

Datasheet for ABIN2714323

Aconitase 1 Protein (ACO1) (Myc-DYKDDDDK Tag)[Go to Product page](#)**1** Image

Overview

Quantity:	20 µg
Target:	Aconitase 1 (ACO1)
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Aconitase 1 protein is labelled with Myc-DYKDDDDK Tag.
Application:	Antibody Production (AbP), Standard (STD)

Product Details

Characteristics:	<ul style="list-style-type: none">• Recombinant human ACO1 / IREB1 protein expressed in HEK293 cells.• Produced with end-sequenced ORF clone
Purity:	> 80 % as determined by SDS-PAGE and Coomassie blue staining

Target Details

Target:	Aconitase 1 (ACO1)
Alternative Name:	Aco1,ireb1 (ACO1 Products)
Background:	The protein encoded by this gene is a bifunctional, cytosolic protein that functions as an essential enzyme in the TCA cycle and interacts with mRNA to control the levels of iron inside cells. When cellular iron levels are high, this protein binds to a 4Fe-4S cluster and functions as an aconitase. Aconitases are iron-sulfur proteins that function to catalyze the conversion of citrate to isocitrate. When cellular iron levels are low, the protein binds to iron-responsive

Target Details

elements (IREs), which are stem-loop structures found in the 5' UTR of ferritin mRNA, and in the 3' UTR of transferrin receptor mRNA. When the protein binds to IRE, it results in repression of translation of ferritin mRNA, and inhibition of degradation of the otherwise rapidly degraded transferrin receptor mRNA. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. Alternative splicing results in multiple transcript variants

Molecular Weight: 98.2 kDa

NCBI Accession: [NP_002188](#)

Pathways: [Transition Metal Ion Homeostasis](#)

Application Details

Application Notes: Recombinant human proteins can be used for:
Native antigens for optimized antibody production
Positive controls in ELISA and other antibody assays

Comment: The tag is located at the C-terminal.

Restrictions: For Research Use only

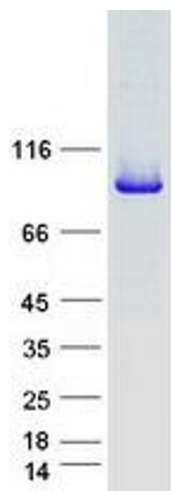
Handling

Concentration: 50 µg/mL

Buffer: 25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10 % glycerol.

Storage: -80 °C

Storage Comment: Store at -80°C. Thaw on ice, aliquot to individual single-use tubes, and then re-freeze immediately. Only 2-3 freeze thaw cycles are recommended.



Western Blotting

Image 1. Validation with Western Blot