IRE1p Antibody

Subcategory: Rabbit Polyclonal Antibody
Cat. No.: 253582
Unit: 0.1 mg

Description:
Accumulation of malfolded proteins in the endoplasmic reticulum (ER) activates the unfolded protein response (UPR) and the upregulation of the ER molecular chaperones GRP78 and GRP 94. These proteins are normally bound to ER transmembrane proteins such as IRE1p and ATF6 but ER stress causes their dissociation. This allows IRE1p, a serine-threonine protein kinase to transduce the unfolded protein signal from the ER to the nucleus. IRE1p also has an endoribonuclease activity that is required to splice X-box binding protein (XBP1) mRNA converting it to a potent UPR transcriptional activation. Depletion of IRE1p through the expression of a dominant negative form of IRE1p has no effect on transfected cells, but cell death via apoptosis occurs under stress conditions that cause unfolded proteins to accumulate in the ER. Two alternatively spliced transcript variants encoding different isoforms have been found for this gene.

Isotype: Rabbit Ig
Applications: E, WB
Species Reactivity: H
Format: Each vial contains 0.1 ml IgG in PBS pH 7.4 with 0.02% sodium azide. Antibody was purified by immunogen affinity chromatography.
Alternate Names: IRE1p ; Endoplasmic reticulum-to-nucleus signaling 1; ERN1
Accession No.: O75460

Antigen: KLH-conjugated synthetic peptide encompassing a sequence within human IRE1p.
Application Notes: E: 1:500-1:1,000; WB: 1:100-1:500

Storage: Store at -20°C. Minimize freeze-thaw cycles. Product is guaranteed one year from the date of shipment.

For research use only, not for diagnostic or therapeutic procedures.