

Monoclonal Antibody to MAPK7 / ERK5 (incl. pos. control) - Purified

Alternate names:	Big MAP kinase 1, ERK4, Extracellular signal-regulated kinase 5, MAPK7, Mitogen-activated protein kinase 7
Catalog No.:	AM00058PU-N
Quantity:	0.1 mg
Background:	Erk5 (also known as MAPK7 or big mitogen activated kinase 1, BMK1) belongs to the Ser/Thr protein kinase family. It contains a T E Y motif in the activation loop similar to Erk1/2. Extracellular signals, including receptor tyrosine kinases and G-protein-coupled receptors as well as osmotic and oxidative stress lead to Erk5 activation by MEK5. The Erk5 pathway plays an important role in cellular proliferation, differentiation and survival.
Uniprot ID:	Q13164
NCBI:	NP_002740.2
GeneID:	5598
Host / Isotype:	Mouse / IgG1
Clone:	12F2
Immunogen:	Peptide conjugated to Hemocyanin. Epitope: N-Terminus.
Format:	State: Lyophilized purified Ig fraction Purification: Size Exclusion Chromatography Buffer System: 1 ml PBS containing 0.09% Sodium Azide, PEG and Sucrose Reconstitution: Restore with 1 ml H ₂ O (15 min, RT).
Applications:	Western Blot: 0.5 µg/ml for HRPO/ECL detection. Recommended blocking buffer: Casein/Tween 20 based blocking and blot incubation buffer. <i>Included Positive Control:</i> Cell lysate from untreated SKOV-3 cells (See Protocols). Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody recognizes MAP kinase 7 (erk5) at 92 kDa in Western-blot applications. Species: Human, Mouse, Rat, Dog. Other species not tested.
Storage:	Store lyophilized (preferably in a desiccator) at -20°C and reconstituted (aliquote and freeze in liquid nitrogen) at -80°C. Avoid repeated freezing and thawing. Thaw aliquots at 37°C. Thawed aliquots may be stored at 4°C up to 3 months. Shelf life: one year from despatch.

For research and in vitro use only. Not for diagnostic or therapeutic work.
Material Safety Datasheets are available at www.acris-antibodies.com or on request.

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

Protocols:

Positive Control Cell Lysate: SKOV-3 Untreated

Format: Lyophilized cell lysate from Serum starved SKOV-3 cells.

Reconstitution: Restore by addition of 200 µl H₂O. After complete solubilization add 200 µl 2x SDS-PAGE sample buffer, mix and incubate at 90°C for 5 min.

Storage: Aliquote and store frozen.
Avoid repeated freeze/thaw cycles.

Application: The positive control cell lysate is recommended for immunoblot applications. 20 µl of positive control cell lysate correspond to ca. 80.000 cells. Use 20 µl / lane (mini gel) for HRPO/ECL detection of the target proteins.

Please note: The lyophilized cell lysates contain SDS and are not recommended for applications with native proteins such as immunoprecipitation.

Pictures:

Detection of endogenous MAPK7 / erk5
Whole cell lysates of serum starved tumor cells (20.000 cells per lane) were applied to SDS-PAGE and transferred to a PVDF membrane. Immunoblots were probed with mab MAPK7-12F2 (0.5 µg/ml) for 1h at RT and developed by ECL (exp. time: 30 sec).

- Lane 1: A431
- Lane 2: A549
- Lane 3: SKOV3
- Lane 4: OVCAR5
- Lane 5: HaCaT
- Lane 6: PC3
- Lane 7: HeLa
- Lane 8: HepG2

