

Rabbit Anti-phospho-IRE1a (Ser 726)/AP Conjugated antibody

SL4308R-AP

Product Name	Anti-phospho-IRE1a (Ser 726)/AP
Chinese Name	碱性磷酸酶 (AP) 标记的磷酸化内质网核 Signal transduction 蛋白 a1 抗体
Alias	p-IRE1a (phospho-Ser 726); IRE1 (phospho S726) ; IRE1 alpha (p-Ser726); 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 1a; IRE 1P; Ire1 alpha; Ire1-alpha; IRE1a; Ire1alpha; IRE1P; MGC163277; Protein kinase/endoribonuclease; Serine/threonine protein kinase/endoribonuclease IRE1.ERN1_HUMAN
Product Type	Phosphorylated anti
Research Area	Cell biology Signal transduction Kinases and Phosphatases
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human,Rat(predicted:Mouse,Dog,Pig,Cow,Horse,Rabbit)
Applications	IHC-P=1:100-500, IHC-F=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	107kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthesised phosphopeptide derived from human IRE1a around the phosphorylation site of Ser 726
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% 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 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

background:

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.

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.

Product Detail

Subcellular Location:

Endoplasmic reticulum membrane; Single-pass type I membrane protein.

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.

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.