

## Basic Information

<b>Product Name</b>	Anti-Aconitase 2/ACO2 Antibody (Clone#OTI3G8)		
<b>Gene Name</b>	ACO2		
<b>Source</b>	Mouse		
<b>Clonality</b>	Monoclonal		
<b>Isotype</b>	IgG1		
<b>Species Reactivity</b>	human, mouse, rat		
<b>Tested Application</b>	IHC, ICC/IF, WB		
<b>Contents</b>	PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.		
<b>Immunogen</b>	Full length human recombinant protein of human ACO2 (NP_001089) produced in HEK293T cell.		
<b>Concentration</b>	500 ug/ml		
<b>Purification</b>	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)		
<b>Observed MW</b>	85 kDa		
<b>Dilution Ratios</b>	Western blot (WB): 1:2000 Immunohistochemistry (IHC): 1:50 Immunocytochemistry/Immunofluorescence (ICC/IF):1:100		

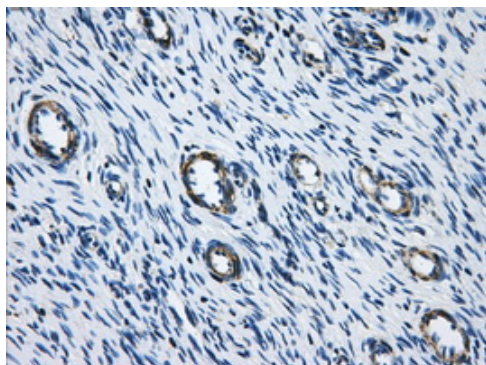
## Storage

Stable for 12 months from date of receipt. Store at -20°C as received.

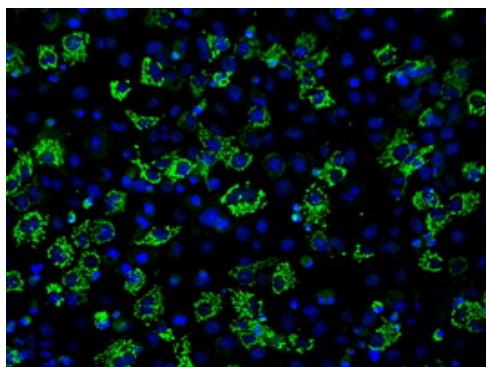
## Background Information

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.

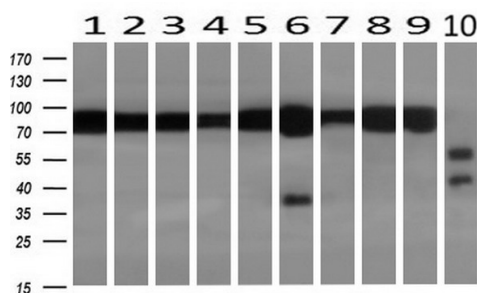
## Selected Validation Data



Immunohistochemical staining of paraffin-embedded Ovary tissue within the normal limits using anti-ACO2mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, M03096, Dilution 1:50)



Anti-ACO2 mouse monoclonal antibody immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY ACO2 .



Western blot analysis of extracts (10ug) from 10 Human tissue by using anti-ACO2 monoclonal antibody at 1:200 (1: Testis; 2: Omentum; 3: Uterus; 4: Breast; 5: Brain; 6: Liver; 7: Ovary; 8: Thyroid gland; 9: colon;10: spleen).