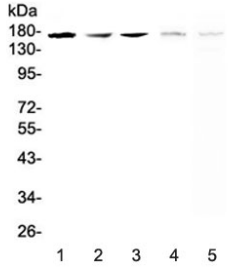
IRE1 Antibody (RQ4356)

Catalog No.	Formulation	Size
RQ4356	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	O75460
Localization	Cytoplasm (Endoplasmic reticulum membrane)
Applications	Western blot: 0.5-1ug/ml Direct ELISA: 0.1-0.5ug/ml
Limitations	This IRE1 antibody is available for research use only.



Western blot testing of 1) human A549, 2((h) SK-OV-3, 3) (h) PANC-1, 4) rat brain and 5) mouse brain lysate with IRE1 antibody at 0.5ug/ml. Predicted molecular weight ~110 kDa, observed here at ~170 kDa.

Description

The serine/threonine-protein kinase/endoribonuclease inositol-requiring enzyme 1 (IRE1 or IRE1a) is an enzyme that in humans is encoded by the ERN1 gene. This gene encodes the transmembrane protein kinase inositol-requiring enzyme 1. The encoded protein contains two functional catalytic domains, a serine/threonine-protein kinase domain and an endoribonuclease domain. This protein functions as a sensor of unfolded proteins in the endoplasmic reticulum (ER) and

triggers an intracellular signaling pathway termed the unfolded protein response (UPR). The UPR is an ER stress response that is conserved from yeast to mammals and activates genes involved in degrading misfolded proteins, regulating protein synthesis and activating molecular chaperones. This protein specifically mediates the splicing and activation of the stress response transcription factor X-box binding protein 1.

Application Notes

Optimal dilution of the IRE1 antibody should be determined by the researcher.

Immunogen

A recombinant human protein corresponding to amino acids R158-L280 was used as the immunogen for the IRE1 antibody.

Storage

After reconstitution, the IRE1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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