

Recombinant Human Tropomyosin 2 protein ab103503

1 Image

Description

Product name	Recombinant Human Tropomyosin 2 protein
Purity	> 90 % SDS-PAGE. ab103503 was purified by using anion-exchange chromatography (DEAE sepharose resin) and gel-filtration chromatography (Sephacryl S-200) with 20mM Tris pH 7.5, 2mM EDTA.
Expression system	Escherichia coli
Accession	<u>P07951-2</u>
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MGSSHHHHHHSSGLVPRGSH MDAIAKKKMQMLKLDKEN AIDRAEQAEADKK QAEDRCKQLEEEQQAQKKLKGTEDEVEKYSSEVKEAQ EKLEQAEKKATD AEADVASLNRRQLVEEELDRAQERLATALQKLEEAEKAA DESERGMKVI ENRAMKDEEKMELQEMQLKEAKHIAEDSDRKYE EVARKL VILEGELERSE ERAEVAESRARQLEEEELRTMDQALKSLMASEEEYSTKED KYEEEIKLLEE KLKEAETRAEFAERSVAKLEKTIDDLEETLASAKEENVEIH QTLDQTLLE LNNL
Predicted molecular weight	35 kDa including tags
Amino acids	1 to 284
Tags	His tag N-Terminus

Specifications

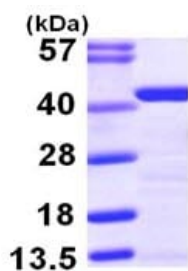
Our **Abpromise guarantee** covers the use of **ab103503** in the following tested applications.

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

Applications	SDS-PAGE Mass Spectrometry
--------------	-------------------------------

Mass spectrometry	MALDI-TOF
Form	Liquid
Preparation and Storage	
Stability and Storage	<p>Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.</p> <p>pH: 8.00</p> <p>Constituents: 0.0154% DTT, 0.316% Tris HCl, 30% Glycerol (glycerin, glycerine), 0.58% Sodium chloride</p>
General Info	
Function	Binds to actin filaments in muscle and non-muscle cells. Plays a central role, in association with the troponin complex, in the calcium dependent regulation of vertebrate striated muscle contraction. Smooth muscle contraction is regulated by interaction with caldesmon. In non-muscle cells is implicated in stabilizing cytoskeleton actin filaments. The non-muscle isoform may have a role in agonist-mediated receptor internalization.
Tissue specificity	Present in primary breast cancer tissue, absent from normal breast tissue.
Involvement in disease	<p>Nemaline myopathy 4 (NEM4) [MIM:609285]: A form of nemaline myopathy. Nemaline myopathies are muscular disorders characterized by muscle weakness of varying severity and onset, and abnormal thread-or rod-like structures in muscle fibers on histologic examination. Nemaline myopathy type 4 presents from infancy to childhood with hypotonia and moderate-to-severe proximal weakness with minimal or no progression. Major motor milestones are delayed but independent ambulation is usually achieved, although a wheelchair may be needed in later life. Note=The disease is caused by mutations affecting the gene represented in this entry.</p> <p>Arthrogryposis, distal, 1A (DA1A) [MIM:108120]: A form of distal arthrogryposis, a disease characterized by congenital joint contractures that mainly involve two or more distal parts of the limbs, in the absence of a primary neurological or muscle disease. Distal arthrogryposis type 1 is characterized largely by camptodactyly and clubfoot. Hypoplasia and/or absence of some interphalangeal creases is common. The shoulders and hips are less frequently affected. Note=The disease is caused by mutations affecting the gene represented in this entry.</p>
Sequence similarities	Belongs to the tropomyosin family.
Domain	The molecule is in a coiled coil structure that is formed by 2 polypeptide chains. The sequence exhibits a prominent seven-residues periodicity.
Post-translational modifications	Phosphorylated on Ser-61 by PIK3CG. Phosphorylation on Ser-61 is required for ADRB2 internalization.
Cellular localization	Cytoplasm > cytoskeleton.

Images



15% SDS-PAGE analysis of 3µg ab103503.

SDS-PAGE - Recombinant Human Tropomyosin 2
protein (ab103503)

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors