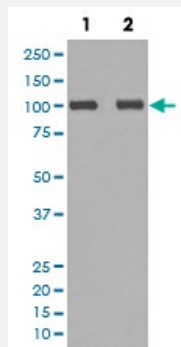


ACO1 monoclonal antibody, clone ABG-1

Catalog # MAB19520 Size 100 uL

Applications



Western Blot (Cell lysate)

Western blot analysis of (1) mouse kidney lysate; (2) HepG2 cell lysate with ACO1 monoclonal antibody.

Specification

Product Description	Rabbit monoclonal antibody raised against synthetic peptide of human ACO1.
Immunogen	A synthetic peptide corresponding to human ACO1.
Host	Rabbit
Reactivity	Human, Mouse, Rat
Form	Liquid
Purification	Affinity purification
Isotype	IgG
Recommend Usage	Immunocytochemistry (1:50-1:200) Immunofluorescence (1:50-1:200) Western Blot (1:500-1:2000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

Storage Instruction

Store at -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Note

This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

Western blot analysis of (1) mouse kidney lysate; (2) HepG2 cell lysate with ACO1 monoclonal antibody.

- Immunocytochemistry

- Immunofluorescence

Gene Info — ACO1

Entrez GeneID[48](#)**Protein Accession#**[P21399](#)**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

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 \(CO₂ fixation\)](#)