Anti-IRE1 Antibody [C9-F2]

EM1708-88

Product Type:	Mouse monoclonal IgG1, primary antibodies
Species reactivity:	Human
Applications:	WB, IHC-P
Molecular Wt:	110 kDa
Clone number:	C9-F2

Description: The accumulation of unfolded proteins within the endoplasmic recticulum (ER) of yeast and mammalian cells activates the unfolded protein response (UPR) pathway and leads to the transcription of ER-specific genes involved in protein folding. The activation of the UPR requires the ER transmembrane kinase IRE1p (for inositol-requiring and ER-to-nucleus signaling protein). IRE1α and IRE1β are two mammalian homologs of the yeast IRE1p. These related proteins localize to the ER lumen and contain both a short transmembrane domain that spans the ER membrane and a cytosolic Ser/Thr kinase domain. IRE1 activation involves the oligomerization and trans-phosphorylation of the cytosolic portion of the proteins, which then potentiates its intrinsic kinase activity and, in turn, stimulates transcription of UPR-targeted genes. In response to stress, sensors for the ER mammalian cells activate IRE1α and IRE1β, which then results in the phosphorylation of JNK (Jun N-Terminal Kinase) and the activation of the cellular MAP kinase pathway.

Immunogen: Recombinant protein

Positive control: Raji, A431, Jurkat, Hela, HEK293 cell lysate, human placenta tissue, human brain tissue, human stomach tissue.

Subcellular location: Endoplasmic reticulum membrane.

Database links: SwissProt: O75460 Human

Recommended Dilutions:

WB	1:500-1:2,000
IHC-P	1:50-1:200

Storage Buffer: Purified antibody in PBS with 0.05% sodium azide.

Storage Instruction: 4℃; -20℃ for long term storage.

Purity: Protein A affinity purified.

Images

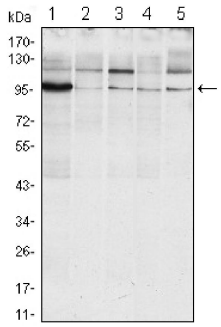

Fig1: Western blot analysis of ERN1 on different cell lysate using anti-ERN1 antibody at 1/1,000 dilution.
Positive control:
Line1: Raji
Line2: A431
Line3: Jurkat
Line4: Hela
Line5: HEK293

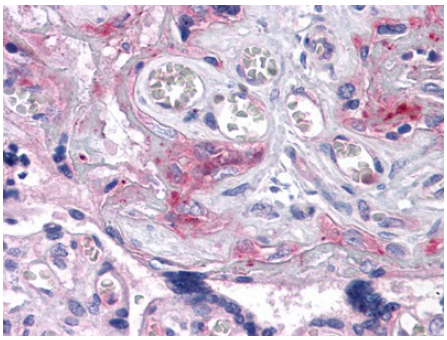

Fig2: Immunohistochemical analysis of paraffin-embedded human placenta tissue using anti-ERN1 antibody. Counter stained with hematoxylin.

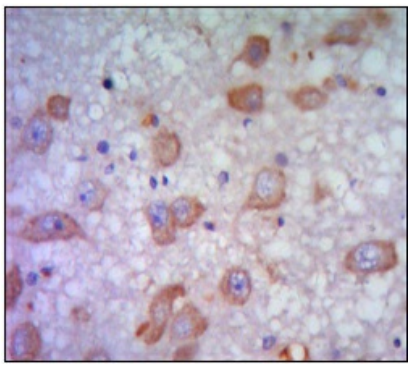

Fig3: Immunohistochemical analysis of paraffin-embedded human brain tissue using anti-ERN1 antibody. Counter stained with hematoxylin.

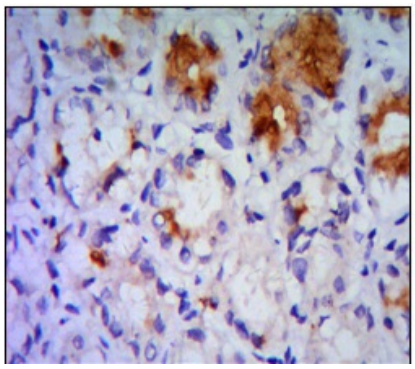

Fig4: Immunohistochemical analysis of paraffin-embedded human stomach tissue using anti-ERN1 antibody. Counter stained with hematoxylin.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".