

ERN1 Antibody (monoclonal) (M02)**Mouse monoclonal antibody raised against a partial recombinant ERN1.****Catalog # AT1944a****Specification**

ERN1 Antibody (monoclonal) (M02) - Product Information

Application	WB, IF, E
Primary Accession	O75460
Other Accession	AF059198
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2a Kappa
Calculated MW	109735

ERN1 Antibody (monoclonal) (M02) - 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

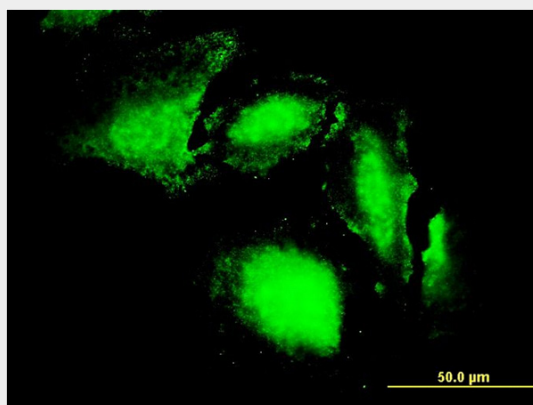
ERN1 Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

ERN1 Antibody (monoclonal) (M02) - Protocols

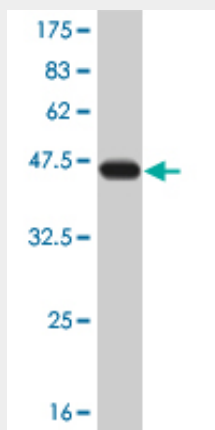
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

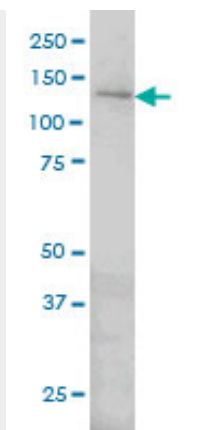
ERN1 Antibody (monoclonal) (M02) - Images



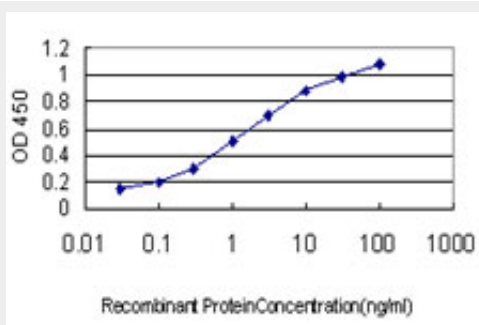
Immunofluorescence of monoclonal antibody to ERN1 on HeLa cell. [antibody concentration 25 ug/ml]



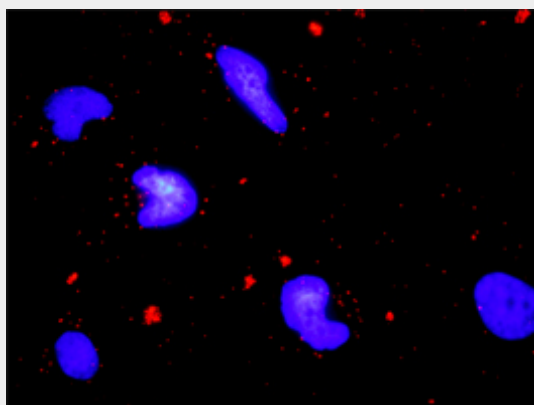
Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.63 KDa) .



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



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).

ERN1 Antibody (monoclonal) (M02) - 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.

ERN1 Antibody (monoclonal) (M02) - 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.