

Product datasheet for **AM00091PU-N**

MEK1 (MAP2K1) (incl. pos. control) Mouse Monoclonal Antibody [Clone ID: 9G3]

Product data:

Product Type:	Primary Antibodies
Clone Name:	9G3
Applications:	ELISA, WB
Recommended Dilution:	Western Blot: 0.5 µg/ml for HRPO/ECL detection. <i>Included Positive Control:</i> Cell lysate from untreated HepG2 cells. (See Protocols) Recommended blocking buffer: Casein/Tween 20 based blocking and blot incubation buffer. ELISA: 0.1 µg/ml (protein ELISA).
Reactivity:	Canine, Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Synthetic peptide conjugated to KLH
Specificity:	This antibody specifically recognizes the activation loop of MEK1/2 independent of its phosphorylation status.
Formulation:	1 ml PBS / 0.09 % Na-azide / PEG and Sucrose State: Purified State: Lyophilized purified Ig
Reconstitution Method:	Restore with 1 ml H ₂ O (15 min, RT)
Purification:	Size exclusion chromatography
Storage:	Store lyophilized at 2-8°C for 6 months or at -20°C long term. After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	Homo sapiens mitogen-activated protein kinase kinase 1 (MAP2K1)
Database Link:	Entrez Gene 26395 Mouse Entrez Gene 170851 Rat Entrez Gene 5604 Human



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Background: MEK (MAP Kinase Kinase) phosphorylates the MAP Kinase on both threonine and tyrosine residues of the activation motif TEY. MEK1 and MEK2 are activated by phosphorylation of two serine residues (Ser 218/222 in MEK1 and Ser 222/226 in MEK2). These phosphorylation sites are substrates of the Raf family of kinases.

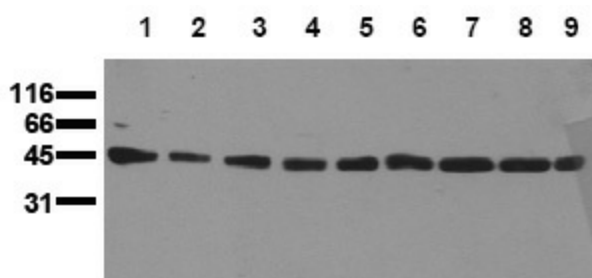
Synonyms: MAP2K1 - mitogen-activated protein kinase kinase 1, MAPKK1, MEK1, MKK1, PRKMK1, MAP2K2 - mitogen-activated protein kinase kinase 2, MAPKK2, MEK2, MKK2, PRKMK2

Note: Protocol: **Positive Control: Cell lysate from untreated HepG2 cells**
Formulation: Lyophilized cell lysate from serum starved HepG2 cells
Reconstitution: Reconstitute 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. 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.

Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: Acute myeloid leukemia, 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, Natural killer cell mediated cytotoxicity, Neurotrophin 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, Thyroid cancer, Toll-like receptor signaling pathway, Vascular smooth muscle contraction, VEGF signaling pathway

Product images:



Detection of endogenous MEK1/2 Whole cell lysates of serum starved tumor cells (20.000 cells per lane) were applied to SDS-PAGE and transferred to a PVDF membrane. The immunoblot was probed with mab MEK1/2-9G3 (0.5 µg/ ml) for 1h at RT and developed by ECL (exp. time: 30 sec). lane 1: HeLa; lane 2: HepG2; lane 3: HEK293; lane 4: SH-SY5Y; lane 5: MDCK; lane 6: PC12; lane 7: CMT 93; lane 8: Neuro 2A; lane 9: 3T3