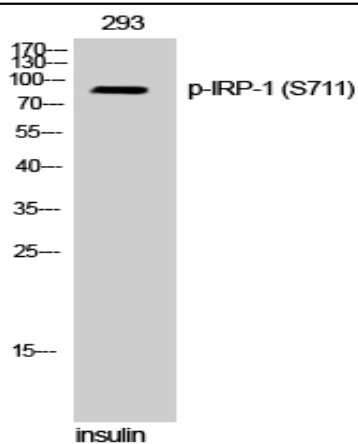


IRP-1 (phospho Ser711) Polyclonal Antibody

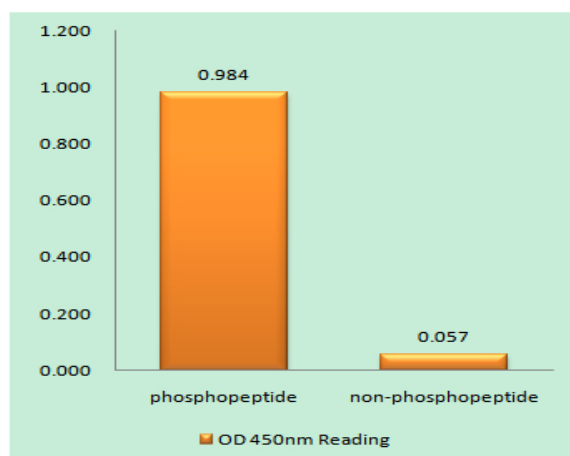
Catalog No :	YP0754
Reactivity :	Human;Mouse;Rat;Monkey
Applications :	WB;IHC;IF;ELISA
Target :	IRP-1
Fields :	>>Citrate cycle (TCA cycle);>>Glyoxylate and dicarboxylate metabolism;>>Metabolic pathways;>>Carbon metabolism;>>2-Oxocarboxylic acid metabolism;>>Biosynthesis of amino acids
Gene Name :	ACO1
Protein Name :	Cytoplasmic aconitate hydratase
Human Gene Id :	48
Human Swiss Prot No :	P21399
Mouse Gene Id :	11428
Mouse Swiss Prot No :	P28271
Rat Gene Id :	50655
Rat Swiss Prot No :	Q63270
Immunogen :	The antiserum was produced against synthesized peptide derived from human IREB1 around the phosphorylation site of Ser711. AA range:681-730
Specificity :	Phospho-IRP-1 (S711) Polyclonal Antibody detects endogenous levels of IRP-1 protein only when phosphorylated at S711.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG

Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	85kD
Cell Pathway :	Citrate cycle (TCA cycle);Glyoxylate and dicarboxylate metabolism;
Background :	<p>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</p>
Function :	<p>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.,</p>
Subcellular Location :	Cytoplasm, cytosol .
Expression :	Brain,Brain astrocytoma,Uterus,

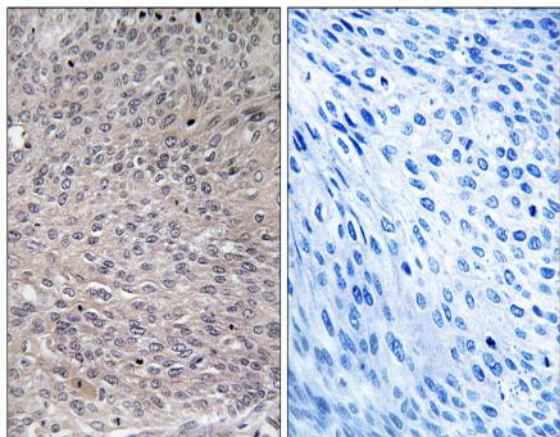
Products Images



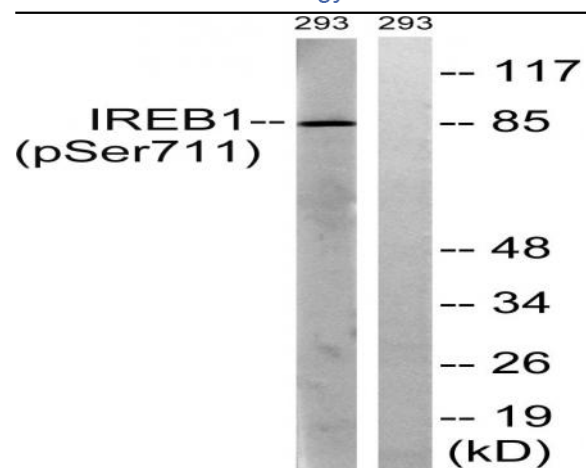
Western Blot analysis of 293 cells using Phospho-IRP-1 (S711) Polyclonal Antibody



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using IREB1 (Phospho-Ser711) Antibody



Immunohistochemistry analysis of paraffin-embedded human thyroid gland, using IREB1 (Phospho-Ser711) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from 293 cells treated with insulin 0.01U/ml 30', using IREB1 (Phospho-Ser711) Antibody. The lane on the right is blocked with the phospho peptide.