

ACO2 monoclonal antibody (M01), clone 1A11

Catalog # H00000050-M01

Size 100 ug

Specification

Product Description	Mouse monoclonal antibody raised against a partial recombinant ACO2.
Immunogen	ACO2 (AAH14092, 1 a.a. ~ 179 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	MAPYSLLVTRLQKALGVRQYHVASVLCQRAKVAMSHFEPNEYHYDLLEKNINVRKRLNRPLTLSE KIVYGHLDPPASQEIERGKSYLRPDRVAMQDATAQMAMLQFISSGLSKVAVPSTIHCDHLIEAQ VGGEKDLRRAKDINQEVYNFLATAGAKYGVGFWKPGSGIIHQIILE
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (97); Rat (96)
Isotype	IgG2a Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein.
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- ELISA

Gene Info — ACO2

Entrez GeneID [50](#)

GeneBank Accession# [BC014092](#)

Protein Accession#	AAH14092
Gene Name	ACO2
Gene Alias	ACONM, MGC20605, MGC33908
Gene Description	aconitase 2, mitochondrial
Omim ID	100850
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene 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. [provided by RefSeq]
Other Designations	OTTHUMP00000042146 OTTHUMP00000165920 aconitase 2 aconitate hydratase citrate hydro-lyase

Publication Reference

- [Regulation of mitochondrial aconitase by phosphorylation in diabetic rat heart.](#)

Lin G, Brownsey RW, MacLeod KM.

Cellular and Molecular Life Sciences 2009 Mar; 66(5):919.

Application: IP, WB-Ti, Rat, Rat hearts

Pathway

- [Biosynthesis of alkaloids derived from histidine and purine](#)
- [Biosynthesis of alkaloids derived from ornithine](#)
- [Biosynthesis of alkaloids derived from shikimate pathway](#)
- [Biosynthesis of alkaloids derived from terpenoid and polyketide](#)
- [Biosynthesis of phenylpropanoids](#)
- [Biosynthesis of plant hormones](#)
- [Biosynthesis of terpenoids and steroids](#)
- [Citrate cycle \(TCA cycle\)](#)

- [Glyoxylate and dicarboxylate metabolism](#)
- [Metabolic pathways](#)
- [Reductive carboxylate cycle \(CO₂ fixation\)](#)