

Rabbit Anti-phospho-Aconitase 1 (Ser711) antibody

SL12958R

Product Name:	phospho-Aconitase 1 (Ser711)
Chinese Name:	磷酸化铁调节蛋白1抗体
Alias:	Aconitase 1 (phospho S711); p-Aconitase 1 (phospho S711); ACO 1; ACO1; ACOC_HUMAN; Aconitase 1 soluble; Aconitase; Aconitase1; Aconitate hydratase; ACONS; Citrate hydro lyase; Citrate hydro-lyase; Cytoplasmic aconitate hydratase; Ferritin repressor protein; IRE BP 1; IRE-BP 1; IREB 1; IREB1; IREBP; IREBP1; Iron regulatory protein 1; Iron responsive element binding protein 1; Iron-responsive element-binding protein 1; IRP 1; IRP1; OTTHUMP00000045233.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Cow, Horse, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	98kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human Aconitase 1 around the phosphorylation site of Ser711:YG(p-S)RR
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of

	antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
	Iron metabolism is essential for sustaining mammalian homeostasis. Iron uptake and distribution is a highly regulated process in mammalian cells that is monitored by two iron sensing proteins; iron regulatory protein-1 and -2 (IRP-1 and -2), also known as iron responsive element-binding protein-1 and -2 (IRE–BP-1 and -2) or aconitase 1 and 2. IRP-1 and IRP-2 are important soluble regulatory factors that mediate iron uptake and storage in mammalian cells. They are capable of either repressing translation or enhancing mRNA stability by associating with stem-loop motifs known as iron-responsive elements (IREs). IRPs respond to stress mediators, iron concentration and signaling factors, including nitrogen monoxide, cytokines and hydrogen peroxide.
	Function: Iron sensor. Binds a 4Fe-4S cluster and functions as aconitase when cellular iron levels are high. Functions as mRNA binding protein that regulates uptake, sequestration and utilization of iron when cellular iron levels are low. Binds to iron-responsive elements (IRES) in target mRNA species when iron levels are low. Binding of a 4Fe-4S cluster precludes RNA binding.
	Subunit: Interacts (when associated with the 4Fe-4S) with FBXL5. Interacts with frataxin(81-210).
Product Detail:	Subcellular Location: Cytoplasm.
	Similarity: Belongs to the aconitase/IPM isomerase family.
	SWISS: P21399
	Gene ID: 48
	Database links:
	Entrez Gene: 48Human
	Entrez Gene: 11428 Mouse
	Entrez Gene: 50655Rat
	Omim: 100880Human
	SwissProt: P21399Human
	SwissProt: P28271Mouse

SwissProt: Q63270Rat

Unigene: 567229Human

Unigene: 331547 Mouse

Unigene: 35934Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.