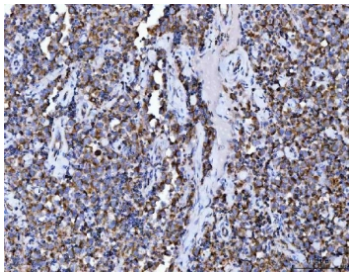
ACO2 Antibody / Aconitase 2 [clone 4C12D1] (RQ7281)

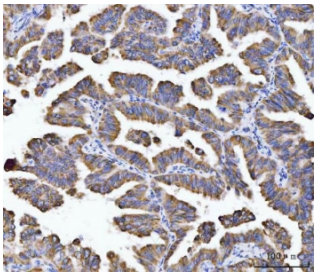
Catalog No.	Formulation	Size
RQ7281	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

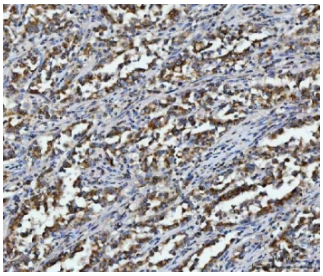
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1
Clone Name	4C12D1
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q99798
Localization	Cytoplasmic (mitochondria)
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml
Limitations	This ACO2 antibody is available for research use only.



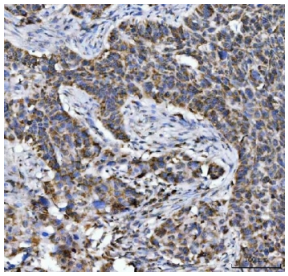
IHC staining of FFPE human testicular germ cell tumor tissue with ACO2 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



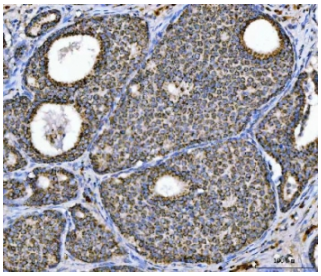
IHC staining of FFPE human lung adenocarcinoma tissue with ACO2 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



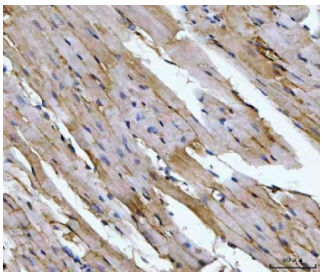
IHC staining of FFPE human hepatocellular carcinoma tissue with ACO2 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



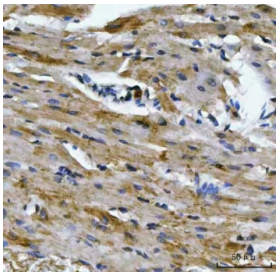
IHC staining of FFPE human laryngeal squamous cell carcinoma tissue with ACO2 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



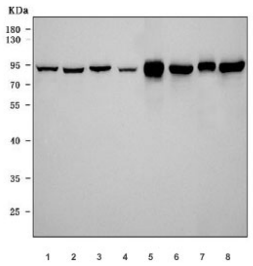
IHC staining of FFPE human breast cancer tissue with ACO2 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE mouse heart tissue with ACO2 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE rat heart tissue with ACO2 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of 1) human HeLa, 2) human U-87 MG, 3) human Jurkat, 4) human SH-SY5Y, 5) rat skeletal muscle, 6) rat brain, 7) mouse skeletal muscle and 8) mouse brain tissue lysate with ACO2 antibody. Predicted molecular weight: ~85 kDa.

Description

Aconitase 2, mitochondrial (also called Aconitate hydratase, 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.

Application Notes

Optimal dilution of the ACO2 antibody should be determined by the researcher.

Immunogen

Amino acids 561-596 (TSQRLQLLEPFDKWDGKDLEDLQILIKVKGKCTTDH) were used as the immunogen for the ACO2 antibody.

Storage

After reconstitution, the ACO2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.