

IRP-1 (phospho Ser711) Polyclonal Antibody Catalog # AP67686

Specification

IRP-1 (phospho Ser711) Polyclonal Antibody - Product Information

Application	WB
Primary Accession	P21399
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.

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:1281544, PubMed:1946430, PubMed:23891004, PubMed:8041788).

Cellular Location

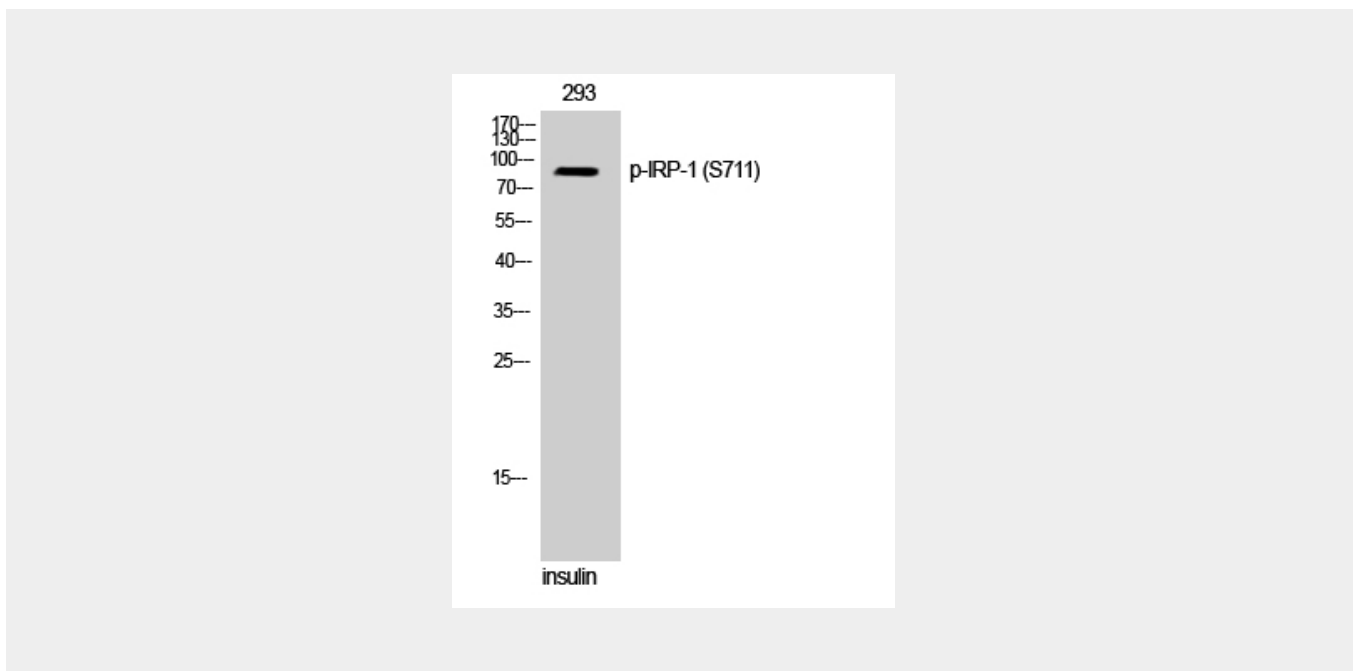
Cytoplasm, cytosol.

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



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.