# abcam

# Product datasheet

# Recombinant Human Aconitase 1/ACO1 protein ab103501

# 1 Image

#### **Description**

Product name Recombinant Human Aconitase 1/ACO1 protein

Purity > 90 % SDS-PAGE.

ab103501 was purified using conventional chromatography techniques.

**Expression system** Escherichia coli

Accession P21399

Protein length Full length protein

Animal free No

Nature Recombinant

**Species** Human

Sequence MGSSHHHHHHSSGLVPRGSHMGSMSNPFAHLAEPLDP

**VQPGKKFFNLNKL** 

EDSRYGRLPFSIRVLLEAAIRNCDEFLVKKQDIENILHWNVT

**QHKNIEVP** 

FKPARVILQDFTGVPAVVDFAAMRDAVKKLGGDPEKINPV

**CPADLVIDHS** 

**IQVDFNRRADSLQKNQDLEFERNRERFEFLKWGSQAFHN** 

**MRIIPPGSGII** 

HQVNLEYLARVVFDQDGYYYPDSLVGTDSHTTMIDGLGILG

**WGVGGIEAE** 

AVMLGQPISMVLPQVIGYRLMGKPHPLVTSTDIVLTITKHLR

**QVGVVGKF** 

VEFFGPGVAQLSIADRATIANMCPEYGATAAFFPVDEVSIT

YLVQTGRDE

EKLKYIKKYLQAVGMFRDFNDPSQDPDFTQVVELDLKTVV

**PCCSGPKRPQ** 

DKVAVSDMKKDFESCLGAKQGFKGFQVAPEHHNDHKTFI

**YDNTEFTLAHG** 

SVVIAAITSCTNTSNPSVMLGAGLLAKKAVDAGLNVMPYIK

TSLSPGSGV

VTYYLQESGVMPYLSQLGFDVVGYGCMTCIGNSGPLPEP

**VVEAITQGDLV** 

AVGVLSGNRNFEGRVHPNTRANYLASPPLVIAYAIAGTIRID

**FEKEPLGV** 

1

NAKGQQVFLKDIWPTRDEIQAVERQYVIPGMFKEVYQKIET

**VNESWNALA** 

TPSDKLFFWNSKSTYIKSPPFFENLTLDLQPPKSIVDAYVL

**LNLGDSVTT** 

DHISPAGNIARNSPAARYLTNRGLTPREFNSYGSRRGNDA

**VMARGTFANI** 

RLLNRFLNKQAPQTIHLPSGEILDVFDAAERYQQAGLPLIVL

AGKEYGAG

SSRDWAAKGPFLLGIKAVLAESYERIHRSNLVGMGVIPLEY

**LPGENADAL** 

GLTGQERYTIIIPENLKPQMKVQVKLDTGKTFQAVMRFDTD

VELTYFLNG GILNYMIRKMAK

Predicted molecular weight

101 kDa including tags

Amino acids

1 to 889

Tags

His tag N-Terminus

## **Specifications**

Our Abpromise guarantee covers the use of ab103501 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

Additional notes This product was previously labelled as Aconitase 1

#### **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.

pH: 8.00

Constituents: 0.0308% DTT, 0.316% Tris HCI, 10% Glycerol (glycerin, glycerine), 0.58% Sodium

chloride

# **General Info**

**Function** Iron sensor. Binds a 4Fe-4S cluster and functions as aconitase when cellular iron levels are high.

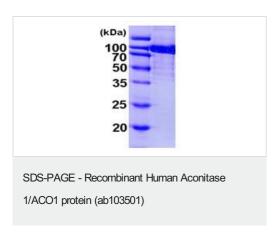
Functions as mRNA binding protein that regulates uptake, sequestration and utilization of iron when cellular iron levels are low. Binds to iron-responsive elements (IRES) in target mRNA species when iron levels are low. Binding of a 4Fe-4S cluster precludes RNA binding.

Catalyzes the isomerization of citrate to isocitrate via cis-aconitate.

**Sequence similarities**Belongs to the aconitase/IPM isomerase family.

Cellular localization Cytoplasm.

## **Images**



15% SDS-PAGE analysis of 3µg ab103501.

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

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