

Rabbit Anti-phospho-IRE1 (Ser724) antibody

SL16698R

Product Name:	phospho-IRE1 (Ser724)
Chinese Name:	磷酸化IRE1蛋白抗体
Alias:	IRE1 (phospho S724); p-IRE1 (phospho S724); Endoplasmic reticulum (ER) to nucleus signalling 1; Endoplasmic reticulum to nucleus signaling 1; Endoplasmic reticulum to nucleus signaling 1; ER to nucleus signaling 1; ERN 1; ERN1; ERN1_HUMAN; hIRE 1p; hIRE1p; Inositol requiring 1; Inositol requiring 1, S. cerevisiae, homolog of; Inositol requiring enzyme 1, S. cerevisiae, homolog of; Inositol requiring enzyme 1; Inositol-requiring protein 1; IRE 1; IRE 1a; IRE 1P; Ire1 alpha; Ire1-alpha; IRE1a; Ire1alpha; IRE1P; MGC163277; MGC163279; Protein kinase/endoribonuclease; RGD1559716; Serine/threonine protein kinase/endoribonuclease IRE1.
Organism Species:	Rabbit
Clonality:	Polyclonal S
React Species:	Human, Mouse, Rat, Pig, Cow, Horse, Sheep,
Applications:	WB=1:500-2000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100- 500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	107kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human IRE1 around the phosphorylation site of Ser724:RH(p-S)FS
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of

	antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
	The accumulation of unfolded proteins within the endoplasmic recticulum (ER) of yeast
	and mammalian cells activates the unfolded protein response (UPR) pathway and leads
	to the transcription of ER-specific genes involved in protein folding. The activation of
	the UPR requires the ER transmembrane kinase IRE1p (for inositol-requiring and ER-to-
	nucleus signaling protein). IRE1 α and IRE1 β are two mammalian homologs of the yeast
	IRE1p. These related proteins localize to the ER lumen and contain both a short
	transmembrane domain that spans the ER membrane and a cytosolic Ser/Thr kinase
	domain. IRE1 activation involves the oligomerization and trans-phosphorylation of the
	cytosolic portion of the proteins, which then potentiates its intrinsic kinase activity and,
	in turn, stimulates transcription of UPR-targeted genes. In response to stress, sensors for
	the ER mammalian cells activate IRE1 α and IRE1 β , which then results in the
	phosphorylation of JNK (Jun N-Terminal Kinase) and the activation of the centular MAP
	kinase pathway.
	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
	Subcellular Location:
	Endoplasmic reticulum membrane.
Product Detail:	
	Tissue Specificity:
	Ubiquitously expressed. High levels observed in pancreatic tissue.
	Post-translational modifications:
	Autophosphorylated.
	Similarity: Polongs to the protein kingse superfamily
	Ser/Thr protein kinase family
	Contains 1 KEN domain
	Contains 1 protein kinase domain
	contains i protein kinase domain.
	SWISS:
	O75460
	Gene ID:
	2081
	Datahasa links:
	Databast IIIKS.
	Entrez Gene: 10595 Human

Entrez Gene: 2081 Human Entrez Gene: 78943 Mouse Entrez Gene: 498013 Rat Omim: 604033 Human SwissProt: O75460 Human SwissProt: Q76MJ5 Human SwissProt: Q9EQY0 Mouse SwissProt: Q9Z2E3 Mouse Unigene: 133982 Human Unigene: 592041 Human Unigene: 700027 Human Unigene: 20452 Mouse Unigene: 340943 Mouse Unigene: 226435 Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.





Paraformaldehyde-fixed, paraffin embedded (mouse brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (IRE1 (Ser724)) Polyclonal Antibody, Unconjugated (SL16698R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat pancreas tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (IRE1 (Ser724)) Polyclonal Antibody, Unconjugated (SL16698R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (IRE1 (Ser724)) Polyclonal Antibody, Unconjugated (SL16698R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.