

AR09811PU-N**Human ACO1 / IREB1 (1-889, His-tag) - Purified****Alternate names:**

Aconitase, Citrate hydro-lyase, Cytoplasmic aconitase hydratase, Ferritin repressor protein, IRP1, Iron regulatory protein 1, Iron-responsive element-binding protein 1

Quantity:

50 µg

Concentration:

0.5 mg/ml (determined by Bradford assay)

Background:

ACO1 (aconitase 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.

Uniprot ID:[P21399](#)**NCBI:**[NP_002188](#)**GeneID:**[48](#)**Species:**

Human

Source:

E. coli

Format:**State:** Liquid purified protein**Purity:** >90%**Buffer System:** 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 2mM DTT, 100mM NaCl**Description:**

Recombinant human ACO1 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

AA Sequence:

MGSSHHHHHH SSGLVPRGSH MGSMSNPF FAH LAEP LDPVQP GKKFF NLNKL EDSR YGR LR LPF
SIRVLLAAAI RNCDEFVLVKK QDIENILHWN VTQHKNIEVP FKPARVILQD FTGVPVAVVDF
AAMRDVAVKKL GGDPEKINPV CPADLVIDHS IQVDFNRRAD SLQKNQDLEF ERNRERFEFL
KWGSQAFHNM RIIPPGSGII HQVNLEYLAR VVFDQDGYYY PDSLVTGDSH TTMIDGLGIL
GWVGGIEAE AVMLGQPISM VLPQVIGYRL MGKPHPLVTS TDIVLTITKH LRQVGVVVKF
VEFFGPGVAQ LSIADRATIA NMCPEYGATA AFFPVDEVSI TYLVQTRDE EKLKYIKKYL
QAVGMFRDFN DPSQDPDFTQ VVELDLKTVV PCCSGPKRPQ DKVAVSDMKK DFESCLGAKQ
GFKGFQVAPE HHNDHKTFIY DNTEFTLAHG SVVIAAITSC TNSNSPSVML GAGLLAKKAV
DAGLNVMPYI KTSLSPGSGV VTYYLQESGV MPYLSQLGFD VVGYGCMTCI GNSGPLPEPV
VEAITQGDIV AVGVLSGNRN FEGRVHPNTR ANYLASPLV IAYAIAGTIR IDFEKEPLGV
NAKGQQVFLK DIWPTREIQ AVERQYVIPG MFKEVYQKIE TVNESWNALA TPSDKLFFWN
SKSTYIKSPP FFENLTLDLQ PPKSIVDAYV LLNLGDSVTT DHISPAGNIA RNSPAARYLT
NRGLTPREFN SYGSRRGNDA VMARGTFANI RLLNRFLNKQ APQTIHLPSG EILDVFDAAE
RYQQAGLPLI VLAGKEYGAG SSRDWAAGP FLLGIKAVLA ESYERIHRNS LVGMGVIPLE
YLPGENADAL GLTGQERYTI IIPENLKPQM KVQVKLDTGK TFQAVMRFDT DVELTYFLNG
GILNYMIRKM AK

Molecular weight: 100.8 kDa**Storage:**

Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer.

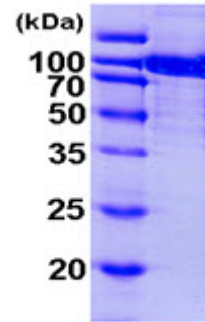
Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

General Readings:

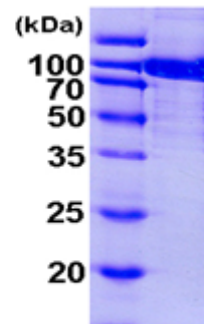
Vashisht A.A., et al (2009) Science 326:718-721.
Salahudeen A.A., et al (2009) Science 326:722-726.

Pictures:



15% SDS-PAGE (3ug)

Recombinant human ACO1, 1-889aa, His-tagged



15% SDS-PAGE (3ug)