Datasheet for ABIN7263897

anti-Aconitase 1 antibody

2 Images

Go to Product page

Overview

Quantity:	200 µL
Target:	Aconitase 1 (ACO1)
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Aconitase 1 antibody is un-conjugated
Application:	Immunohistochemistry (IHC)

Product Details

Immunogen:	Recombinant fusion protein of human ACO1 (NP_002188.1).
Isotype:	IgG
Characteristics:	Polyclonal Antibody
Purification:	Affinity purification

Target Details

Target:	Aconitase 1 (ACO1)
Alternative Name:	ACO1 (ACO1 Products)
Background:	The protein encoded by this gene is a bifunctional, cytosolic protein that functions as an essential enzyme in the TCA cycle and interacts with mRNA to control the levels of iron inside cells. When cellular iron levels are high, this protein binds to a 4Fe-4S cluster and functions as an aconitase. Aconitases are iron-sulfur proteins that function to catalyze the conversion of

Target Details

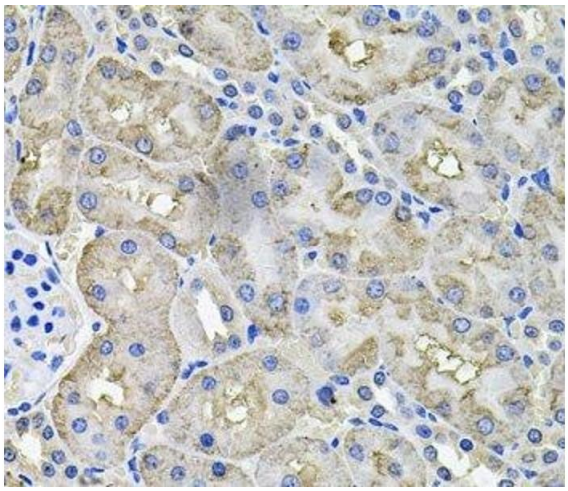
	citrate to isocitrate. When cellular iron levels are low, the protein binds to iron-responsive elements (IREs), which are stem-loop structures found in the 5' UTR of ferritin mRNA, and in the 3' UTR of transferrin receptor mRNA. When the protein binds to IRE, it results in repression of translation of ferritin mRNA, and inhibition of degradation of the otherwise rapidly degraded transferrin receptor mRNA. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. Alternative splicing results in multiple transcript variants
Gene ID:	48
UniProt:	P21399
Pathways:	Transition Metal Ion Homeostasis

Application Details

Application Notes:	IHC 1:50-1:100
Restrictions:	For Research Use only

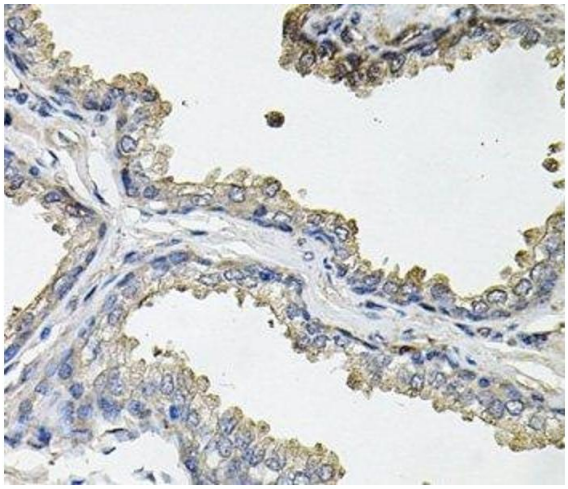
Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	PBS with 0.02 % sodium azide, 50 % glycerol, pH 7.3
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20°C. Avoid freeze / thaw cycles.



Immunohistochemistry (Paraffin-embedded Sections)

Image 1. Immunohistochemistry of paraffin-embedded Rat kidney using ACO1 Polyclonal Antibody at dilution of 1:100 (40x lens).



Immunohistochemistry (Paraffin-embedded Sections)

Image 2. Immunohistochemistry of paraffin-embedded Human prostate using ACO1 Polyclonal Antibody at dilution of 1:100 (40x lens).