

# ACO1 rabbit monoclonal antibody

Catalog # H00000048-K      Size 100 ug x up to 3

## Specification

<b>Product Description</b>	Rabbit monoclonal antibody raised against a human ACO1 peptide using ARM Technology.
<b>Immunogen</b>	A synthetic peptide of human ACO1 is used for rabbit immunization. Customer or Abnova will decide on the preferred peptide sequence.
<b>Host</b>	Rabbit
<b>Library Construction</b>	Non-fusion antibody library from rabbit spleen ( <a href="#">ARM Technology</a> ).
<b>Expression</b>	Overexpression vector and transfection into 293H cell line.
<b>Reactivity</b>	Human
<b>Purification</b>	Protein A
<b>Isotype</b>	IgG
<b>Quality Control Testing</b>	Antibody reactive against human ACO1 peptide by ELISA and mammalian transfected lysate by Western Blot.
<b>Storage Buffer</b>	In 1x PBS, pH 7.4
<b>Storage Instruction</b>	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
<b>Deliverable</b>	Up to three rabbit IgG clones of 100 ug each will be delivered to customer.
<b>Note</b>	<ol style="list-style-type: none"> <li>Customer may provide cell or tissue lysate for antibody screening.</li> <li>Rabbit monoclonal antibody generated by ARM technology is amenable to antibody engineering including F(ab)<sub>2</sub>, IgG, scFv and different Fc and non-Fc conjugates per customer request.</li> </ol>

## Applications

- Western Blot (Transfected lysate)

[Protocol Download](#)

- ELISA

## Gene Info — ACO1

Entrez GeneID [48](#)

GeneBank Accession# [ACO1](#)

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 \(CO<sub>2</sub> fixation\)](#)