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ACO2 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP7561C

Specification

ACO2 Antibody (Center) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	Q99798
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**294-325**

ACO2 Antibody (Center) - Additional Information

Gene ID 50

Other Names
Aconitate hydratase, mitochondrial, Aconitase, Citrate hydro-lyase, ACO2

Target/Specificity
This ACO2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 294-325 amino acids from the Central region of human ACO2.

Dilution
WB~~1:1000
IHC-P~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
ACO2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

ACO2 Antibody (Center) - Protein Information

Name ACO2

Function Catalyzes the isomerization of citrate to isocitrate via cis- aconitate.

Cellular Location

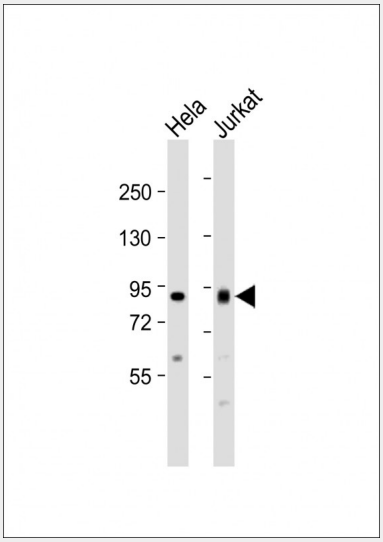
Mitochondrion {ECO:0000250|UniProtKB:P16276}.

ACO2 Antibody (Center) - Protocols

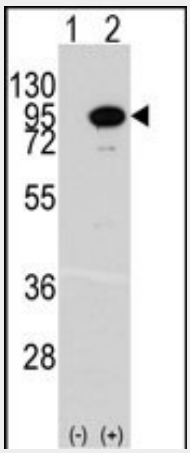
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ACO2 Antibody (Center) - Images

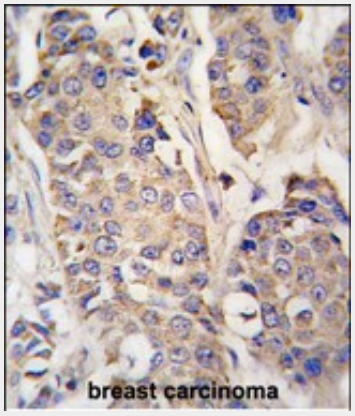


All lanes : Anti-ACO2 Antibody (Center) at 1:1000 dilution Lane 1: Hela whole cell lysate Lane 2: Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 85 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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Western blot analysis of ACO2 (arrow) using rabbit polyclonal ACO2 Antibody (Center) (Cat.#AP7561c).293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the ACO2 gene (Lane 2) (Origene Technologies).



Formalin-fixed and paraffin-embedded human breast carcinoma tissue reacted with ACO2 antibody (Center) (Cat.#AP7561c), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

ACO2 Antibody (Center) - Background

ACO2 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. 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.

ACO2 Antibody (Center) - References

Yu,Z.,Prostate 66 (10), 1061-1069 (2006)
Tsui,K.H.,Asian J. Androl. 8 (3), 307-315 (2006)
Ahmed,M.,J. Proteome Res. 4 (3), 931-940 (2005)

ACO2 Antibody (Center) - Citations

- Malarial infection develops mitochondrial pathology and mitochondrial oxidative stress to promote hepatocyte apoptosis.