



Aconitase 1 (ACO1) Mouse mAb

Catalog No	YP-mAb-18687
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	
Immunogen	A synthetic peptide corresponding to a sequence within amino acids 1-100 of human Aconitase 1 (ACO1) (P21399)
Specificity	
Formulation	
Source	Monoclonal, Mouse,IgG
Purification	Affinity purification
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	IRP1;ACONS;HEL60;IREB1;IREBP;IREBP1;Aconitase 1 (ACO1)
Observed Band	98kDa
Calculated Molecular Weight	98kDa
Cell Pathway	
Tissue Specificity	
Function	
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 ironresponsive 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

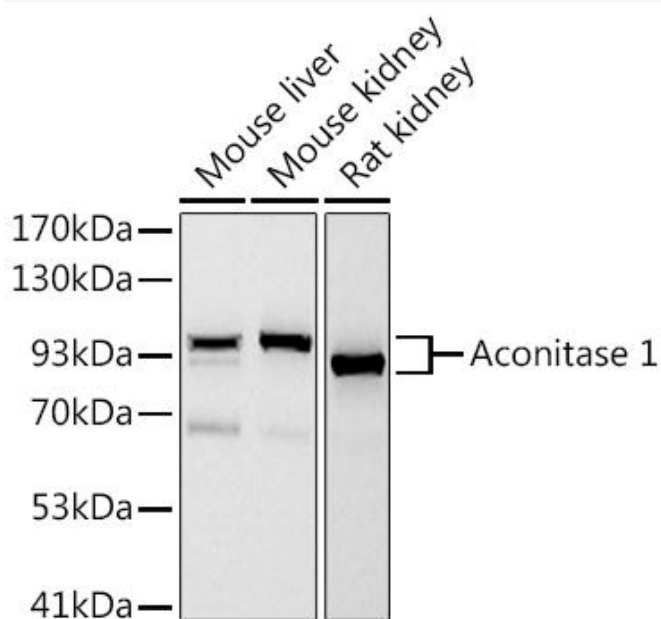
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western blot analysis of various lysates using Aconitase 1 (ACO1) Mouse mAb (A4821) at 1:1000 dilution. Secondary antibody: HRP-conjugated Goat anti-Mouse IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25μ g per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 30s.