

Store at -20C  
#6922**ACO2 Antibody**

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**For Research Use Only. Not for Use in Diagnostic Procedures.**

<b>Applications:</b> W, IF-IC	<b>Reactivity:</b> H M R Mk	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 85	<b>Source/Isotype:</b> Rabbit	<b>UniProt ID:</b> #Q99798	<b>Entrez-Gene Id:</b> 50
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<b>Product Usage Information</b>	<b>Application</b> Western Blotting Immunofluorescence (Immunocytochemistry)	<b>Dilution</b> 1:1000 1:50
<b>Storage</b>	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.	
<b>Specificity/Sensitivity</b>	ACO2 Antibody recognizes endogenous levels of total ACO2 protein.	
<b>Source / Purification</b>	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly540 of human ACO2 protein. Antibodies are purified by protein A and peptide affinity chromatography.	
<b>Background</b>	Aconitase 2 (ACO2) catalyzes the conversion of citrate to isocitrate via cis-aconitate in the second step of the tricarboxylic acid (TCA) cycle (1,2). ACO2 is also an important regulator of iron homeostasis within cells (1-4). In addition, research studies have shown that this enzyme is deficient in the mitochondrial disease Friedreich's Ataxia (4,5).	
<b>Background References</b>	<ol style="list-style-type: none"> <li>Gille, G. and Reichmann, H. (2011) <i>J Neural Transm</i> 118, 349-59.</li> <li>Mirel, D.B. et al. (1998) <i>Gene</i> 213, 205-18.</li> <li>Myers, C.R. et al. (2010) <i>Free Radic Biol Med</i> 49, 1903-15.</li> <li>Rötig, A. et al. (1997) <i>Nat Genet</i> 17, 215-7.</li> <li>Ye, H. and Rouault, T.A. (2010) <i>Biochemistry</i> 49, 4945-56.</li> </ol>	
<b>Species Reactivity</b>	Species reactivity is determined by testing in at least one approved application (e.g., western blot).	
<b>Western Blot Buffer</b>	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.	
<b>Applications Key</b>	<b>W:</b> Western Blotting <b>IF-IC:</b> Immunofluorescence (Immunocytochemistry)	
<b>Cross-Reactivity Key</b>	<b>H:</b> Human <b>M:</b> Mouse <b>R:</b> Rat <b>Mk:</b> Monkey	
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