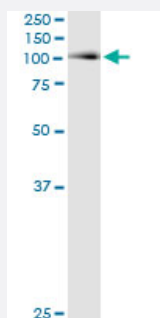


ACO1 monoclonal antibody (M01), clone 2C1

Catalog # H00000048-M01

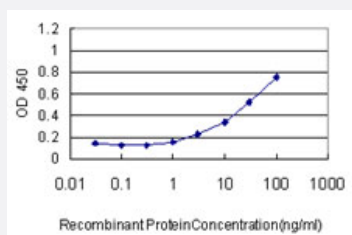
Size 100 ug

Applications



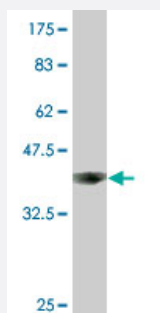
Immunoprecipitation

Immunoprecipitation of ACO1 transfected lysate using anti-ACO1 monoclonal antibody and Protein A Magnetic Bead, and immunoblotted with ACO1 MaxPab rabbit polyclonal antibody.



Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged ACO1 is approximately 0.3ng/ml as a capture antibody.



Western Blot detection against Immunogen (37.84 KDa) .

Specification

Product Description

Mouse monoclonal antibody raised against a partial recombinant ACO1.

Immunogen	ACO1 (AAH18103, 780 a.a. ~ 889 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	RDWAAKGPFLLGIKAVLAESYERIHRSNLVGMGVIPLEYLPGENADALGLTGQERYTIIIPENLKPQM KVQVKLDTGKTFQAVMRFTDVELTYFLNGGILNYMIRKMAK
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (91)
Isotype	IgG2a Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (37.84 KDa) .
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Immunoprecipitation

Immunoprecipitation of ACO1 transfected lysate using anti-ACO1 monoclonal antibody and Protein A Magnetic Bead, and immunoblotted with ACO1 MaxPab rabbit polyclonal antibody.

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged ACO1 is approximately 0.3ng/ml as a capture antibody.

[Protocol Download](#)

- ELISA

Gene Info — ACO1

Entrez GeneID

[48](#)

GeneBank Accession#	BC018103
Protein Accession#	AAH18103
Gene Name	ACO1
Gene Alias	ACONS, IREB1, IREBP, IREBP1, IRP1
Gene Description	aconitase 1, soluble
Omim ID	100880
Gene Ontology	Hyperlink
Gene Summary	Aconitase 1, also known as iron regulatory element binding protein 1 (IREB1), is a cytosolic protein which binds to iron-responsive elements (IREs). IREs are stem-loop structures found in the 5' UTR of ferritin mRNA, and in the 3' UTR of transferrin receptor mRNA. The iron-induced binding to the IRE results in repression of translation of ferritin mRNA, and inhibition of degradation of the otherwise rapidly degrading transferrin receptor mRNA. Thus, IREB1 plays a central role in cellular iron homeostasis. It was also shown to have aconitase activity, and hence grouped with the aconitase family of enzymes. [provided by RefSeq]
Other Designations	OTTHUMP00000021176 OTTHUMP00000021177 OTTHUMP00000045233 aconitase 1 aconitase hydratase citrate hydro-lyase ferritin repressor protein iron regulatory protein 1 iron-responsive element binding protein 1

Publication Reference

- [IF/TA-related metabolic changes?Xproteome analysis of rat renal allografts.](#)

Reuter S, Reiermann S, Worner R, Schroter R, Edemir B, Buck F, Henning S, Peter-Katalinic J, Vollenbroeker B, Amann K, Pavenstadt H, Schlatter E, Gabriels G.

Nephrology, Dialysis, Transplantation: Official Publication of the European Dialysis 2010 Aug; 25(8):2492.

Application: WB-Ti, Rat, Rat renal allografts, Rat renal isografts

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 \(CO₂ fixation\)](#)