abcam

Product datasheet

Human Syntrophin alpha 1 peptide ab23124

1 References

Overview

Product name Human Syntrophin alpha 1 peptide

Description

Nature Synthetic

Amino Acid Sequence

Species Human

Sequence ASGRRAPRTGLLE-C

Amino acids 2 to 14

Specifications

Our Abpromise guarantee covers the use of **ab23124** in the following tested applications.

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

Applications Blocking - Blocking peptide for Anti-Syntrophin alpha 1 antibody (ab5941)

Form Liquid

Preparation and Storage

Stability and Storage Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

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.