

**Aconitase 1 Antibody**  
Rabbit mAb  
Catalog # AP90141**Specification****Aconitase 1 Antibody - Product Information**

Application	WB, FC, ICC
Primary Accession	<a href="#">P21399</a>
Reactivity	Rat
Clonality	Monoclonal
<b>Other Names</b>	
ACO 1; Aconitase; Citrate hydro lyase; IREB1; IRP 1; Iron responsive element binding protein 1;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	98399 Da

**Aconitase 1 Antibody - Additional Information**

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Aconitase 1
Description	Iron sensor. Binds a 4Fe-4S cluster and functions as aconitase when cellular iron levels are high.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

**Aconitase 1 Antibody - Protein Information****Name** ACO1**Synonyms** IREB1**Function**

Bifunctional iron sensor that switches between 2 activities depending on iron availability (PubMed: [1281544](http://www.uniprot.org/citations/1281544), PubMed: [1946430](http://www.uniprot.org/citations/1946430), PubMed: [8041788](http://www.uniprot.org/citations/8041788)). Iron deprivation, promotes its mRNA binding activity through which it regulates the expression of genes involved in iron uptake, sequestration and utilization (PubMed: [1281544](http://www.uniprot.org/citations/1281544), PubMed: [1946430](http://www.uniprot.org/citations/1946430), PubMed: [23891004](http://www.uniprot.org/citations/23891004), PubMed: [8041788](http://www.uniprot.org/citations/8041788)). Binds to iron-responsive elements (IRES) in the untranslated region of target mRNAs preventing for

instance the translation of ferritin and aminolevulinic acid synthase and stabilizing the transferrin receptor mRNA (PubMed:<a href="http://www.uniprot.org/citations/1281544" target="\_blank">1281544</a>, PubMed:<a href="http://www.uniprot.org/citations/1946430" target="\_blank">1946430</a>, PubMed:<a href="http://www.uniprot.org/citations/23891004" target="\_blank">23891004</a>, PubMed:<a href="http://www.uniprot.org/citations/8041788" target="\_blank">8041788</a>).

#### Cellular Location

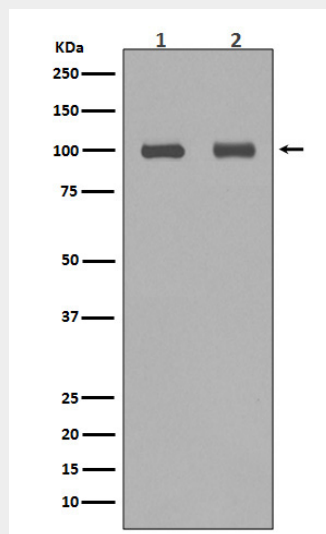
Cytoplasm, cytosol.

#### Aconitase 1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Aconitase 1 Antibody - Images



Western blot analysis of Aconitase 1 in (1) mouse kidney lysate; (2) HepG2 cell lysate.