

Product datasheet for **AP11745PU-N**

Aconitase 2 (ACO2) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	ELISA: 1/1,000. Western blot: 1/100-1/500. Immunohistochemistry on Paraffin Sections: 1/10-1/50.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	Ig
Clonality:	Polyclonal
Immunogen:	KLH conjugated synthetic peptide between 438-467 amino acids from the central region of Human Aconitase.
Specificity:	This antibody detects ACO2 at Center.
Formulation:	PBS State: Purified State: Liquid purified Ig fraction Preservative: 0.09% (W/V) Sodium Azide
Concentration:	lot specific
Purification:	Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	85425 Da
Gene Name:	aconitase 2
Database Link:	Entrez Gene 50 Human Q99798



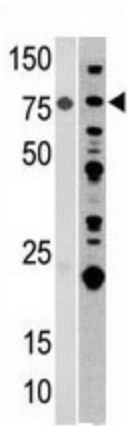
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Background:

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. 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.

Synonyms:

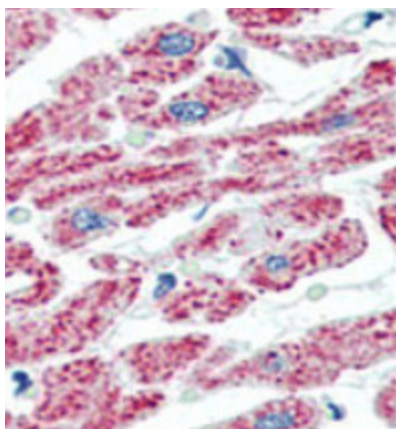
Aconitase 2

Product images:


Western blot analysis of anti-ACO2 in mouse heart (left) and 293 (right) tissue lysates (35 ug/lane). ACO2 (arrow) was detected using the purified Pab (1:60 dilution).



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, containing 1 mM Na₃VO₄, 20 mM NaF, 5 v/v % protease inhibitor cocktail; 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.



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.