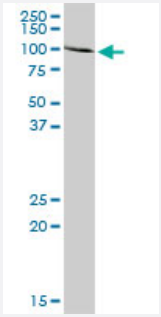
MaxPab®

ACO1 MaxPab rabbit polyclonal antibody (D01)

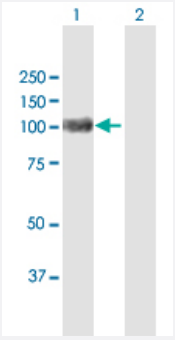
Catalog # H00000048-D01 Size 100 uL

Applications



Western Blot (Tissue lysate)

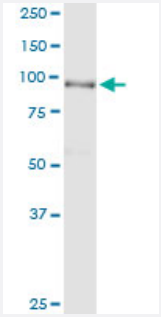
ACO1 MaxPab rabbit polyclonal antibody. Western Blot analysis of ACO1 expression in human liver.



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 NVTQHKNIEVPFKPARVILQDFTGVPAVVDFAAMRDAVKKLGGDPEKINPVCPADLVIDHSIQVDF NRRADSLQKNQDLEFERNRERFEFLKWGSQAFHNMRIIPPGSGIIHQVNLEYLARVVFDQDGYYYP DSLVGTDSHTTMIDGLGILGWGVGGIEAEAVMLGQPISMVLPQVIGYRLMGKPHPLVTSTDIVLTITK HLRQVGVVGKFVEFFGPGVAQLSIADRATIANMCPEYGATAAFFPVDEVSITYLVQTGRDEEKLKY IKKYLQAVGMFRDFNDPSQDPDFTQVVELDLKTVVPCCSGPKRPQDKVAVSDMKKDFESCLGA KQGFKGFQVAPEHHNDHKTFIYDNTEFTLAHGSVVIAAITSCTNTSNPSVMLGAGLLAKKAVDAGL NVMPYIKTSLSPGSGVVTYYLQESGVMPYLSQLGFDVVGYGCMTCIGNSGPLPEPVVEAITQGDL VAVGVLSGNRNFEGRVHPNTRANYLASPPLVIAYAIAGTIRIDFEKEPLGVNAKGQQVFLKDIWPTR DEIQAVERQYVIPGMFKEVYQKIETVNESWNALATPSDKLFFWNSKSTYIKSPPFFENLTLDLQPP KSIVDAYVLLNLGDSVTTDHISPAGNIARNSPAARYLTNRGLTPREFNSYGSRRGNDAVMARGTFA NIRLLNRFLNKQAPQTIHLPSGEILDVFDAAERYQQAGLPLIVLAGKEYGAGSSRDWAAKGPFLLGI KAVLAESYERIHRSNLVGMGVIPLEYLPGENADALGLTGQERYTIIIPENLKPQMKVQVKLDTGKTF 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

- 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).
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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|aconitate 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)