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Product datasheet for AM00058PU-N

ERK5 (MAPK7) (incl. pos. control) Mouse Monoclonal Antibody [Clone ID: 12F2]

Product data:

Product Type:	Primary Antibodies
Clone Name:	12F2
Applications:	WB
Recommended Dilution:	Western Blot: 0.5 µg/ml for HRPO/ECL detection. Recommended blocking buffer: Casein/Tween 20 based blocking and blot incubation buffer. *Included Positive Control:* Cell lysate from untreated SKOV-3 cells (See Protocols).
Reactivity:	Canine, Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Peptide conjugated to Hemocyanin. Epitope: N-Terminus.
Specificity:	This antibody recognizes MAP kinase 7 (erk5) at 92 kDa in Western-blot applications.
Formulation:	1 ml PBS containing 0.09% Sodium Azide, PEG and Sucrose State: Purified State: Lyophilized purified Ig fraction
Reconstitution Method:	Restore with 1 ml H2O (15 min, RT).
Purification:	Size Exclusion Chromatography
Conjugation:	Unconjugated
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.
Stability:	Shelf life: one year from despatch.
Gene Name:	mitogen-activated protein kinase 7
Database Link:	Entrez Gene 5598 Human Q13164

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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 oxdative stress lead to Erk5 activation by MEK5. The Erk5 pathway plays an important role in cellular proliferation, differentiation and survival.

Synonyms: Mitogen-activated protein kinase 7, Extracellular signal-regulated kinase 5, ERK4, Big MAP kinase 1, MAPK7

Note: Protocol: **Positive Control Cell Lysate: SKOV-3 Untreated**

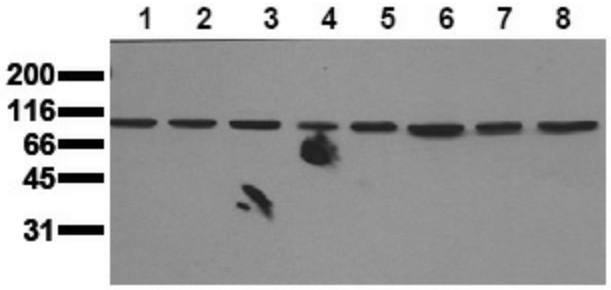
Format: Lyophilized cell lysate from Serum starved SKOV-3 cells.

Reconstitution: Restore by addition of 200 µl H20. 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.

Product images:



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 ug/ 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