

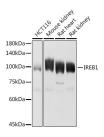
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ACO1 Polyclonal Antibody

Catalog No. E-AB-62607 Reactivity H,M,R Store at -20°C. Avoid freeze / thaw cycles. **Storage** Host Rabbit **Applications Isotype IgG**

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

Images



Western blot analysis of extracts of various cell lines using Aconitase 1 (ACO1) Polyclonal Antibody at 1:1000 dilution.

Immunogen Information

Immunogen Recombinant fusion protein of human ACO1

GeneID 48 **Swissprot** P21399

Synonyms ACO1.ACONS.HEL60.IREB1.IREBP.IREBP1.IRP1

Product Information

Calculated MW 98kDa **Observed MW** 98KDa

Buffer PBS with 0.02% sodium azide,50% glycerol,pH7.3.

Purify Affinity purification Dilution WB 1:500-1:2000

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