

## Monoclonal Antibody to MAPK3 / ERK1 - Purified

<b>Alternate names:</b>	ERK-1, ERT2, Extracellular signal-regulated kinase 1, Insulin-stimulated MAP2 kinase, MAP kinase 3, MAP kinase isoform p44, MAPK 3, Microtubule-associated protein 2 kinase, Mitogen-activated protein kinase 1, Mitogen-activated protein kinase 3, PRKM3, p44-ERK1, p44-MAPK
<b>Catalog No.:</b>	AM09379PU-N
<b>Quantity:</b>	0.1 ml
<b>Concentration:</b>	1.0 mg/ml
<b>Background:</b>	Mitogen-activated protein kinase (MAPKs) are a widely conserved family of serine/threonine kinase involved in many cellular programs such as cell proliferation, differentiation, motility, and death. MAPK3 (ERK1) signaling pathway can be activated in response to a diverse range of extracellular stimuli including mitogens, growth factors, and cytokines and is an important target in the diagnosis and treatment of cancer. Upon stimulation, a sequential three-part protein kinase cascade is initiated, consisting of a MAP kinase kinase kinase (MAPKKK or MAP3K), a MAP kinase kinase (MAPKK or MAP2K), and a MAP kinase (MAPK). Multiple p44/42 MAP3Ks have been identified, including members of the Raf family as well as Mos and Tpl2/Cot. MEK1 and MEK2 are the primary MAPKKs in this pathway.
<b>Uniprot ID:</b>	<a href="#">P27361</a>
<b>NCBI:</b>	<a href="#">NP_002737</a>
<b>GenID:</b>	<a href="#">5595</a>
<b>Host / Isotype:</b>	Mouse / IgG2b
<b>Recommended Isotype Controls:</b>	SM12P, AM03110PU-N
<b>Clone:</b>	AT1A2
<b>Immunogen:</b>	Recombinant human MAPK3 protein (1-137aa) purified from E. coli
<b>Format:</b>	<b>State:</b> Liquid purified Ig fraction <b>Purification:</b> Protein-G affinity chromatography <b>Buffer System:</b> PBS, pH 7.4, containing 0.09% sodium azide
<b>Applications:</b>	ELISA. Western blot (1:250 - 1:500). Immunofluorescence (1:250 - 1:500). Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**For research and in vitro use only. Not for diagnostic or therapeutic work.**

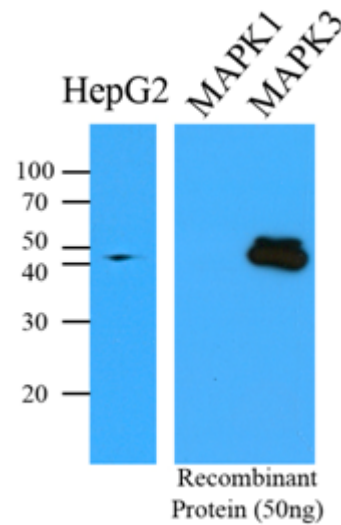
Material Safety Datasheets are available at [www.acris-antibodies.com](http://www.acris-antibodies.com) or on request.

Antibody Hotline - Technical Questions - Antibody Location Service  
Free Call: 0800-2274746 (Germany only) - [www.acris-antibodies.com](http://www.acris-antibodies.com)



- Specificity:** The antibody recognizes human MAPK3. Other species not tested.  
**Species:** Human  
Other species not tested.
- Storage:** Store the antibody undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer.  
Avoid repeated freezing and thawing.  
Shelf life: one year from despatch.
- General Readings:** Meloche S, et al., *Oncogene* (2007) 26:3227-39.  
Raman M, et al., *Oncogene* (2007) 26:3100-12.  
Roberts PJ, et al., *Oncogene* (2007) 26:3291-310.  
Shaul YD, et al., *Seeger R. Acta* (2007) 1773:1213-26.

**Pictures:** **Western blot analysis:**  
Cell lysates of HepG2 (35 ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human MAPK3 (1:500). To determine specificity of anti-human MAPK3 antibody, western blot was performed using the MAPK1 and MAPK3 recombinant proteins (50ng). Proteins were visualized using a goat anti-mouse antibody.



**Immunofluorescence** of HeLa cells stained with Hoechst 3342 (Blue) for nucleus staining and monoclonal anti-human MAPK3 antibody (1:500) with Texas Red (Red).

