

Product datasheet

Recombinant Actin protein (Tagged) ab235861

1 Image

Description

Product name	Recombinant Actin protein (Tagged)
Purity	> 85 % SDS-PAGE.
Expression system	Escherichia coli
Accession	<u>P10982</u>
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Absidia glauca (Pin mould)
Sequence	MSMEEEEIALVIDNGSGMCKAGFAGDDAPRAVFPSIVGR PRHQGIMVGMG QKDSYVGDEAQSQRGILTRYPIEHGVTNWDDMEKIWHHT FYNELRVAP EEHPVLLTEAPLNPKSNREKMTQIMFETFNAPAFYVSIQA
Predicted molecular weight	21 kDa including tags
Amino acids	1 to 140
Tags	His tag N-Terminus
Additional sequence information	N-terminal 6xHis-tagged and C-terminal Myc-tagged. Absidia glauca (Pin mould).

Specifications

Our **Abpromise guarantee** covers the use of **ab235861** 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

Form Liquid

Preparation and Storage

Stability and Storage Shipped at 4°C. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
pH: 7.2
Constituents: Tris buffer, 50% Glycerol (glycerin, glycerine)

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 containing (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.

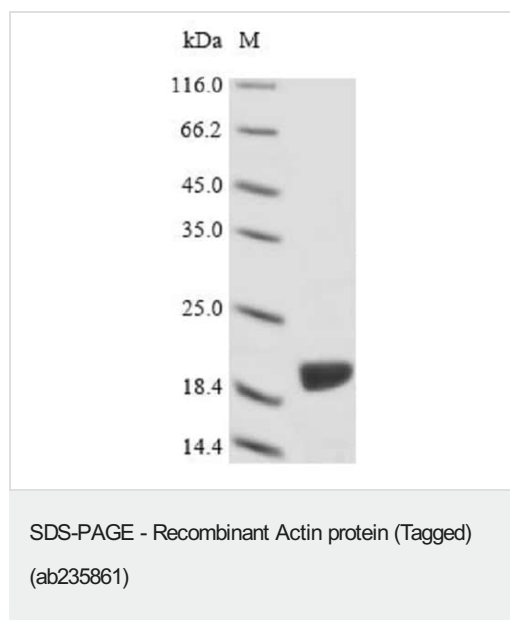
Sequence similarities

Belongs to the actin family.

Cellular localization

Cytoplasm > cytoskeleton.

Images



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel analysis of ab235861.

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