

**IRP-1 (phospho Ser711) Polyclonal Antibody**  
Catalog # AP67686**Specification****IRP-1 (phospho Ser711) Polyclonal Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	<a href="#">P21399</a>
Reactivity	Human, Mouse, Rat, Monkey
Host	Rabbit
Clonality	Polyclonal

**IRP-1 (phospho Ser711) Polyclonal Antibody - Additional Information****Gene ID** 48**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

**Dilution**

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications.

IHC-P~~N/A

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**IRP-1 (phospho Ser711) Polyclonal 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

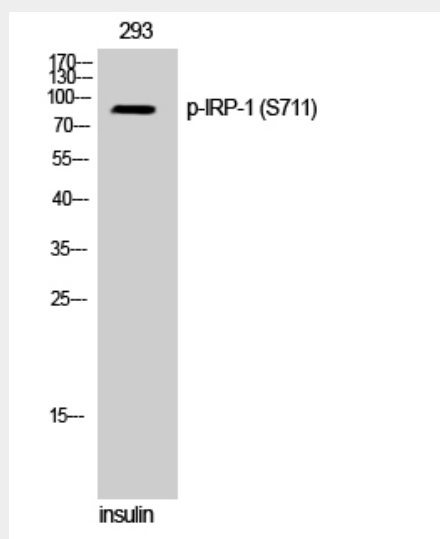
Cytoplasm, cytosol.

#### IRP-1 (phospho Ser711) Polyclonal 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](#)

#### IRP-1 (phospho Ser711) Polyclonal Antibody - Images



Western Blot analysis of 293 cells using Phospho-IRP-1 (S711) Polyclonal Antibody

#### IRP-1 (phospho Ser711) Polyclonal Antibody - Background

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.