

CAB6008

Product Information

Product SKU:	CAB6008	Gene ID:	48	Size:	20uL, 100uL
Clone No:	-	Host Species:	Rabbit	Reactivity:	Mouse,Rat

Additional Information

Observed MW:	100kDa	Conjugate:	Unconjugated
Calculated MW:	98kDa	Isotype:	IgG

Immunogen Information

Background:	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
Recommended Dilution:	WB,1:500 - 1:1000
Synonyms:	IRP1; ACONS; HEL60; IREB1; IREBP; IREBP1; Aconitase 1 (ACO1)
Purification Method:	Affinity purification
Immunogen:	A synthetic peptide corresponding to a sequence within amino acids 100-200 of human Aconitase 1 (ACO1) (P21399).
Storage:	Store at -20°C. Avoid freeze / thaw cycles.Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.