



## Rabbit Anti-Aconitase 1 antibody

SL9848R

<b>Product Name:</b>	Aconitase 1
<b>Chinese Name:</b>	铁调节蛋白1抗体
<b>Alias:</b>	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.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Pig,Cow,Rabbit,Sheep,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	98kDa
<b>Cellular localization:</b>	cytoplasmic
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human Aconitase 1/IRP-1:101-200/889
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	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.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	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).

**Subcellular Location:**

Cytoplasm.

**Similarity:**

Belongs to the aconitase/IPM isomerase family.

**SWISS:**

P21399

**Gene ID:**

48

**Database links:**

[Entrez Gene: 48](#)Human

[Entrez Gene: 11428](#)Mouse

[Entrez Gene: 50655](#)Rat

[Omim: 100880](#)Human

[SwissProt: P21399](#)Human

[SwissProt: P28271](#)Mouse

[SwissProt: Q63270](#)Rat

[Unigene: 567229](#)Human

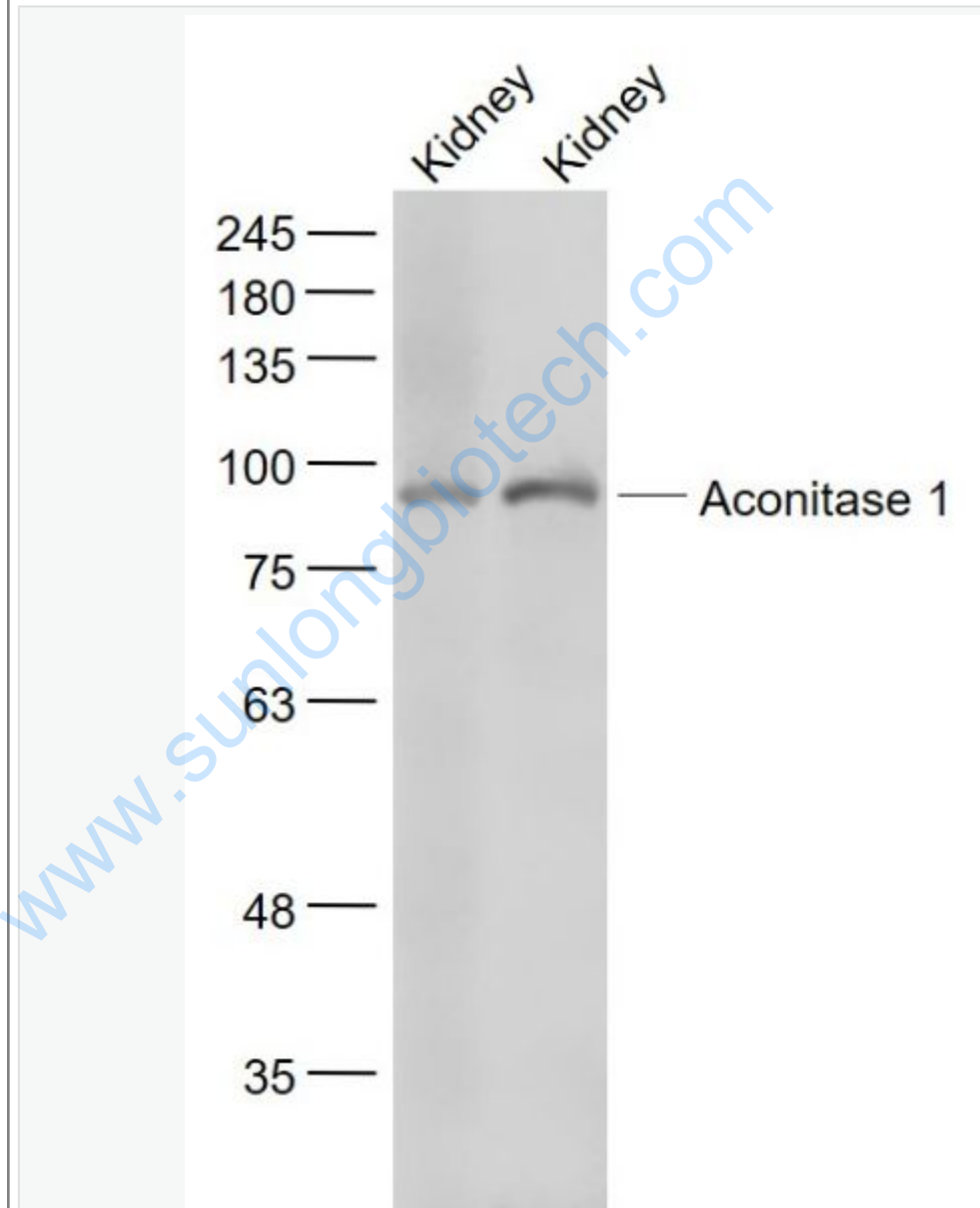
[Unigene: 331547](#)Mouse

[Unigene: 35934Rat](#)

**Important Note:**

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

Picture:



Sample:

Kidney (Mouse) Lysate at 40 ug

Kidney(Rat) Lysate at 40 ug

Primary: Anti- Aconitase 1 (SL9848R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 98 kD

Observed band size: 98 kD

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