Datasheet for ABIN7552732

BDH2 Protein (AA 1-245) (His tag)

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Overview

Quantity:	1 mg
Target:	BDH2
Protein Characteristics:	AA 1-245
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This BDH2 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Purpose:	Custom-made recombinat BDH2 Protein expressed in mammalien cells.
Sequence:	MGRLDGKVII LTAAAQGIGQ AAALAFAREG AKVIATDINE SKLQELEKYP GIQTRVLDVT KKKQIDQFAN EVERLDVLFN VAGFVHHGTV LDCEEKDWDF SMNLNVRSMY LMIKAFLPKM LAQKSGNIIN MSSVASSVKG VVNRCVYSTT KAAVIGLTKS VAADFIQQGI RCNCVCPGTV DTPSLQERIQ ARGNPEEARN DFLKRQKTGR FATAEEIAML CVYLASDESA YVTGNPVIID GGWSL **Sequence without tag. The proposed Purification-Tag is based on experiences 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 to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalien cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and

Product Details

	transmembrane proteins. • 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. If you are not interested in a full length protein, please contact us for individual protein fragments. 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.
Purity:	> 90 % as determined by Bis-Tris Page, Western Blot
Grade:	custom-made

Target Details

Target:	BDH2
Alternative Name:	BDH2 (BDH2 Products)
Background:	Dehydrogenase/reductase SDR family member 6 (EC 1.1.1.-) ((R)-beta-hydroxybutyrate dehydrogenase) (3-hydroxybutyrate dehydrogenase type 2) (EC 1.1.1.30) (4-oxo-L-proline reductase) (EC 1.1.1.104) (Oxidoreductase UCPA) (Short chain dehydrogenase/reductase family 15C member 1),FUNCTION: NAD(H)-dependent dehydrogenase/reductase with a preference for cyclic substrates (PubMed:35150746) (By similarity). Catalyzes stereoselective conversion of 4-oxo-L-proline to cis-4-hydroxy-L-proline, likely a detoxification mechanism for ketoprolines (PubMed:35150746). Mediates the formation of 2,5-dihydroxybenzoate (2,5-DHBA), a siderophore that chelates free cytoplasmic iron and associates with LCN2, thereby regulating iron transport and homeostasis while protecting cells against free radical-induced oxidative stress. The iron-siderophore complex is imported into mitochondria, providing an iron source for mitochondrial metabolic processes in particular heme synthesis (By similarity). May act as a 3-hydroxybutyrate dehydrogenase (PubMed:16380372). {ECO:0000250|UniProtKB:Q8JZV9, ECO:0000269|PubMed:16380372, ECO:0000269|PubMed:35150746}.
Molecular Weight:	26.7 kDa
UniProt:	Q9BUT1

Target Details

Pathways:	Transition Metal Ion Homeostasis, 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.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition 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:	12 months