

ACO1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant ACO1.

Catalog # AT1026a

Specification

ACO1 Antibody (monoclonal) (M01) - Product Information

Application	IP, WB, E
Primary Accession	P21399
Other Accession	BC018103
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG2a Kappa
Calculated MW	98399

ACO1 Antibody (monoclonal) (M01) - Additional Information

Gene ID 48

Other Names

Cytoplasmic aconitate hydratase, Aconitase, Citrate hydro-lyase, Ferritin repressor protein, Iron regulatory protein 1, IRP1, Iron-responsive element-binding protein 1, IRE-BP 1, ACO1, IREB1

Target/Specificity

ACO1 (AAH18103, 780 a.a. ~ 889 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution

WB~~1:500~1000

Format

Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions

ACO1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

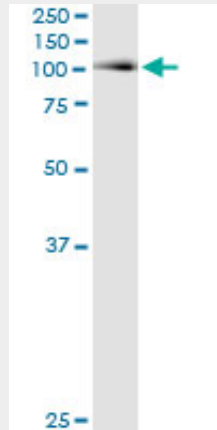
ACO1 Antibody (monoclonal) (M01) - Protocols

Provided below are standard protocols that you may find useful for product applications.

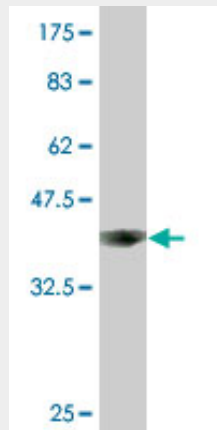
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

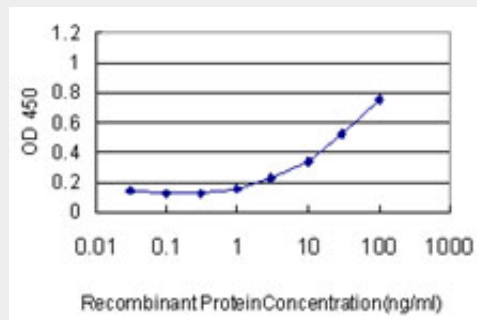
ACO1 Antibody (monoclonal) (M01) - Images



Immunoprecipitation of ACO1 transfected lysate using anti-ACO1 monoclonal antibody and Protein A Magnetic Bead ([U0007](#)), and immunoblotted with ACO1 MaxPab rabbit polyclonal antibody.



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (37.84 KDa) .



Detection limit for recombinant GST tagged ACO1 is approximately 0.3ng/ml as a capture antibody.

ACO1 Antibody (monoclonal) (M01) - Background

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.

ACO1 Antibody (monoclonal) (M01) - References

1. IF/TA-related metabolic changes? Xproteome analysis of rat renal allografts. Reuter S, Reiermann S, Worner R, Schroter R, Edemir B, Buck F, Henning S, Peter-Katalinic J, Vollenbrocker B, Amann K, Pavenstadt H, Schlatter E, Gabriels G. *Nephrol Dial Transplant*. 2010 Feb 22. [Epub ahead of print]