



# IRE1 $\alpha$ mouse mAb

<b>Catalog No</b>	BYmab-03498
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB
<b>Gene Name</b>	ERN1
<b>Protein Name</b>	Serine/threonine-protein kinase/endoribonuclease IRE1
<b>Immunogen</b>	Purified recombinant fragment of human IRE1 $\alpha$ (aa282-433) expressed in E. Coli.
<b>Specificity</b>	IRE1 $\alpha$ Antibody detects endogenous levels of IRE1 $\alpha$ protein.
<b>Formulation</b>	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
<b>Source</b>	Monoclonal, Mouse,IgG
<b>Purification</b>	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB 1:500-2000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	$\geq 90\%$
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	ERN1; IRE1; Serine/threonine-protein kinase/endoribonuclease IRE1; Endoplasmic reticulum-to-nucleus signaling 1; Inositol-requiring protein 1; hIRE1p; Ire1-alpha; IRE1a
<b>Observed Band</b>	105KD
<b>Cell Pathway</b>	Endoplasmic reticulum membrane ; Single-pass type I membrane protein .
<b>Tissue Specificity</b>	Ubiquitously expressed. High levels observed in pancreatic tissue.
<b>Function</b>	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

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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