



IRE1α Monoclonal Antibody

Catalog No	YP-Ab-03409
Isotype	IgG
Reactivity	Human
Applications	WB;IHC;IF;ELISA
Gene Name	ERN1
Protein Name	Serine/threonine-protein kinase/endoribonuclease IRE1
Immunogen	Purified recombinant fragment of human IRE1α (aa282-433) expressed in E. Coli.
Specificity	IRE1α Monoclonal Antibody detects endogenous levels of IRE1α protein.
Formulation	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	WB: 1/500 - 1/2000. IHC: 1/200 - 1/1000. ELISA: 1/10000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥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	
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],

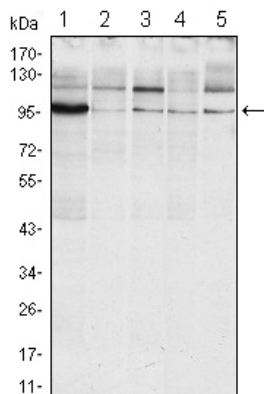
matters needing attention

Avoid repeated freezing and thawing!

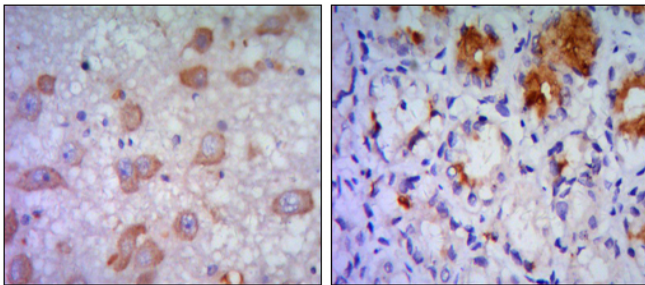
Usage suggestions

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

Products Images



Western Blot analysis using IRE1 α Monoclonal Antibody against Raji (1), A431 (2), Jurkat (3), HeLa(4) and HEK293 (5) cell lysate.



A

B

Immunohistochemistry analysis of paraffin-embedded human brain tissue (A) and stomach tissue (B), showing cytoplasmic localization with DAB staining using IRE1 α Monoclonal Antibody.