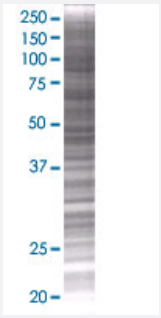
ACO1 293T Cell Transient Overexpression Lysate(Denatured)

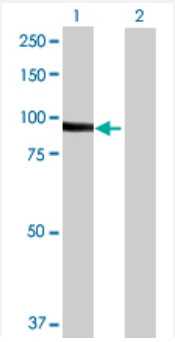
Catalog # H00000048-T01 Size 100 uL

Applications



SDS-PAGE Gel

ACO1 transfected lysate.



Western Blot

Lane 1: ACO1 transfected lysate (97.9 KDa)
Lane 2: Non-transfected lysate.

Specification

Transfected Cell Line	293T
Plasmid	pCMV-ACO1 full-length
Host	Human
Theoretical MW (kDa)	97.9
Interspecies Antigen Sequence	Mouse (93)

Quality Control Testing	Transient overexpression cell lysate was tested with Anti-ACO1 antibody (H00000048-B01) by Western Blots. SDS-PAGE Gel ACO1 transfected lysate. Western Blot Lane 1: ACO1 transfected lysate (97.9 KDa) Lane 2: Non-transfected lysate.
Storage Buffer	1X Sample Buffer (50 mM Tris-HCl, 2% SDS, 10% glycerol, 300 mM 2-mercaptoethanol, 0.01% Bromophenol blue)
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot

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

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)