

ACO1 Rabbit Polyclonal Antibody

Catalog No: #55352

Package Size: #55352-1 50ul #55352-2 100ul



SAB[®]

Signalway Antibody

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

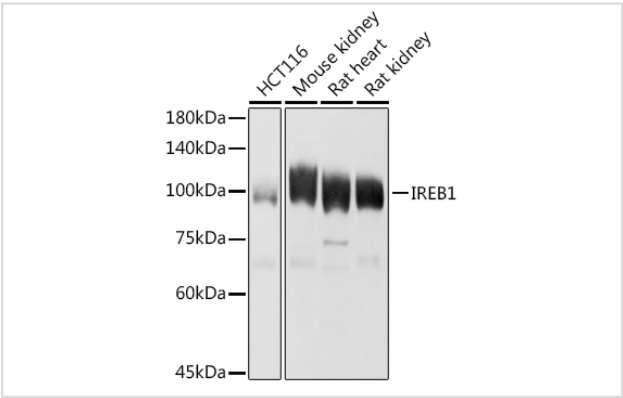
Description

Product Name	ACO1 Rabbit Polyclonal Antibody
Host Species	Rabbit
Clonality	Polyclonal
Isotype	IgG
Purification	Affinity purification
Applications	WB
Species Reactivity	Human,Mouse,Rat
Immunogen Description	Recombinant fusion protein of human IREB1 (NP_002188.1).
Conjugates	Unconjugated
Other Names	ACO1;ACONS;HEL60;IREB1;IREBP;IREBP1;IRP1
Accession No.	Uniprot:P21399GenelD:48
Calculated MW	98kDa
SDS-PAGE MW	98KDa
Formulation	PBS with 0.02% sodium azide,50% glycerol,pH7.3.
Storage	Store at -20°C. Avoid freeze / thaw cycles.

Application Details

WB 1:500 - 1:2000

Images



Western blot analysis of extracts of various cell lines, using IREB1 antibody.

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

Note: This product is for in vitro research use only and is not intended for use in humans or animals.