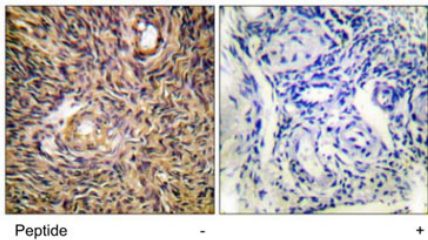


ACO1 polyclonal antibody

Catalog # PAB18049 Size 100 ug

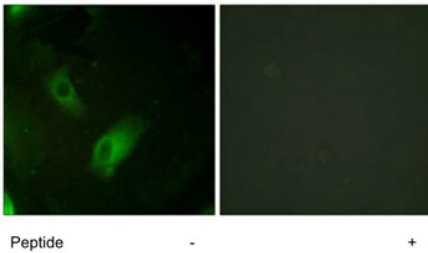
Applications



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemistry analysis of paraffin-embedded human ovary tissue using ACO1 polyclonal antibody (Cat # PAB18049).

Peptide "+" means "with peptide blocking".



Immunofluorescence

Immunofluorescence analysis of HeLa cells, using ACO1 polyclonal antibody (Cat # PAB18049).

Peptide "+" means "with peptide blocking".

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of ACO1.
Immunogen	A synthetic peptide corresponding to human ACO1.
Host	Rabbit
Reactivity	Human, Mouse, Rat
Specificity	This antibody is specific to ACO1.
Form	Liquid

Recommend Usage	Immunohistochemistry (1:50~1:100) Immunofluorescence (1:500~1:1000) ELISA (1:40000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, 150mM NaCl, pH 7.4 (50% glycerol, 0.02% sodium azide)
Storage Instruction	Store at -20°C. Aliquot to 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

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemistry analysis of paraffin-embedded human ovary tissue using ACO1 polyclonal antibody (Cat # PAB18049).
Peptide "+" means "with peptide blocking".

- Immunohistochemistry

- Immunofluorescence

Immunofluorescence analysis of HeLa cells, using ACO1 polyclonal antibody (Cat # PAB18049).
Peptide "+" means "with peptide blocking".

- Enzyme-linked Immunoabsorbent Assay

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|aconitate hydratase|citrate hydro-lyase|ferritin repressor protein|iron regulatory protein 1|iron-responsive element binding protein 1

Publication Reference

- [The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection \(MGC\).](#)

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Genome Research 2004 Oct; 14(10B):2121.

- [Expression of active iron regulatory factor from a full-length human cDNA by in vitro transcription/translation.](#)

Hirling H, Emery-Goodman A, Thompson N, Neupert B, Seiser C, Kuhn LC.

Nucleic Acids Research 1992 Jan; 20(1):33.

- [Homology between IRE-BP, a regulatory RNA-binding protein, aconitase, and isopropylmalate isomerase.](#)

Hentze MW, Argos P.

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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 \(CO₂ fixation\)](#)