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Product datasheet for TA345794

Aconitase 1 (ACO1) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB, IHC
Reactivity:	Human, Mouse
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	The immunogen for anti-ACO1 antibody: synthetic peptide directed towards the N terminal of human ACO1. Synthetic peptide located within the following region: MSNPFAHLAEPLDPVQPGKKFFNLNKLEDSRYGRLPFSIRVLLEAAIRNC
Formulation:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose. *Note that this product is shipped as lyophilized powder to China customers.*
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	98 kDa
Gene Name:	aconitase 1
Database Link:	NP_002188 Entrez Gene 11428 MouseEntrez Gene 48 Human P21399

View online »

Background: ACO1, also known as iron regulatory element binding protein 1 (IREB1), is a cytosolic protein which binds to iron-responsive elements (IREs). It 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.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.

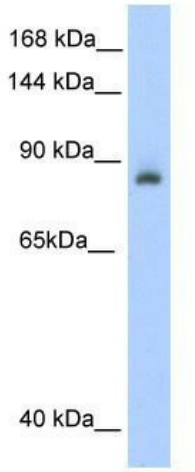
Synonyms: ACONS; HEL60; IREB1; IREBP; IREBP1; IRP1

Note: Immunogen Sequence Homology: Pig: 100%; Rat: 100%; Human: 100%; Bovine: 100%; Dog: 93%; Mouse: 93%; Horse: 92%; Guinea pig: 91%; Rabbit: 86%

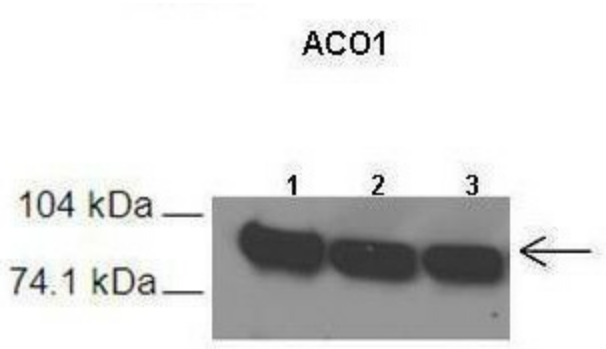
Protein Families: Druggable Genome

Protein Pathways: Citrate cycle (TCA cycle), Glyoxylate and dicarboxylate metabolism, Metabolic pathways

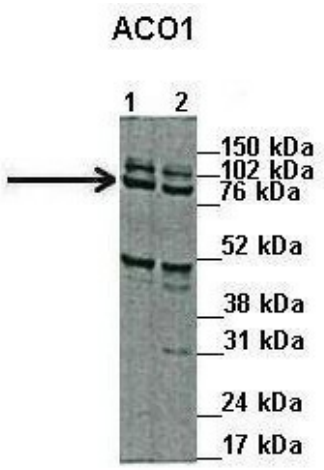
Product images:



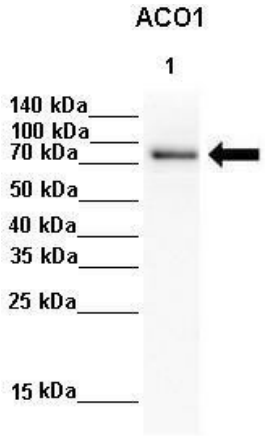
WB Suggested Anti-ACO1 Antibody Titration: 0.2-1 ug/ml; ELISA Titer: 1: 62500; Positive Control: Human kidney



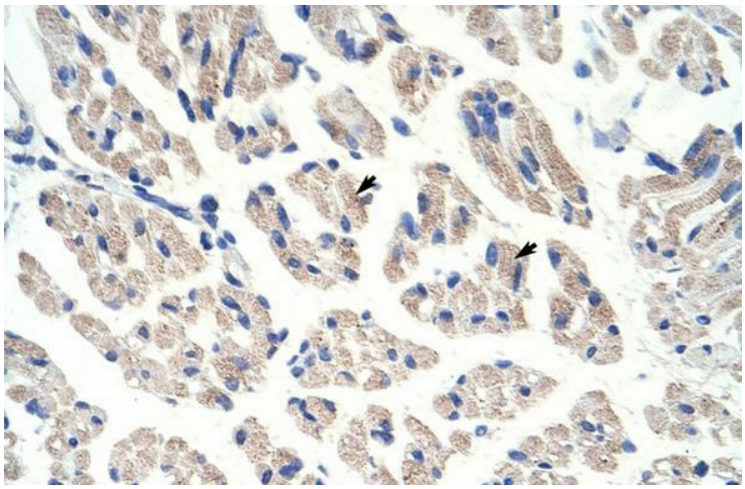
Lanes: 1. 60 ug mouse liver extract 2. 60 ug mouse liver extract 3. 60 ug mouse liver extract; Primary Antibody Dilution: 1: 500; Secondary Antibody: Anti-rabbit HRP; Secondary Antibody Dilution: 1: 3000; Gene Name: ACO1;



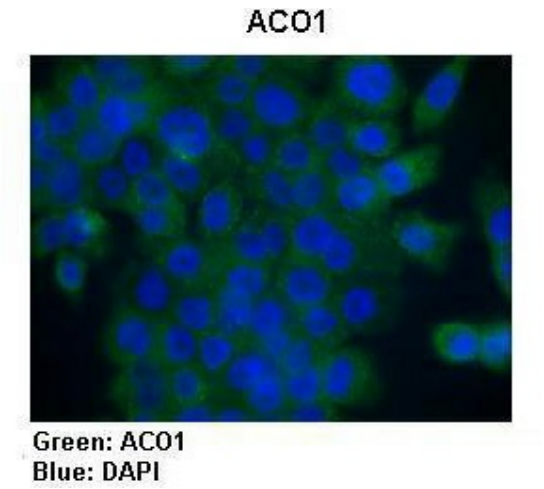
Lanes: 1. 45ug capan1 cell lysate; 2. 45 ug HPAF cell lysate; Primary Antibody Dilution: 1: 1000; Secondary Antibody: Anti-Rabbit HRP; Secondary Antibody Dilution: 1: 5000; Gene Name: ACO1;



Lanes: Lane 1: 100ug HePG2 lysate; Primary Antibody Dilution: 1: 1000; Secondary Antibody: Goat anti rabbit-HRP; Secondary Antibody Dilution: 1: 8000; Gene Name: ACO1;



Rabbit Anti-ACO1 Antibody; Paraffin Embedded Tissue: Human Muscle; Cellular Data: Skeletal muscle cells; Antibody Concentration: 4.0-8.0 ug/ml; Magnification: 400X



Sample Type: Human Capan1 cells (Pancreatic cancer cell line) Primary Antibody Dilution: 1: 300; Secondary Antibody: Anti-rabbit-AlexaFluor-488; Secondary Antibody: ilution: 1: 200; Color/Signal Descriptions: ACO1: Green DAPI: Blue; Gene Name: ACO1;