

**ERN1 Antibody (monoclonal) (M06)****Mouse monoclonal antibody raised against a partial recombinant ERN1.****Catalog # AT1945a****Specification**

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**ERN1 Antibody (monoclonal) (M06) - Product Information**

Application	WB, IHC, E
Primary Accession	<a href="#">O75460</a>
Other Accession	<a href="#">AF059198</a>
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG1 Kappa
Calculated MW	109735

**ERN1 Antibody (monoclonal) (M06) - 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 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=3449" target="\_blank">HGNC:3449</a>)

**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

IHC~~1:100~500

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**

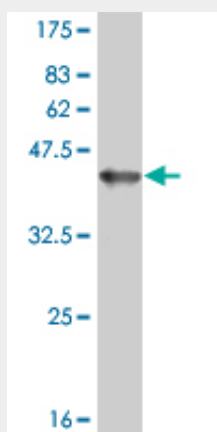
ERN1 Antibody (monoclonal) (M06) is for research use only and not for use in diagnostic or therapeutic procedures.

**ERN1 Antibody (monoclonal) (M06) - Protocols**

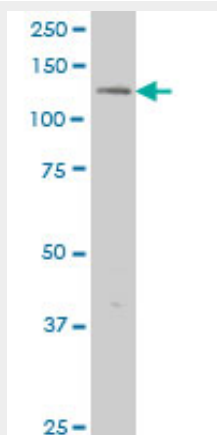
Provided below are standard protocols that you may find useful for product applications.

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

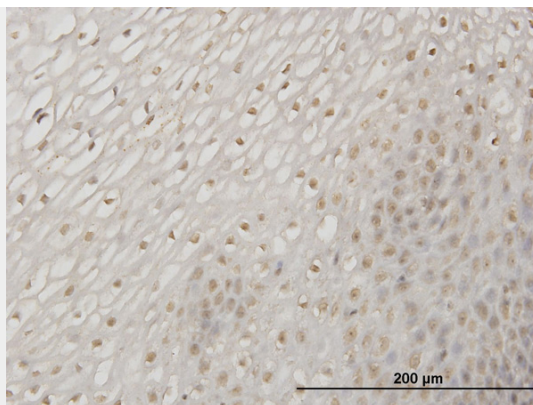
#### **ERN1 Antibody (monoclonal) (M06) - Images**



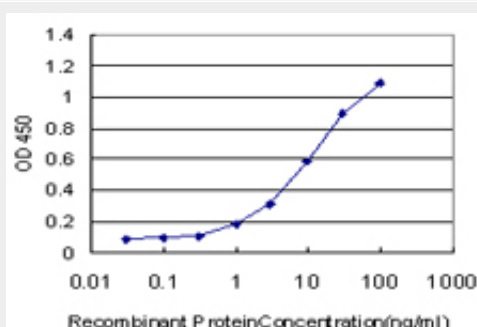
Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.63 KDa) .



ERN1 monoclonal antibody (M06), clone 3D1 Western Blot analysis of ERN1 expression in HeLa (Cat # AT1945a )



Immunoperoxidase of monoclonal antibody to ERN1 on formalin-fixed paraffin-embedded human esophagus. [antibody concentration 1.5 ug/ml]



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

### ERN1 Antibody (monoclonal) (M06) - 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) (M06) - References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedione-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.

### ERN1 Antibody (monoclonal) (M06) - Citations

- [Hypothermia and Rewarming Activate a Macroglial Unfolded Protein Response Independent of Hypoxic-Ischemic Brain Injury in Neonatal Piglets.](#)