Datasheet for ABIN3095479

SH2B2 Protein (AA 1-632) (Strep Tag)

Overview

Quantity:	1 mg
Target:	SH2B2
Protein Characteristics:	AA 1-632
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SH2B2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MNGAGPGPAA AAPVPVPVPV PDWRQFCELH AQAAAVDFAH KFCRFLRDNP AYDTPDAGAS FSRHFAANFL DVFGEEVRRV LVAGPTTRGA AVSAEAMEPE LADTSALKAA PYGHSRSSED VSTHAATKAR VRKGFSLRNM SLCVVDGVRD MWHRRASPEP DAAAAPRTAE PRDKWTRRLR LSRTLAAKVE LVDIQREGAL RFMVADDAAA GSGGSAQWQK CRLLLRRAVA EERFRLEFFV PPKASRPKVS IPLSAIIEVR TTMPLEMPEK DNTFVLKVEN GAEYILETID SLQKHSWVAD IQGCVDPGDS EEDTELSCTR GGCLASRVAS CSCELLTDAV DLPRPPETTA VGAVVTAPHS RGRDAVRESL IHVPLETFLQ TLESPGGSGS DSNNTGEQGA ETDPEAEPEL ELSDYPWFHG TLSRVKAAQL VLAGGPRNHG LFVIRQSETR PGEYVLTFNF QGKAKHLRLS LNGHGQCHVQ HLWFQSVLDM LRHFHTHPIP LESGGSADIT LRSYVRAQDP PPEPGPTPPA APASPACWSD SPGQHYFSSL AAAACPPASP SDAAGASSSS ASSSSAASGP APPRPVEGQL SARSRSNSAE RLLEAVAATA AEEPPEAAPG RARAVENQYS FY
	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 by multi-step, protein-specific process to ensure correct folding and modification. • 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 will ensure that you receive a correctly folded 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. • The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer. • We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.
Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag

Product Details

capture material. Eluate fractions are analyzed by SDS-PAGE.

2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)

Target Details

Target:	SH2B2
Alternative Name:	SH2B2 (SH2B2 Products)
Background:	SH2B adapter protein 2 (Adapter protein with pleckstrin homology and Src homology 2 domains) (SH2 and PH domain-containing adapter protein APS),FUNCTION: Adapter protein for several members of the tyrosine kinase receptor family. Involved in multiple signaling pathways. May be involved in coupling from immunoreceptor to Ras signaling. Acts as a negative regulator of cytokine signaling in collaboration with CBL. Binds to EPOR and suppresses EPO-induced STAT5 activation, possibly through a masking effect on STAT5 docking sites in EPOR. Suppresses PDGF-induced mitogenesis. May induce cytoskeletal reorganization via interaction with VAV3. {ECO:0000269|PubMed:10374881, ECO:0000269|PubMed:12400014, ECO:0000269|PubMed:15378031, ECO:0000269|PubMed:9989826}.
Molecular Weight:	67.7 kDa
UniProt:	O14492
Pathways:	Carbohydrate Homeostasis, Brown Fat Cell Differentiation

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.

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

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)