abcam

Product datasheet

Recombinant Human Syntrophin alpha 1 protein ab116180

1 Image

Description

Product name	Recombinant Human Syntrophin alpha 1 protein
Purity	> 85 % SDS-PAGE. ab116180 was purified using conventional chromatography techniques.
Expression system	Escherichia coli
Accession	Q13424
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MGSSHHHHHHSSGLVPRGSHMGSMASGRRAPRTGLLELRAGAGSGAGGER WQRVLLSLAEDVLTVSPADGDPGPEPGAPREQEPAQLNGAAEPGAGPPQL PEALLLQRRRVTVRKADAGGLGISIKGGRENKMPILISKIFKGLAADQTE ALFVGDAILSVNGEDLSSATHDEAVQVLKKTGKEVVLEVKYMKDVSPYFK NSTGGTSVGWDSPPASPLQRQPSSPGPTPRNFSEAKHMSLKMAYVSKRCT PNDPEPRYLEICSADGQDTLFLRAKDEASARSWATAIQAQVNTLTPRVKD ELQALLAATSTAGSQDIKQIGWLTEQLPSGGTAPTLALLTEKELLLYLSL PETREALSRPARTAPLIATRLVHSGPSKGSVPYDAELSFALRTGTRHGVD THLFSVESPQELAAWTRQLVDGCHRAAEGVQEVSTACTWNGRPCSLSVHI DKGFTLWAAEPGAARAVLLRQPFEKLQMSSDDGASLLFLDFGGAEGEIQL DLHSCPKTIVFIIHSFLSAKVTRLGLLA
Predicted molecular weight	56 kDa including tags
Amino acids	1 to 505
Tags	His tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab116180** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Mass Spectrometry SDS-PAGE
Mass spectrometry	MALDI-TOF
Form	Liquid

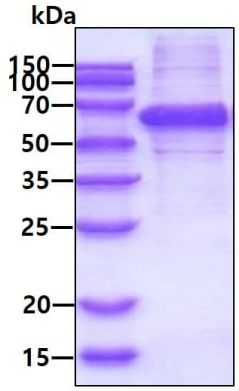
Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. pH: 8.00 Constituents: 0.02% DTT, 0.32% Tris HCl, 10% Glycerol (glycerin, glycerine), 0.88% Sodium chloride

General Info

Function	Adapter protein that binds to and probably organizes the subcellular localization of a variety of membrane proteins. May link various receptors to the actin cytoskeleton and the extracellular matrix via the dystrophin glycoprotein complex. Plays an important role in synapse formation and in the organization of UTRN and acetylcholine receptors at the neuromuscular synapse. Binds to phosphatidylinositol 4,5-biphosphate.
Tissue specificity	High expression in skeletal muscle and heart. Low expression in brain, pancreas, liver, kidney and lung. Not detected in placenta.
Involvement in disease	Defects in SNTA1 are the cause of long QT syndrome type 12 (LQT12) [MIM:612955]. A heart disorder characterized by a prolonged QT interval on the ECG and polymorphic ventricular arrhythmias. They cause syncope and sudden death in response to excercise or emotional stress, and can present with a sentinel event of sudden cardiac death in infancy.
Sequence similarities	Belongs to the syntrophin family. Contains 1 PDZ (DHR) domain. Contains 2 PH domains. Contains 1 SU (syntrophin unique) domain.
Domain	The PH 1 domain mediates the oligomerization in a calcium dependent manner, and the association with the phosphatidylinositol 4,5-biphosphate. The PDZ domain binds to the last three or four amino acids of ion channels and receptor proteins. The association with dystrophin or related proteins probably leaves the PDZ domain available to recruit proteins to the membrane. The SU domain binds calmodulin in a calcium-dependent manner.
Post-translational modifications	Phosphorylated by CaM-kinase II. Phosphorylation may inhibit the interaction with DMD.
Cellular localization	Cell membrane > sarcolemma. Cell junction. Cytoplasm > cytoskeleton. In skeletal muscle, it localizes at the cytoplasmic side of the sarcolemmal membrane and at neuromuscular junctions.

Images



SDS-PAGE - Recombinant Human Syntrophin alpha 1 protein (ab116180)

SDS-PAGE analysis of ab116180 (3µg).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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