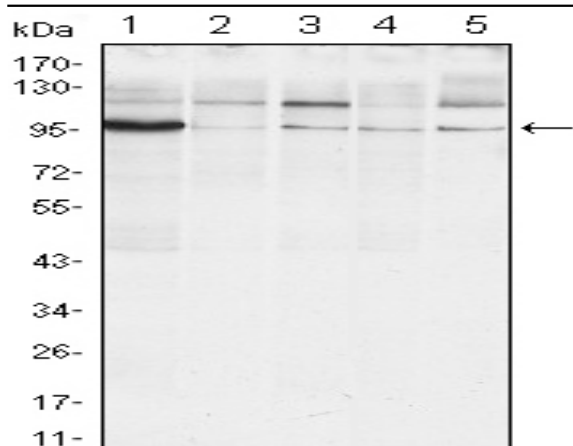


IRE1α Monoclonal Antibody

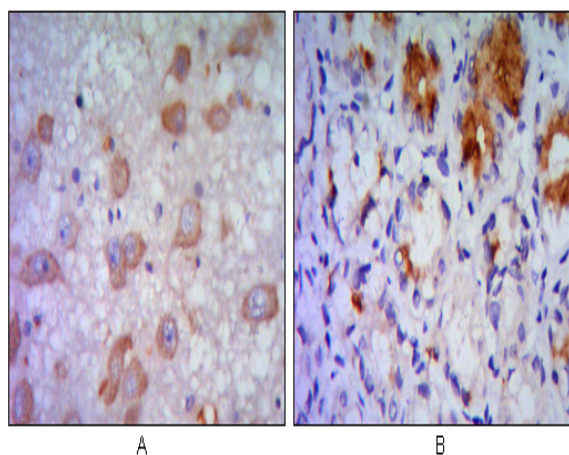
Catalog No :	YM0381
Reactivity :	Human
Applications :	WB;IHC;IF;ELISA
Target :	IRE1α
Fields :	>>Autophagy - animal;>>Protein processing in endoplasmic reticulum;>>Apoptosis;>>Non-alcoholic fatty liver disease;>>Alzheimer disease;>>Parkinson disease;>>Amyotrophic lateral sclerosis;>>Huntington disease;>>Spinocerebellar ataxia;>>Pathways of neurodegeneration - multiple diseases;>>Lipid and atherosclerosis
Gene Name :	ERN1
Protein Name :	Serine/threonine-protein kinase/endoribonuclease IRE1
Human Gene Id :	2081
Human Swiss Prot No :	O75460
Mouse Swiss Prot No :	Q9EQY0
Immunogen :	Purified recombinant fragment of human IRE1α (aa282-433) expressed in E. Coli.
Specificity :	IRE1α Monoclonal Antibody detects endogenous levels of IRE1α protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:500 - 1:2000. IHC 1:200 - 1:1000. ELISA: 1:10000.. IF 1:50-200
Purification :	Affinity purification
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight :	110kD
Cell Pathway :	Alzheimer's disease;
P References :	<ol style="list-style-type: none"> 1. Biochem Biophys Res Commun. 2004 Apr 30;317(2):390-6. 2. Mol Cell Biol. 2005 Sep;25(17):7522-33. 3. Science. 2007 Nov 9;318(5852):944-9.
Background :	<p>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],</p>
Function :	<p>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</p>
Subcellular Location :	Endoplasmic reticulum membrane ; Single-pass type I membrane protein .
Expression :	Ubiquitously expressed. High levels observed in pancreatic tissue.
Tag :	orthogonal
Sort :	1039
No4 :	1

Products Images



Western Blot analysis using IRE1α Monoclonal Antibody against Raji (1), A431 (2), Jurkat (3), HeLa(4) and HEK293 (5) cell lysate.



Immunohistochemistry analysis of paraffin-embedded human brain tissue (A) and stomach tissue (B), showing cytoplasmic localization with DAB staining using IRE1α Monoclonal Antibody.