

#6922 Store at -20°C

ACO2 Antibody



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For Research Use Only. Not For Use In Diagnostic Procedures.

Applications W, IF-IC Endogenous	Species Cross-Reactivity* H, M, R, Mk	Molecular Wt. 85 kDa	Isotype Rabbit IgG**
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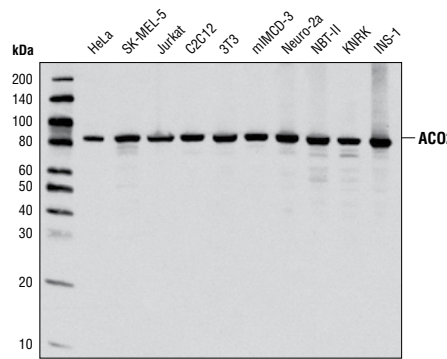
Background: Aconitase 2 (ACO2) catalyzes the conversion of citrate to isocitrate via cis-aconitate in the second step of the tricarboxylic acid (TCA) cycle (1,2). ACO2 also is an important regulator of iron homeostasis within cells (1-4). In addition, this enzyme is found to be deficient in the mitochondrial disease Friedreich Ataxia (4,5).

Specificity/Sensitivity: ACO2 Antibody recognizes endogenous levels of total ACO2 protein.

Source/Purification: 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.

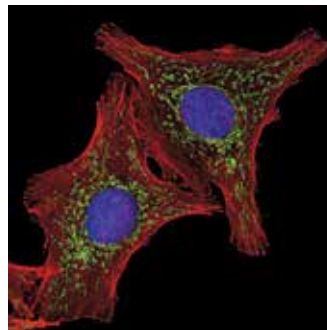
Background References:

- (1) Gille, G. and Reichmann, H. (2010) *J Neural Transm*, Epub ahead of print.
- (2) Mirel, D.B. et al. (1998) *Gene* 213, 205-18.
- (3) Myers, C.R. et al. (2010) *Free Radic Biol Med* 49, 1903-15.
- (4) Rötig, A. et al. (1997) *Nat Genet* 17, 215-7.
- (5) Ye, H. and Rouault, T.A. (2010) *Biochemistry* 49, 4945-56.



Western blot analysis of extracts from various cell lines using ACO2 Antibody.

SK-MEL-5



Immunofluorescent analysis of SK-MEL-5 cells using ACO2 Antibody (green). Actin filaments were labeled using DyLight™ 554 Phalloidin #13054 (red). Blue pseudocolor = DRAQ5® #4084 (fluorescent DNA dye).

Entrez-Gene ID #50
UniProt ID #Q99798

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunofluorescence (IF-IC)	1:50

For application specific protocols please see the web page for this product at www.cellsignaling.com.

Please visit www.cellsignaling.com for a complete listing of recommended companion products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.

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Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
 Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.