

Basic Information

Product Name	Anti-Aconitase 2/ACO2 Antibody
Gene Name	ACO2
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Aconitase 2 identical to the related mouse and rat sequences.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	85 kDa
Dilution Ratios	Western blot (WB):1:500-2000

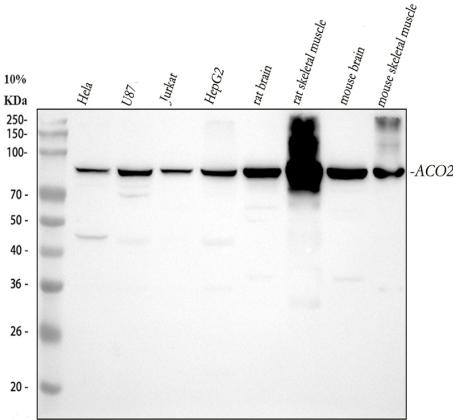
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

Aconitase 2, mitochondrial is a protein that in humans is encoded by the ACO2 gene. The protein encoded by this gene belongs to the aconitase/IPM isomerase family. It is an enzyme that catalyzes the interconversion of citrate to isocitrate via cis-aconitate in the second step of the TCA cycle. This protein is encoded in the nucleus and functions in the mitochondrion. It was found to be one of the mitochondrial matrix proteins that are preferentially degraded by the serine protease 15(PRSS15), also known as Lon protease, after oxidative modification.

Selected Validation Data



Western blot analysis of Aconitase 2/ACO2 using anti-Aconitase 2/ACO2 antibody (PB1026). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,
 Lane 2: human U87 whole cell lysates,
 Lane 3: human Jurkat whole cell lysates,
 Lane 4: human HepG2 whole cell lysates,
 Lane 5: rat brain tissue lysates,
 Lane 6: rat skeletal muscle tissue lysates,
 Lane 7: mouse brain tissue lysates,
 Lane 8: mouse skeletal muscle tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Aconitase 2/ACO2 antigen affinity purified polyclonal antibody (PB1026) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Aconitase 2/ACO2 at approximately 85 kDa. The expected band size for Aconitase 2/ACO2 is at 85 kDa.