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Anti-IRE1 (Ser724) Antibody

Our Anti-IRE1 (Ser724) rabbit polyclonal phosphospecific primary antibody from PhosphoSolutions is p
Catalog # AN1430

Product Information

Application	WB
Primary Accession	Q9EQY0
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	110185

Additional Information

Gene ID	78943
Other Names	Endoplasmic reticulum (ER) to nucleus signalling 1 antibody, Endoplasmic reticulum to nucleus signaling 1 antibody, Endoplasmic reticulum-to-nucleus signaling 1 antibody, Endoribonuclease antibody, ER to nucleus signaling 1 antibody, ERN 1 antibody, Ern1 antibody, ERN1_HUMAN antibody, hIRE 1p antibody, hIRE1p antibody, Inositol requiring 1 antibody, Inositol requiring 1, S. cerevisiae, homolog of antibody, Inositol requiring enzyme 1, S. cerevisiae, homolog of antibody, Inositol requiring protein 1 antibody, inositol-requiring enzyme 1 antibody, Inositol-requiring protein 1 antibody, IRE 1 antibody, IRE 1a antibody, IRE 1P antibody, Ire1 alpha antibody, Ire1-alpha antibody, IRE1a antibody, Ire1alpha antibody, IRE1P antibody, MGC163277 antibody, MGC163279 antibody, Protein kinase/endoribonuclease antibody, RGD1559716 antibody, Serine/threonine protein kinase/endoribonuclease IRE1 antibody
Target/Specificity	IRE1, inositol requiring 1 protein, is an ER transmembrane sensor that activates unfolded protein response (UPR) to maintain the ER and cellular function (Chen et al, 2013). The activation of UPR involves three signaling pathways, IRE1, PERK, and ATF6, which are crucial to returning protein homoeostasis to levels of non-stressed cells (Stewart et al, 2012). Changes in ER homeostasis causing unfolded protein buildup can be due to Ca2+ depletion, hypoxia, altered glycosylation, and viral infection triggering the UPR and activation of IRE1 (Stewart et al, 2012). UPR dysfunction plays an important role in the pathogenesis of neurodegenerative diseases including Alzheimer's disease, Parkinson's disease, amyotrophic lateral sclerosis and Huntington's disease, which is characterized by the accumulation and aggregation of misfolded proteins (Xiang C et al, 2017). The phosphorylation of IRE1 at ser724 may play a significant role in understanding these diseases.
Dilution	WB~~1:1000
Format	Antigen Affinity Purified from Pooled Serum

Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Anti-IRE1 (Ser724) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

Background

IRE1, inositol requiring 1 protein, is an ER transmembrane sensor that activates unfolded protein response (UPR) to maintain the ER and cellular function (Chen et al, 2013). The activation of UPR involves three signaling pathways, IRE1, PERK, and ATF6, which are crucial to returning protein homoeostasis to levels of non-stressed cells (Stewart et al, 2012). Changes in ER homeostasis causing unfolded protein buildup can be due to Ca2+ depletion, hypoxia, altered glycosylation, and viral infection triggering the UPR and activation of IRE1 (Stewart et al, 2012). UPR dysfunction plays an important role in the pathogenesis of neurodegenerative diseases including Alzheimer's disease, Parkinson's disease, amyotrophic lateral sclerosis and Huntington's disease, which is characterized by the accumulation and aggregation of misfolded proteins (Xiang C et al, 2017). The phosphorylation of IRE1 at ser724 may play a significant role in understanding these diseases.