SunLong Biotech Co.,LTD
Tel: 0086-571- 56623320 Fax:0086-571- 56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-IRE1 antibody

SL8680R

Product Name:	IRE1
Chinese Name:	内质网核Signal transduction蛋白a1抗体
Alias:	IRE1a; Endoplasmic reticulum (ER) to nucleus signalling 1; Endoplasmic reticulum to nucleus signaling 1; Endoplasmic reticulum-to-nucleus signaling 1; Endoribonuclease; ER to nucleus signaling 1; ERN 1; ERN1; ERN1_HUMAN; hIRE 1p; hIRE1p; Inositol requiring 1; Inositol requiring protein 1; Inositol-requiring protein 1; IRE-1; IRE 1; IRE 1a; IRE 1P; Ire1 alpha; Ire1-alpha; Ire1alpha; IRE1P; MGC163277; Protein kinase/endoribonuclease; Serine/threonine protein kinase/endoribonuclease IRE1.
文献引用 PubMed :	**Specific References(5)**|SL8680R has been referenced in 5 publications. **[IF=3.12]**Jiang, H-Q., et al. "Guanabenz Delays the Onset of Disease Symptoms, Extends Lifespan, Improves Motor Performance and Attenuates Motor Neuron Loss in the SOD1 G93A Mouse Model of Amyotrophic Lateral Sclerosis." Neuroscience (2014).**WB;Mouse**. PubMed:24699224 **[IF=4.19]**Xu, Demei, et al. "Polychlorinated biphenyl quinone induces endoplasmic reticulum stress, unfolded protein response and calcium release." Chemical Research in Toxicology (2015).**WB;Human**. PubMed:25950987 **[IF=4.86]**Jiang, Mingfang, et al. "Down-regulation of miR-384-5p Attenuates Rotenone-induced Neurotoxicity in Dopaminergic SH-SY5Y Cells Through Inhibiting Endoplasmic Reticulum Stress." American Journal of Physiology-Cell Physiology (2016): ajpcell-00226.**WB;Human**. PubMed:26864693

	[IF=3.29]Yan, Jiting, et al. "Catalpol prevents alteration of cholesterol homeostasis in non-alcoholic fatty liver disease via attenuating endoplasmic reticulum stress and NOX4 over-expression." RSC Advances 7.2 (2017): 1161-1176.**WB;Human**. PubMed:0 [IF=3.28]Chen, Li, et al. "Influence of resveratrol on endoplasmic reticulum stress and expression of adipokines in adipose tissues/adipocytes induced by high-calorie diet or palmitic acid." Endocrine (2016): 1-13.**WB;Mouse**. PubMed:28070709
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1ug/testICC=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:	105kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human IRE1a:252-260/977
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
Product Detail:	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] **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. **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. Interacts with TAOK3 and TRAF2.

Subcellular Location:
Endoplasmic reticulum membrane.

Tissue Specificity:
Ubiquitously expressed. High levels observed in pancreatic tissue.

Post-translational modifications:
Autophosphorylated.

Similarity:
Belongs to the protein kinase superfamily. Ser/Thr protein kinase family.
Contains 1 KEN domain.
Contains 1 protein kinase domain.

SWISS:
O75460

Gene ID:
2081

Database links:

Entrez Gene: 2081 Human

Entrez Gene: 78943 Mouse

Entrez Gene: 498013 Rat

Omim: 604033 Human

SwissProt: O75460 Human

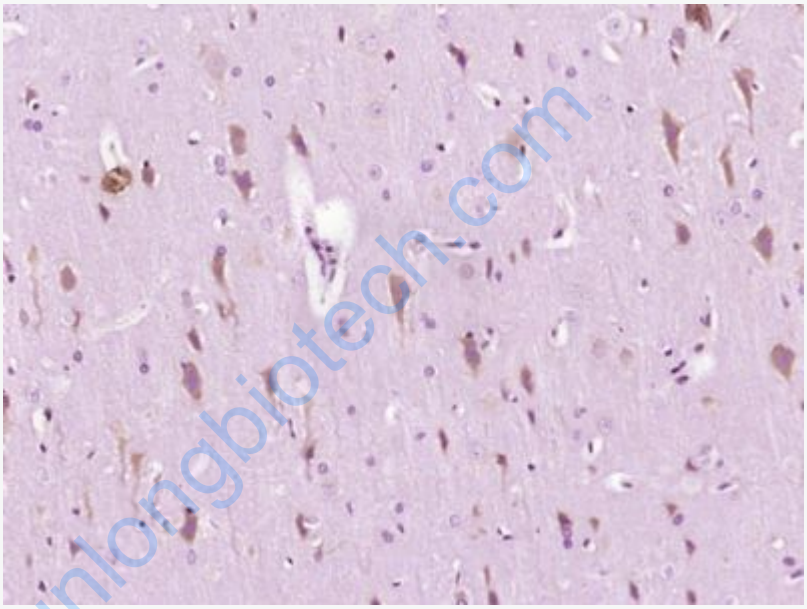
SwissProt: Q9EQY0 Mouse

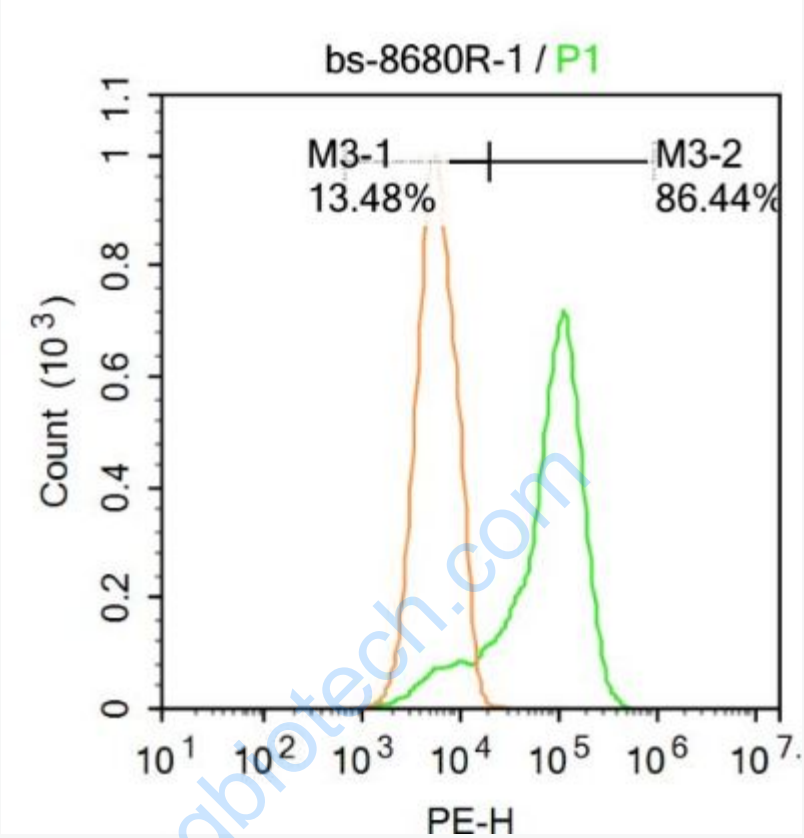
Unigene: 133982 Human

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.
Picture:	 Paraformaldehyde-fixed, paraffin embedded (Rat brain); 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) Polyclonal Antibody, Unconjugated (SL8680R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Blank control: Raji.

Primary Antibody (green line): Rabbit Anti-IRE1 antibody (SL8680R)

Dilution: 1μg /10^6 cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-PE

Dilution: 1μg /test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with PBST for 20 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at at room temperature .Cells stained with Primary Antibody for 30 min at room

	temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.