

## Product datasheet for **AM09368PU-N**

### **ERK2 (MAPK1) Mouse Monoclonal Antibody [Clone ID: AT1A4]**

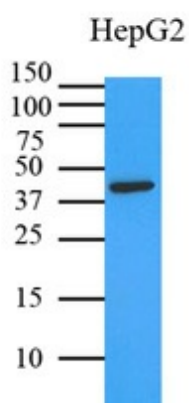
#### **Product data:**

Product Type:	Primary Antibodies
Clone Name:	AT1A4
Applications:	ELISA, IF, WB
Recommended Dilution:	ELISA. Western blot (1:500 - 1:3,000). Immunofluorescence (1:500 - 1:3,000).
Reactivity:	Human
Host:	Mouse
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Recombinant human MAPK1 (1-360aa) purified from E. coli
Specificity:	The antibody recognizes human MAPK1. Other species not tested.
Formulation:	PBS, pH 7.4 containing 0.02% Sodium Azide and 10% Glycerol State: Purified State: Liquid purified Ig fraction
Concentration:	lot specific
Purification:	Protein-G affinity chromatography
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	mitogen-activated protein kinase 1
Database Link:	<a href="#">Entrez Gene 5594 Human P28482</a>

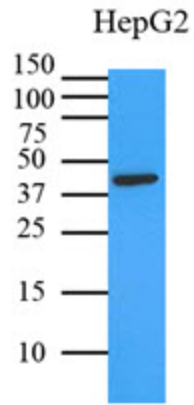


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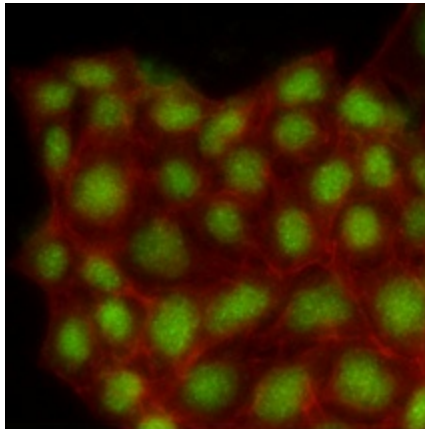
<b>Background:</b>	Mitogen-activated protein kinases (MAPKs) are reported to be critical regulatory factors for the growth and migration of various cell types including vascular smooth muscle cells (VSMCs). It has also been reported that the activation of the MAP kinase family, extracellular signal regulated kinases 1/2 (ERK1/2), and c-Jun N-terminal kinase (JNK) via Src activation is important for All-induced migration of VSMCs. MAPKs are intracellular signal-transduction pathways that have been shown to play a central role in the development of injury following ischemia in the brain and heart. MAPKs regulate gene expression, which is important in cell injury/repair and proliferation/differentiation.
<b>Synonyms:</b>	Mitogen-activated protein kinase 1, p42-MAPK, ERT1, PRKM1, PRKM2, MAP kinase 2, MAPK2, MAPK1
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Protein Pathways:</b>	Acute myeloid leukemia, Adherens junction, Alzheimer's disease, Axon guidance, B cell receptor signaling pathway, Bladder cancer, Chemokine signaling pathway, Chronic myeloid leukemia, Colorectal cancer, Dorso-ventral axis formation, Endometrial cancer, ErbB signaling pathway, Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Focal adhesion, Gap junction, Glioma, GnRH signaling pathway, Insulin signaling pathway, Long-term depression, Long-term potentiation, MAPK signaling pathway, Melanogenesis, Melanoma, mTOR signaling pathway, Natural killer cell mediated cytotoxicity, Neurotrophin signaling pathway, NOD-like receptor signaling pathway, Non-small cell lung cancer, Oocyte meiosis, Pancreatic cancer, Pathways in cancer, Prion diseases, Progesterone-mediated oocyte maturation, Prostate cancer, Regulation of actin cytoskeleton, Renal cell carcinoma, T cell receptor signaling pathway, TGF-beta signaling pathway, Thyroid cancer, Toll-like receptor signaling pathway, Type II diabetes mellitus, Vascular smooth muscle contraction, VEGF signaling pathway

**Product images:**

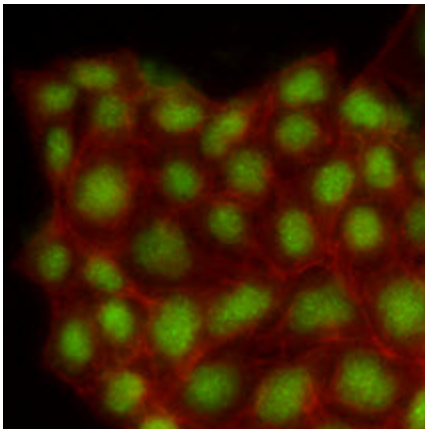
Cell lysates of HepG2 (35ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human MAPK1 (1:3000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.



Western blot analysis: Cell lysates of HepG2 (35 ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human MAPK1 (1:3000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.



Immunofluorescence of human MCF7 cells stained with Phalloidin-TRITC (Red) for Actin staining and monoclonal anti-human MAPK1 antibody (1:500) with Alexa 488 (Green).



Immunofluorescence of human MCF7 cells stained with Phalloidin-TRITC (Red) for Actin staining and monoclonal anti-human MAPK1 antibody (1:500) with Alexa 488 (Green).