

Basic Information

Product Name	Anti-Aconitase 2/ACO2 Antibody (Clone#20A46)	
Gene Name	ACO2	
Source	Rabbit	
Clonality	Monoclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF, IP	
Contents	500 ug/ml; Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide, 0.4-0.5 mg/ml BSA and 50% glycerol.	
Immunogen	A synthesized peptide derived from human Aconitase 2	
Concentration	500 ug/ml	
Purification	Affinity-chromatography	
Observed MW	85 kDa	
Dilution Ratios	Western blot (WB): Immunohistochemistry (IHC): Immunocytochemistry/Immunofluorescence (ICC/IF): ImmunoPrecipitation (IP):	1:1000-5000 1:50-200 1:50-200 1:50

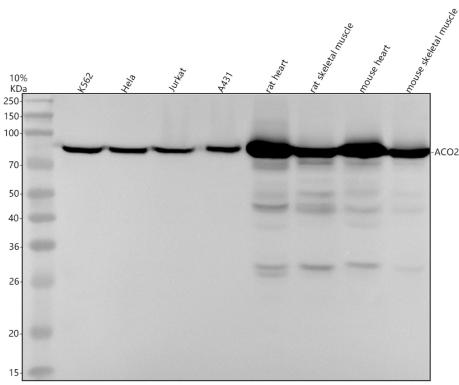
Storage

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 anti-ACO2 antibody (M03096-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human K562 whole cell lysates,

Lane 2: human Hela whole cell lysates,

Lane 3: human Jurkat whole cell lysates,

Lane 4: human A431 whole cell lysates,

Lane 5: rat heart tissue lysates,

Lane 6: rat skeletal muscle tissue lysates,

Lane 7: mouse heart 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-ACO2 antigen affinity purified monoclonal antibody (M03096-2) 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 ACO2 at approximately 85 kDa. The expected band size for ACO2 is at 85 kDa.