

Rabbit ACO2 Polyclonal Antibody | anti-ACO2 antibody

ACO2 Antibody (Center)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA284137	Rabbit	Human, mouse, rat (Predicted Reactivity: Bovine, Pig)	Immunohistochemistry, ELISA, Western Blot

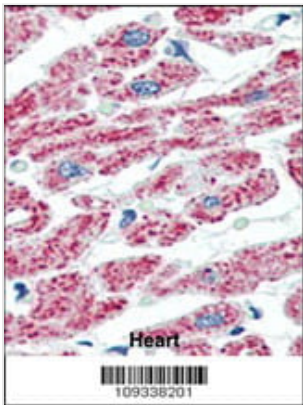
PRODUCT SYNONYMS

ACO2; Polyclonal Antibody; ACO2 Antibody (Center); Aconitate hydratase; mitochondrial; Aconitase; Citrate hydro-lyase; anti-ACO2 antibody

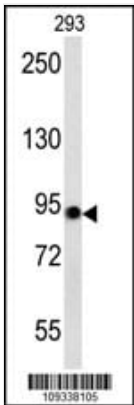
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, mouse, rat (Predicted Reactivity: Bovine, Pig)
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This ACO2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 438-467 amino acids from the Central region of human ACO2.
Purity/Purification	Purified Rabbit Polyclonal Antibody (Pab)
Form/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.
Concentration	Vial Concentration: 2 (varies by lot)
Sequence Positions	438-467
Sequence Length	780
Applicable Applications for anti-ACO2 antibody	IHC (Immunohistochemistry), ELISA, WB (Western Blot)
Antigen Type	Synthetic Peptide
Antigen Source	HUMAN
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

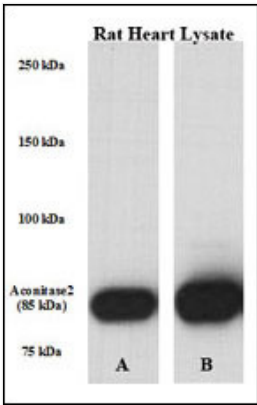
IMAGES



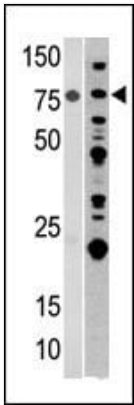
IHC (Immunohistochemistry)
Formalin-fixed and paraffin-embedded human Heart tissue reacted with ACO2 Antibody (Center) , which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



WB (Western Blot)
ACO2 western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the Aconitase antibody detected the Aconitase protein (arrow).



WB (Western Blot)
Perfused isolated rat heart whole tissue lysate was lysed with either A) 50 mM Tris-HCl, 150 mM NaCl, 1 mM EDTA, 1% NP-40, 0.1% SDS, 0.5% Na-deoxycholate, 1 mM Na3VO4, 20 mM NaF, 1 mM PMSF, 5 v/v % protease inhibitor cocktail or B) T-PER Tissue Protein Extraction Reagent [# 785101; Pierce], containing 1mM Na3VO4, 20 mM NaF, 5 v/v % protease inhibitor cocktail (Sigma); PVDF membrane was incubated in primary Ab [rabbit polyclonal antibody against ACO2 (Center). Solution: 1:1000 diluted in 5% NFM TBS-T 0.05 for overnight (15 hrs) at 4 °C. Data courtesy of Boglarka Laczy M.D., Division of Cardiovascular Disease, Dept. of Medicine, University of Alabama at Birmingham.



WB (Western Blot)
Western blot analysis of anti-ACO2 Pab in mouse heart(left) and 293 (right) tissue lysates (35ug/lane). ACO2(arrow) was detected using the purified Pab.

ADDITIONAL INFORMATION

Related Product Information for anti-ACO2 antibody	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. 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.
Product Categories/Family for anti-ACO2 antibody	Metabolism; Signal Transduction
References	Juang, H.H., Mol. Genet. Metab. 81(3):244-252 (2004). Bota, D.A., et al., Nat. Cell Biol. 4(9):674-680 (2002). Gruer, M.J., et al., Trends Biochem. Sci. 22(1):3-6 (1997). Klausner, R.D., et al., Mol. Biol. Cell 4(1):1-5 (1993). Geurts van Kessel, A.H., et al., Cytogenet. Cell Genet. 28(3):169-172 (1980).

NCBI AND UNIPROT INFORMATION

NCBI GI #	4501867
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NCBI GeneID	50
NCBI Accession #	NP_001089.1
NCBI GenBank Nucleotide #	NM_001098.2
UniProt Accession #	Q99798; O75809; Q5JZ41; Q6FHX0; Q8TAQ6
Molecular Weight	85425
NCBI Official Full Name	aconitate hydratase, mitochondrial
NCBI Official Synonym Full Names	aconitase 2, mitochondrial
NCBI Official Symbol	ACO2
NCBI Official Synonym Symbols	ICRD; OCA8; ACONM
NCBI Protein Information	aconitate hydratase, mitochondrial
UniProt Protein Name	Aconitate hydratase, mitochondrial
UniProt Gene Name	ACO2
UniProt Synonym Gene Names	Aconitase
UniProt Entry Name	ACON_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/aco2-antibody-immunohistochemistry-western-blot-elisa/284137>