abcam

Product datasheet

Recombinant Human Alpha Skeletal Muscle Actin protein ab157838

2 Images

Description

Product name	Recombinant Human Alpha Skeletal Muscle Actin protein
Expression system	Wheat germ
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MCDEDETTALVCDNGSGLVKAGFAGDDAPRAVFPSIVGR PRHQGVMVGMG QKDSYVGDEAQSKRGILTLKYPIEHGIITNWDDMEKIWHHT FYNELRVAP EEHPTLLTEAPLNPKANREKMTQIMFETFNVPAMYVAIQAV LSLYASGRT TGIVLDSGDGVTHNVPIYEGYALPHAIMRLDLAGRDLTDYL MKILTERGY SFVTTAEREIVRDIKEKLCYVALDFENEMATAASSSSLEKS YELPDGQVI TIGNERFRCPETLFQPSFIGMESAGIHETTYNSIMKCDIDIRK DLYANNV MSGGTTMYPGIADRMQKEITALAPSTMKIKIIAPPERKYSVW IGGSILAS LSTFQQMWITKQEYDEAGPSIVHRKCF
Amino acids	1 to 377
Tags	GST tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab157838** in the following tested applications.

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

Applications	ELISA
	Western blot
Form	Liquid

Additional notes

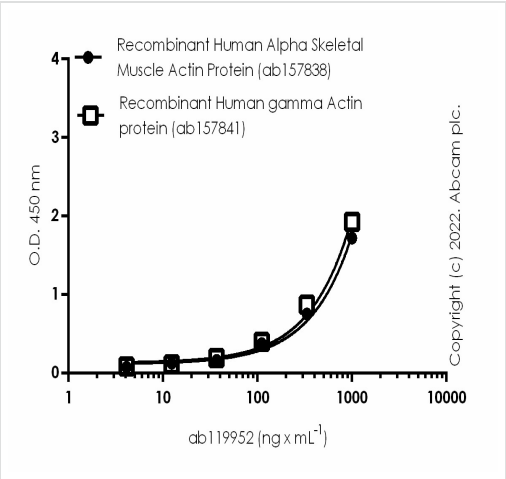
Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80ºC. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.31% Glutathione, 0.79% Tris HCl

General Info

Function	Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.
Involvement in disease	Defects in ACTA1 are the cause of nemaline myopathy type 3 (NEM3) [MIM:161800]. 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. The phenotype at histological level is variable. Some patients present areas devoid of oxidative activity containg (cores) within myofibers. Core lesions are unstructured and poorly circumscribed. Defects in ACTA1 are a cause of myopathy congenital with excess of thin myofilaments (MPCETM) [MIM:161800]. A congenital muscular disorder characterized at histological level by areas of sarcoplasm devoid of normal myofibrils and mitochondria, and replaced with dense masses of thin filaments. Central cores, rods, ragged red fibers, and necrosis are absent. Defects in ACTA1 are a cause of congenital myopathy with fiber-type disproportion (CFTD) [MIM:255310]; also known as congenital fiber-type disproportion myopathy (CFTDM). CFTD is a genetically heterogeneous disorder in which there is relative hypotrophy of type 1 muscle fibers compared to type 2 fibers on skeletal muscle biopsy. However, these findings are not specific and can be found in many different myopathic and neuropathic conditions.
Sequence similarities	Belongs to the actin family.
Cellular localization	Cytoplasm > cytoskeleton.

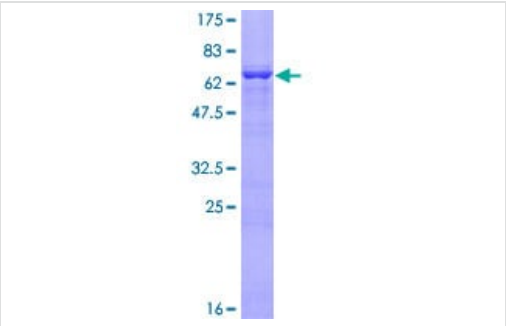
Images



ELISA - Recombinant Human Alpha Skeletal Muscle Actin protein (ab157838)

*1 ug per mL of recombinant protein ab157838 and **ab157841** were immobilised in PBS on an ELISA plate overnight. After blocking in 5% BSA, primary antibody (**ab119952**) was added in a concentration range of 0.017-1000 ng per mL.*

*Pre-absorbed secondary antibody goat anti-rabbit IgG H&L (HRP, **ab97080**) was used at 1/20000 dilution.*



SDS-PAGE - Recombinant Human Alpha Skeletal Muscle Actin protein (ab157838)

ab157838 on a 12.5% SDS-PAGE stained with Coomassie Blue.

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

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