10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ERN1 Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a partial recombinant ERN1.
Catalog # AT1944a

Product Information

Application	WB, IF, E
Primary Accession	O75460
Other Accession	AF059198
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	8D12
Calculated MW	109735

Additional Information

Gene ID	2081
Other Names	Serine/threonine-protein kinase/endoribonuclease IRE1, Endoplasmic reticulum-to-nucleus signaling 1, Inositol-requiring protein 1, hIRE1p, Ire1-alpha, IRE1a, Serine/threonine-protein kinase, Endoribonuclease, 3126-, ERN1 (HGNC:3449)
Target/Specificity	ERN1 (AAC25991, 401 a.a. ~ 500 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	ERN1 Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

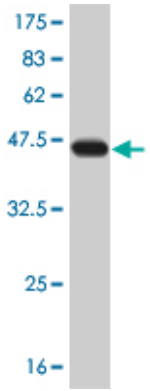
The protein encoded by this gene is the ER to nucleus signalling 1 protein, a human homologue of the yeast Ire1 gene product. This protein possesses intrinsic kinase activity and an endoribonuclease activity and it is important in altering gene expression as a response to endoplasmic reticulum-based stress signals.

References

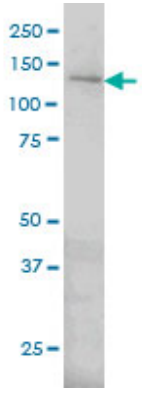
Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes

REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086. Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614. A crucial role for RACK1 in the regulation of glucose-stimulated IRE1alpha activation in pancreatic beta cells. Qiu Y, et al. Sci Signal, 2010 Jan 26. PMID 20103773. NR2F1 and IRE1beta suppress microsomal triglyceride transfer protein expression and lipoprotein assembly in undifferentiated intestinal epithelial cells. Dai K, et al. Arterioscler Thromb Vasc Biol, 2010 Mar. PMID 20007910. Gene-centric association signals for lipids and apolipoproteins identified via the HumanCVD BeadChip. Talmud PJ, et al. Am J Hum Genet, 2009 Nov. PMID 19913121.

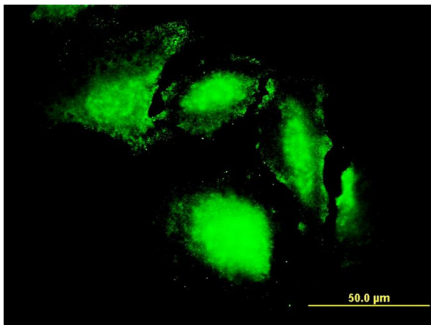
Images



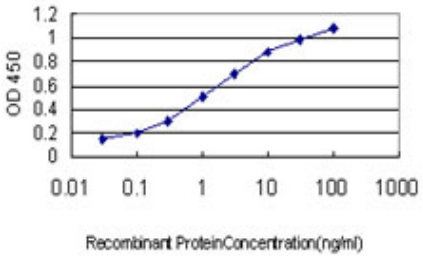
Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.63 KDa) .



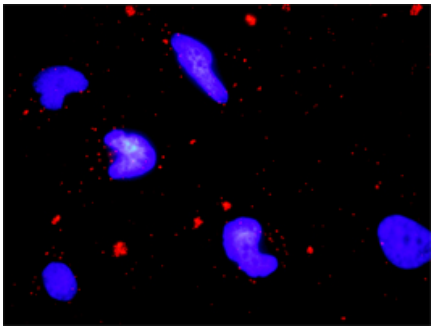
ERN1 monoclonal antibody (M02), clone 8D12 Western Blot analysis of ERN1 expression in HeLa ((Cat # AT1944a)



Immunofluorescence of monoclonal antibody to ERN1 on HeLa cell. [antibody concentration 25 ug/ml]



Detection limit for recombinant GST tagged ERN1 is approximately 0.03ng/ml as a capture antibody.



Proximity Ligation Analysis of protein-protein interactions between TRAF2 and ERN1. HeLa cells were stained with anti-TRAF2 rabbit purified polyclonal 1:1200 and anti-ERN1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.