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ACO1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant ACO1.
Catalog # AT1026a

Product Information

Application	WB, IP, E
Primary Accession	P21399
Other Accession	BC018103
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	2C1
Calculated MW	98399

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 IP~~N/A E~~N/A
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.

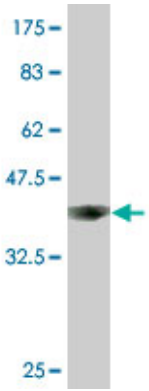
Background

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.

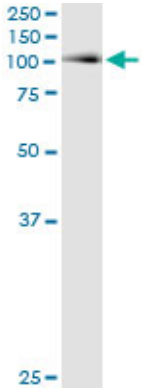
References

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, Vollenbroker B, Amann K, Pavenstadt H, Schlatter E, Gabriels G.Nephrol Dial Transplant. 2010 Feb 22. [Epub ahead of print]

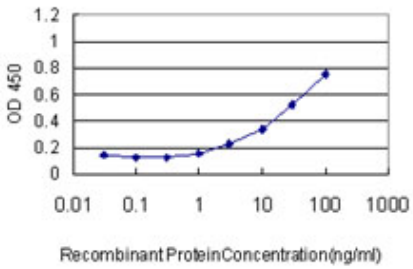
Images



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



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



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