

Recombinant human ACO1 protein

Catalog Number: ATGP0871

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-889aa

UniProt No.

P21399

NCBI Accession No.

NP_002188

Alternative Names

Cytoplasmic aconitate hydratase, ACONS, IREB1, IREBP, IREBP1, IRP1

PRODUCT SPECIFICATION

Molecular Weight

100.8 kDa (912aa)

Concentration

0.5mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 2mM DTT, 100mM NaCl

Purity

> 90% by SDS-PAGE

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

ACO1 (aconitate hydratase) plays a role as an iron sensor. This enzyme catalyzes the stereo-specific isomerization of citrate to isocitrate via cis-aconitate in the tricarboxylic acid cycle, a non-redox-active process. Recombinant human ACO1 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

<MGSSHHHHHH SGLVPRGSH MGS>MSNPFAH LAEPLDPVQP GKKFFNLNKL EDSRYGRLPF SIRVLLEAAI

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RNCDEFLVKK QDIENILHWN VTQHKNIEVP FKPARVILQD FTGVPVVDF AAMRDAVKKL GGDPEKINPV CPADLVIDHS IQVDFNRRAD SLQKNQDLEF ERNRERFEFL KWGSQAFHNM RIIPPGSGII HQVNLEYLAR VVFDQDGYYY PDSLVTGDSH TTMIDGLGIL GWGVGGIEAE AVMLGQPISM VLPQVIGYRL MGKPHPLVTS TDIVLTITKH LRQVGVGKFK VEFFGPGVAQ LSIADRATIA NMCPEYGATA AFFPVDEVSI TYLVQTGRDE EKLKYIKKYL QAVGMFRDFN DPSQDPDFTQ VVELDLKTVV PCCSGPKRPQ DKVAVSDMCK DFESCLGAKQ GFKGFQVAPE HHNDHKTFIY DNTEFTLAHG SVVIAAITSC TNSNPSVML GAGLLAKKAV DAGLNVMPYI KTSLSPPGSGV VTYYLQESGV MPYLSQLGFD VVGYGCMTCI GNSGPLPEPV VEAITQGDV AVGVLSGNRN FEGRVHPNTR ANYLASPLV IAYAIAGTIR IDFEKEPLGV NAKGQQVFLK DIWPTRDEIQ AVERQYVIPG MFKEVYQKIE TVNESWNALA TPSDKLFFWN SKSTYIKSPP FFENLTLDLQ PPKSIVDAYV LLNLGDSVTT DHISPAGNIA RNSPAARYLT NRGLTPREFN SYGSRRGNDV VMARGTFANI RLLNRFLNKQ APQTIHLPSG EILDVFDAAE RYQQAGLPLI VLAGKEYGAG SSRDWAAGP FLLGIKAVLA ESYERIHRSN LVGMGVIPLE YLPGENADAL GLTGQERYTI IIPENLKPQM KVQVKLDTGK TFQAVMRFDV DVELTYFLNG GILNYMIRKM AK

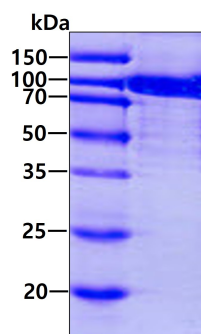
General References

Vashisht A.A., et al (2009) Science 326:718-721

Salahudeen A.A., et al (2009) Science 326:722-726

DATA

SDS-PAGE



3 μ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.