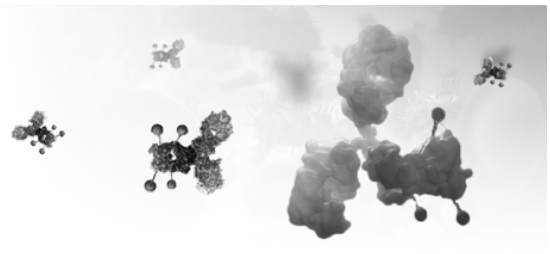

Magic™ Anti-Aconitase 1 (C-terminal)(phospho S711) polyclonal antibody (CABT-B364)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	Recognizes endogenous levels of Aconitase 1 (pS711) protein.
Target	Aconitase 1
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Aconitase 1. The exact sequence is proprietary.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human, Mouse, Chicken, Rat, Zebrafish, Rabbit, Bovine
Purification	Affinity chromatography
Conjugate	Unconjugated
Applications	IHC, IHC-P, WB
Format	Liquid
Size	100 µl
Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C for one year. Avoid freeze/thaw cycles.

BACKGROUND

Introduction	The protein encoded by this gene is a bifunctional, cytosolic protein that functions as an essential enzyme in the TCA cycle and interacts with mRNA to control the levels of iron inside cells. When cellular iron levels are high, this protein binds to a 4Fe-4S cluster and functions as an aconitase. Aconitases are iron-sulfur proteins that function to catalyze the conversion of citrate to isocitrate. When cellular iron levels are low, the protein binds to iron-responsive elements (IREs), which are stem-loop structures found in the 5 UTR of ferritin mRNA, and in the 3 UTR of transferrin

	receptor mRNA. When the protein binds to IRE, it results in repression of translation of ferritin mRNA, and inhibition of degradation of the otherwise rapidly degraded transferrin receptor mRNA. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. Alternative splicing results in multiple transcript variants.
Keywords	ACO1;aconitase 1, soluble;IRP1;ACONS;HEL60;IREB1;IREBP;IREBP1;cytoplasmic aconitate hydratase;IRE-BP 1

GENE INFORMATION

Synonyms	ACO1; aconitase 1, soluble; IREB1; IRP1; ACONS; HEL60; IREBP; IREBP1