10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	98399

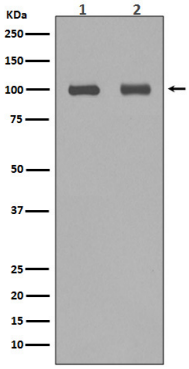
Additional Information

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: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.

Images



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.