ACO1 Polyclonal Antibody

Catalog No. E-AB-62607

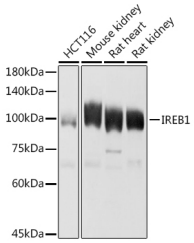
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

Reactivity	Human,Mouse,Rat
Immunogen	Recombinant fusion protein of human ACO1
Host	Rabbit
Isotype	IgG
Purification	Affinity purification
Conjugation	Unconjugated
Buffer	PBS with 0.02% sodium azide,50% glycerol,pH7.3.

Applications	Recommended Dilution
WB	1:500-1:2000

Data



Western blot analysis of extracts of various cell lines using Aconitase 1 (ACO1) Polyclonal Antibody at 1:1000 dilution.
Observed Mw:98KDa
Calculated Mw:98kDa

Preparation & Storage

Storage Store at -20℃. Avoid freeze / thaw cycles.

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 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