

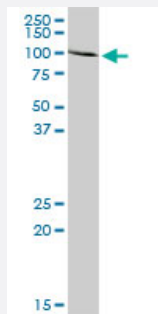
MaxPab®

ACO1 MaxPab rabbit polyclonal antibody (D01)

Catalog # H00000048-D01

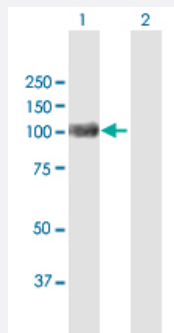
Size 100 uL

Applications



Western Blot (Tissue lysate)

ACO1 MaxPab rabbit polyclonal antibody. Western Blot analysis of ACO1 expression in human liver.

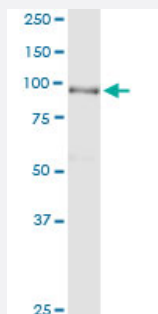


Western Blot (Transfected lysate)

Western Blot analysis of ACO1 expression in transfected 293T cell line ([H00000048-T01](#)) by ACO1 MaxPab polyclonal antibody.

Lane 1: ACO1 transfected lysate(98.4 KDa).

Lane 2: Non-transfected lysate.



Immunoprecipitation

Immunoprecipitation of ACO1 transfected lysate using anti-ACO1 MaxPab rabbit polyclonal antibody and Protein A Magnetic Bead, and immunoblotted with ACO1 purified MaxPab mouse polyclonal antibody (B01P) ([H00000048-B01P](#)).

Specification

Product Description

Rabbit polyclonal antibody raised against a full-length human ACO1 protein.

Immunogen	ACO1 (NP_002188.1, 1 a.a. ~ 889 a.a) full-length human protein.
Sequence	MSNPFAHLAEPLDPVQPGKKFFNLNKLEDSRYGRLPFSIRVLLEAAIRNCDEFLVKKQDIENILHW NVTQHKNIEVPFKPARVILQDFTGVPVVDFAAMRDAVKKLGGDPEKINPVCADLVIDHSIQVDF NRRADSLQKNQDLEFERNRERFEFLKWGSQAFHNMRIIPPGSGIIHQVNLEYLARVVFDQDGYYP DSLVGTDSTHTMIDGLGILGWGVGGIEAEAVMLGQPISMVLPQVIGYRLMGKPHPLVTSTDIVLTITK HLRQVGVGKFEFFGPGVAQLSIADRATIANMCPEYGATAAFFPVDEVSTYLVQTGRDEEKLKY IKKYLQAVGMFRDFNDPSQDPDFTQVVELDLKTVVPCCSGPKRPQDKVAVSDMKKDFESCLGA KQGFKGQVAPEHHNDHKTFMYDNTEFTLAHGSVVIAAITSCNTSNPSVMLGAGLLAKKAVDAGL NVMPYIKTSLSPGSGVVTYLQESGVMPYLSQLGFDVVGYGCMTICIGNSGPLPEPVVEAITQGDL VAVGVLSGNRNFEGRVHPNTRANYLASPLVIAYAIAGTIRIDFEKEPLGVNAKGQQVFLKDMWPTR DEIQAVERQVWIPGMFKEVYQKIETVNESWNALATPSDKLFFWNSKSTYIKSPFFENLTLDLQPP KSIVDAYVLLNLGDSVTTDHISPAGNIARNSPAARYLTNRGLTPREFNSYGSRRGNDVMARGTFA NIRLLNRLNKLQAPQTIHLPSGEILDVFDAAERYQQAGLPLVLAGKEYGAGSSRDWAAKGPFLLGI KAVLAESYERIHRSNLVGMGVIPLEYLPGENADALGLTGQERYTIIPENLKPQMKVQVKLDTGKTF QAVMRFDTDVELTYFLNGGILNYMIRKMAK
Host	Rabbit
Reactivity	Human
Interspecies Antigen Sequence	Mouse (93)
Quality Control Testing	Antibody reactive against mammalian transfected lysate.
Storage Buffer	No additive
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Tissue lysate)

ACO1 MaxPab rabbit polyclonal antibody. Western Blot analysis of ACO1 expression in human liver.

[Protocol Download](#)

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[Protocol Download](#)

- Immunoprecipitation

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[Protocol Download](#)

Gene Info — ACO1

Entrez GeneID

[48](#)

GeneBank Accession#

[NM_002197.1](#)

Protein Accession#

[NP_002188.1](#)

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

- [Transferrin receptor mRNA interactions contributing to iron homeostasis.](#)

Rupani DN, Connell GJ.

RNA 2016 Aug; 22(8):1271.

Application: IP, Human, HUVECs

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 \(CO₂ fixation\)](#)