

**DATASHEET**

**Aconitase 1 Rabbit Monoclonal Antibody(C1714)**

CAT. NO. AMA01326

**KEY FEATURES**

Target	Aconitase 1	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Monoclonal
Applications	WB, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in PBS, pH 7.4, containing 50% glycerol, 0.2% BSA and 0.01% sodium azide.	Storage	at-20°C

**BACKGROUND**

Bifunctional iron sensor that switches between 2 activities depending on iron availability . Iron deprivation, promotes its mRNA binding activity through which it regulates the expression of genes involved in iron uptake, sequestration and utilization . 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 .

**APPLICATION**

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IF/ICC	1:50 - 1:200

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

**PRODUCT OVERVIEW**

Description	Recombinant rabbit monoclonal antibody to Aconitase 1
Specificity	Recognizes endogenous levels of Aconitase 1 protein
Antibody Type	Primary antibody, Recombinant
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within human Aconitase 1 protein. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 98 kD; Observed: 98 kD
Form/Buffer	Liquid in PBS, pH 7.4, containing 50% glycerol, 0.2% BSA and 0.01% sodium azide.
Alternative Names	IREB1; Cytoplasmic aconitase hydratase; Aconitase; Citrate hydro-lyase; Ferritin repressor protein; Iron regulatory protein 1; IRP1; Iron-responsive element-binding protein 1; IRE-BP 1
Gene Symbol	ACO1
Entrez Gene	48(Human); 11428(Mouse); 50655(Rat)
SwissProt	P21399(Human); P28271(Mouse); Q63270(Rat)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

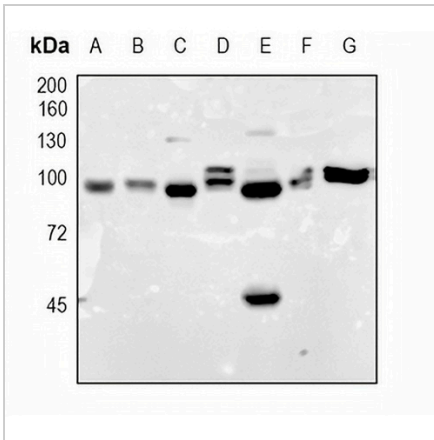
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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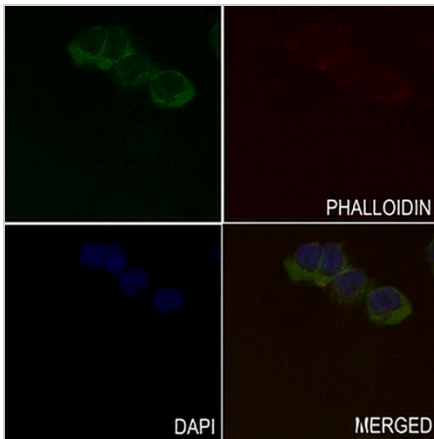
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**DATA**



Western blot analysis of Aconitase 1 expression in A549 (A), U87 (B), MCF7 (C), mouse liver (D), mouse testis (E), rat liver (F), rat kidney whole cell lysates. (Predicted band size: 98 kD; Observed band size: 98 kD)



Immunofluorescent analysis of Aconitase 1 staining in HEK293T cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with an AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.