

IRP-1 (phospho Ser711) Polyclonal Antibody

Catalog # AP67686

Product Information

Application WB, IHC-P **Primary Accession** P21399

Reactivity Human, Mouse, Rat, Monkey

HostRabbitClonalityPolyclonalCalculated MW98399

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

Protein Information

Name ACO1

Synonyms IREB1

Function Bifunctional iron sensor that switches between 2 activities depending on

iron availability (PubMed:1281544, PubMed:1946430, PubMed: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, PubMed:1946430, PubMed:23891004, PubMed: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

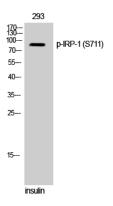
(PubMed: 1281544, PubMed: 1946430, PubMed: 23891004, PubMed: 8041788).

Cellular Location Cytoplasm, cytosol.

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.

Images



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

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