

## Product datasheet for **AM31059PU-N**

### IRE1 (ERN1) Mouse Monoclonal Antibody [Clone ID: 3D1]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	3D1
Applications:	ELISA, IHC, WB
Recommended Dilution:	<b>ELISA.</b> <b>Immunohistochemistry on Paraffin Sections:</b> 5 µg/ml. <b>Western Blot.</b>
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	ERN1 antibody was raised against recombinant protein
Specificity:	This antibody reacts to ERN1 / IRE1.
Formulation:	PBS, pH 7.2 State: Purified State: Liquid purified Ig fraction
Concentration:	lot specific
Purification:	Protein A chromatography
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	endoplasmic reticulum to nucleus signaling 1
Database Link:	<a href="#">Entrez Gene 2081 Human O75460</a>



[View online »](#)

**Background:**

The endoribonuclease IRE1/ERN1 encodes the ER-to-nucleus signaling 1 protein, a human homolog of the yeast Ire1 gene product. In *S. cerevisiae*, as well as in human, this ER transmembrane IRE serine/threonine protein kinase monitors the status of unfolded proteins inside the ER lumen in response to stress. Activation of ERN1 leads to oligomerization, autophosphorylation, and proteolytic cleavage. The kinase and nuclease domains are then transported into the nucleus to function as a site-specific endoribonuclease. ERN1 activates JNK and other chaperone genes in response to stress.

**Synonyms:**

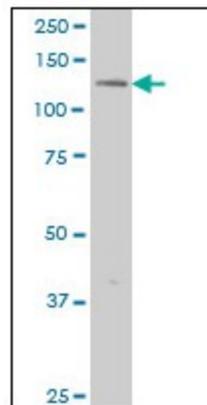
Inositol-requiring protein 1, IRE1p, Ire1-alpha, IRE1a

**Protein Families:**

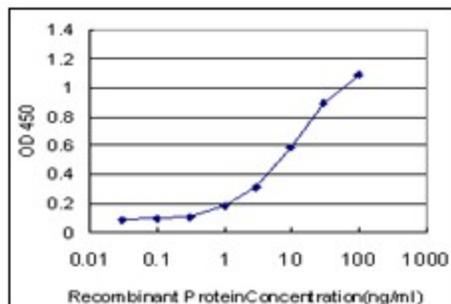
Protein Kinase, Transmembrane

**Protein Pathways:**

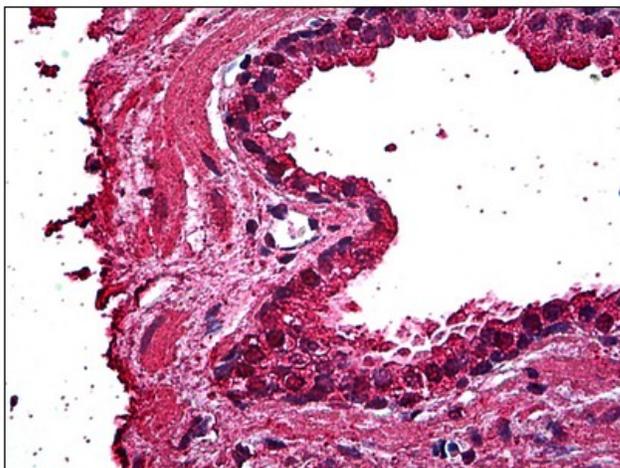
Alzheimer's disease

**Product images:**


ERN1 monoclonal antibody clone 3D1 Western Blot analysis of ERN1 expression in HeLa.



Detection limit for recombinant GST tagged ERN1 is approximately 0.3ng/ml as a capture antibody.



Human Prostate, Epithelium: Formalin-Fixed, Paraffin-Embedded (FFPE)