



IRE1 α mouse mAb

Catalog No	YP-mAb-03498
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	ERN1
Protein Name	Serine/threonine-protein kinase/endoribonuclease IRE1
Immunogen	Purified recombinant fragment of human IRE1 α (aa282-433) expressed in E. Coli.
Specificity	IRE1 α Antibody detects endogenous levels of IRE1 α protein.
Formulation	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	$\geq 90\%$
Storage Stability	-20°C/1 year
Synonyms	ERN1; IRE1; Serine/threonine-protein kinase/endoribonuclease IRE1; Endoplasmic reticulum-to-nucleus signaling 1; Inositol-requiring protein 1; hIRE1p; Ire1-alpha; IRE1a
Observed Band	105KD
Cell Pathway	Endoplasmic reticulum membrane ; Single-pass type I membrane protein .
Tissue Specificity	Ubiquitously expressed. High levels observed in pancreatic tissue.
Function	catalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Magnesium.,enzyme regulation:The kinase domain is activated by trans-autophosphorylation. Kinase activity is required for activation of the endoribonuclease domain.,function:Senses unfolded proteins in the lumen of the endoplasmic reticulum via its N-terminal domain which leads to enzyme auto-activation. The active endoribonuclease domain splices XBP1 mRNA to generate a new C-terminus, converting it into a potent unfolded-protein response transcriptional activator and triggering growth arrest and apoptosis.,PTM:Autophosphorylated.,similarity:Belongs to the protein kinase superfamily. Ser/Thr protein kinase family.,similarity:Contains 1 KEN domain.,similarity:Contains 1 protein kinase domain.,subunit:Homodimer; disulfide-linked. Dimer formation is driven by hydrophobic interactions within the



N-terminal luminal domains

Background

The protein encoded by this gene is the ER to nucleus signalling 1 protein, a human homologue of the yeast Ire1 gene product. This protein possesses intrinsic kinase activity and an endoribonuclease activity and it is important in altering gene expression as a response to endoplasmic reticulum-based stress signals. [provided by RefSeq, Jul 2008],

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images