



IRE1 α Rabbit mAb

Catalog No	YP-rAb-17735
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,IP,ELISA
Gene Name	ERN1 IRE1
Protein Name	Serine/threonine-protein kinase/endoribonuclease IRE1
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:100-1:500; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	$\geq 90\%$
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
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	110kD
Calculated Molecular Weight	110kD
Cell Pathway	Endoplasmic reticulum membrane
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 and stabilized by disulfide bridges. Also binds HSPA5, a negative regulator of the unfolded protein response. This interaction may disrupt homodimerization and prevent activation of ERN1.,tissue specificity:Ubiquitously expressed. High levels observed in pancreatic tissue.,

Background

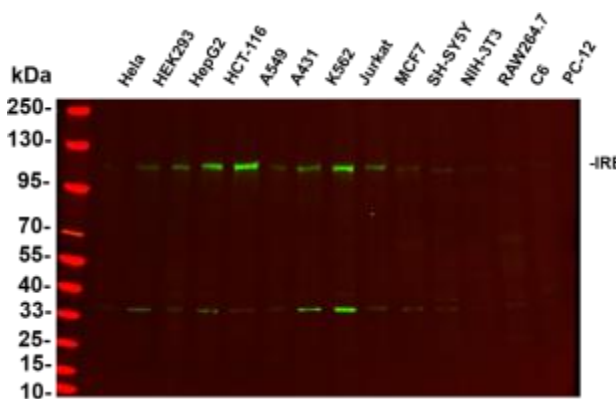
The protein encoded by this gene is the ER to nucleus signalling 1 protein, a human homologue of the yeast Ire1 gene product. This protein possesses intrinsic kinase activity and an endoribonuclease activity and it is important in altering gene expression as a response to endoplasmic reticulum-based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

matters needing attention

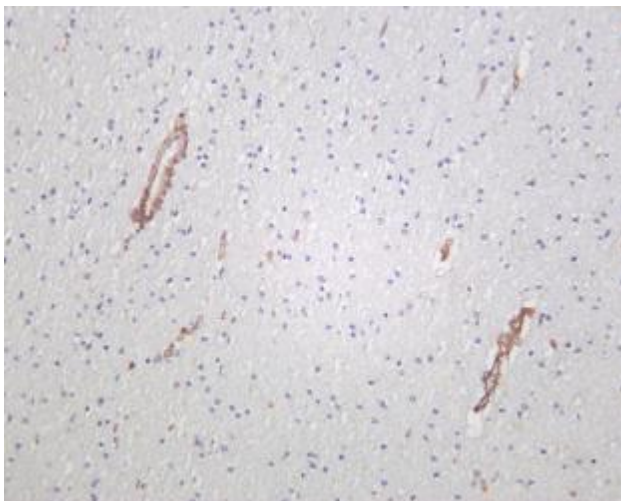
Avoid repeated freezing and thawing!

Usage suggestions

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

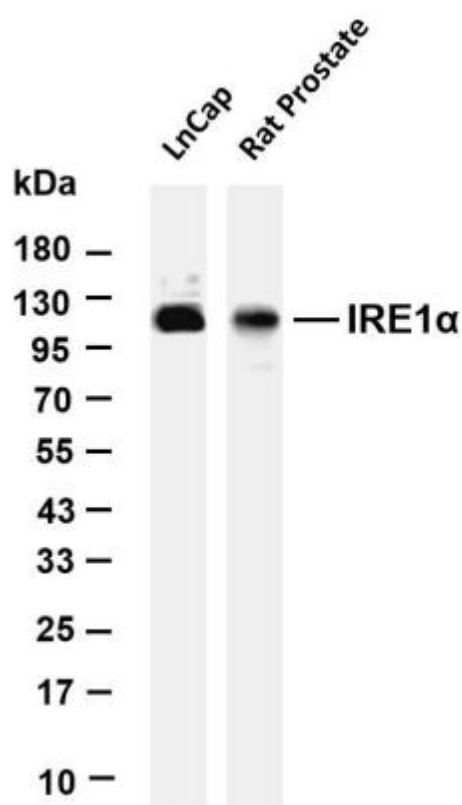


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the primary antibody was used at 4 °C, over night with a 1:5000 dilution . The Dylight 800-conjugated Goat anti-Rabbit antibody



Human brain was stained with anti-IRE1 α rabbit antibody





Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-IRE1 α antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: LnCap Lane 2: Rat Prostate
Predicted band size: 110kDa Observed band size: 110kDa

