

## IRP-1 (phospho Ser138) Polyclonal Antibody

Catalog No: #13784



Package Size: #13784-1 50ul #13784-2 100ul

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## Description

Product Name	IRP-1 (phospho Ser138) Polyclonal Antibody
Host Species	Rabbit
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Applications	IHC-p,IF/ICC,ELISA
Species Reactivity	Human,Mouse,Rat
Specificity	Phospho-IRP-1 (S138) Polyclonal Antibody detects endogenous levels of IRP-1 protein only when phosphorylated at S138.
Immunogen Description	The antiserum was produced against synthesized peptide derived from human IREB1 around the phosphorylation site of Ser138. AA range:106-155
Other Names	ACO1; IREB1; Cytoplasmic aconitate hydratase; Aconitase; Citrate hydro-lyase; Ferritin repressor protein; Iron regulatory protein 1; IRP1; Iron-responsive element-binding protein 1; IRE-BP 1
Accession No.	Swiss Prot:P21399GenelD:48
Uniprot	P21399
GenelD	48
Calculated MW	98kd
Concentration	1 mg/ml
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Storage	-20°C/1

## Application Details

WB 1:500-2000 ,Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.

## Background

aconitase 1(ACO1) Homo sapiens 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 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

Note: This product is for in vitro research use only