



IRP-1 (phospho Ser711) Rabbit Polyclonal Antibody

Catalog# BD-PP0754

Product information

产品货号	BD-PP0754
别名	ACO1; IREB1; Cytoplasmic aconitate hydratase; Aconitase; Citrate hydro-lyase; Ferritin repressor protein; Iron regulatory protein 1; IRP1; Iron-responsive element-binding protein 1; IRE-BP 1
产品名称	IRP-1 (phospho Ser711) Rabbit Polyclonal Antibody
类别	抗原抗体
基因名称	ACO1
蛋白名称	Cytoplasmic aconitate hydratase
推荐应用	WB,IHC-P,IF-P,IF-F,IF-ICC,ELISA
反应种属	Human,Mouse,Rat,Monkey
浓度	1 mg/ml
存储缓冲液	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Human Gene ID	48
Human Gene Link	http://www.ncbi.nlm.nih.gov/sites/entrez?db=gene&term=48
Human Swissprot Link	http://www.uniprot.org/uniprotkb/P21399/entry
Mouse Gene ID	11428
Mouse Gene Link	http://www.ncbi.nlm.nih.gov/sites/entrez?db=gene&term=11428
Mouse Swissprot No.	P28271
Mouse Swissprot Link	http://www.uniprot.org/uniprot/P28271
Rat Gene ID	50655
Rat Gene Link	http://www.ncbi.nlm.nih.gov/sites/entrez?db=gene&term=50655
Rat Swissprot No.	Q63270
Rat Swissprot Link	http://www.uniprot.org/uniprot/Q63270

免疫原	The antiserum was produced against synthesized peptide derived from human IREB1 around the phosphorylation site of Ser711. AA range:681-730
特异性	Phospho-IRP-1 (S711) Polyclonal Antibody detects endogenous levels of IRP-1 protein only when phosphorylated at S711.
稀释度	WB 1:500-1:2000, IHC-P 1:100-1:300, ELISA 1:10000, IF-P/IF-F/IF-ICC 1:50-200
预测分子量	85kDa
运输及保存条件	-20°C/1 year
宿主	Rabbit
同种型	Rabbit,IgG
背景介绍	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
组织表达	Brain,Brain astrocytoma,Uterus,
细胞定位	Cytoplasm, cytosol .
信号通路	Citrate cycle (TCA cycle);Glyoxylate and dicarboxylate metabolism;
功能	catalytic activity:Citrate = isocitrate.,cofactor:Binds 1 4Fe-4S cluster per subunit.,function:Binds to iron-responsive elements (IRES), which are stem-loop structures found in the 5'-UTR of ferritin, and delta aminolevulinic acid synthase mRNAs, and in the 3'-UTR of transferrin receptor mRNA. Binding to the IRE element in ferritin results in the repression of its mRNA translation. Binding of the protein to the transferrin receptor mRNA inhibits the degradation of this otherwise rapidly degraded mRNA. This protein also expresses aconitase activity.,online information:Aconitase entry,similarity:Belongs to the aconitase/IPM isomerase family.,
纯化	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clonality	Polyclonal