

Aconitase 1 Antibody

Rabbit mAb Catalog # AP90141

Product Information

Application WB, IF, ICC **Primary Accession** P21399

Reactivity Rat, Human, Mouse

Clonality Monoclonal

Other Names ACO 1; Aconitase; Citrate hydro lyase; IREB1; IRP 1; Iron responsive element

binding protein 1;

IsotypeRabbit IgGHostRabbitCalculated MW98399

Additional Information

Dilution WB 1:500~1:2000 ICC/IF 1:50~1:200

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.

Protein Information

Name ACO1

Synonyms IREB1

Function Bifunctional iron sensor that switches between 2 activities depending on

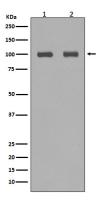
iron availability (PubMed:<u>1281544</u>, PubMed:<u>1946430</u>, PubMed:<u>8041788</u>). Iron deprivation, promotes its mRNA binding activity through which it regulates the expression of genes involved in iron uptake, sequestration and utilization (PubMed:<u>1281544</u>, PubMed:<u>1946430</u>, PubMed:<u>23891004</u>, PubMed:<u>8041788</u>). 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:<u>1281544</u>, PubMed:<u>1946430</u>, PubMed:<u>23891004</u>, PubMed:<u>8041788</u>).

Cellular Location Cytoplasm, cytosol.

Images



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

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