-beta-HSD 4) (D-bifunctional protein) (DBP) (Multifunctional protein 2) (MFP-2) [Cleaved into: (3R)-hydroxyacyl-CoA dehydrogenase (EC 1.1.1.n12), Enoyl-CoA hydratase 2 (EC 4.2.1.107) (EC 4.2.1.119) (3-alpha,7-alpha,12-alpha-trihydroxy-5-beta-cholest-24-enoyl-CoA hydratase)],FUNCTION: Bifunctional enzyme acting on the peroxisomal fatty acid beta-oxidation pathway (PubMed:17442273). Catalyzes two of the four reactions in fatty acid degradation: hydration of 2-enoyl-CoA (trans-2-enoyl-CoA) to produce (3R)-3-hydroxyacyl-CoA, and dehydrogenation of (3R)-3-hydroxyacyl-CoA to produce 3-ketoacyl-CoA (3-oxoacyl-CoA), which is further metabolized by SCPx. Can use straight-chain and branched-chain fatty acids, as well as bile acid intermediates as substrates (By similarity) (PubMed:17442273). {ECO:0000250 UniProtKB:P51659, ECO:0000269 PubMed:17442273}.	
Molecular Weight:	79.5 kDa	
UniProt:	P51660	
Pathways:	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 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

# **Application Details**

	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 <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	