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MAPK3 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant MAPK3.
Catalog # AT2789a

Product Information

Application	WB, IHC, IF, IP, E
Primary Accession	P27361
Other Accession	BC013992
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	3C9
Calculated MW	43136

Additional Information

Gene ID	5595
Other Names	Mitogen-activated protein kinase 3, MAP kinase 3, MAPK 3, ERT2, Extracellular signal-regulated kinase 1, ERK-1, Insulin-stimulated MAP2 kinase, MAP kinase isoform p44, p44-MAPK, Microtubule-associated protein 2 kinase, p44-ERK1, MAPK3, ERK1, PRKM3
Target/Specificity	MAPK3 (AAH13992, 279 a.a. ~ 379 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 IF~~1:50~200 IP~~N/A E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	MAPK3 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

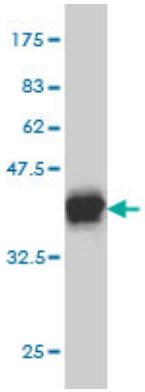
Background

The protein encoded by this gene is a member of the MAP kinase family. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act in a signaling cascade that regulates various cellular processes such as proliferation, differentiation, and cell cycle progression in response to a variety of extracellular signals. This kinase is activated by upstream kinases, resulting in its translocation to the nucleus where it phosphorylates nuclear targets. Alternatively spliced transcript variants encoding different protein isoforms have been described.

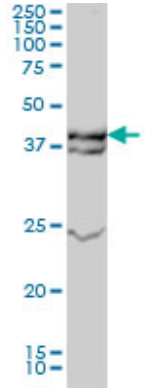
References

Activation of the EGFR/ERK pathway in high-grade mucoepidermoid carcinomas of the salivary glands. Lujan B, et al. Br J Cancer, 2010 Aug 10. PMID 20664595.S1P1 and VEGFR-2 form a signaling complex with extracellularly regulated kinase 1/2 and protein kinase C-alpha regulating ML-1 thyroid carcinoma cell migration. Bergelin N, et al. Endocrinology, 2010 Jul. PMID 20501673.Sorafenib downregulates ERK/Akt and STAT3 survival pathways and induces apoptosis in a human neuroblastoma cell line. Chai H, et al. Int J Clin Exp Pathol, 2010 Apr 23. PMID 20490331.Thymic stromal lymphopoietin receptor-mediated IL-6 and CC/CXC chemokines expression in human airway smooth muscle cells: role of MAPKs (ERK1/2, p38, and JNK) and STAT3 pathways. Shan L, et al. J Immunol, 2010 Jun 15. PMID 20483734.Protein kinase C isoforms zeta and iota mediate collagenase expression and cartilage destruction via STAT3- and ERK-dependent c-fos induction. Litherland GJ, et al. J Biol Chem, 2010 Jul 16. PMID 20463008.

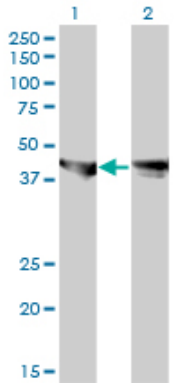
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa) .



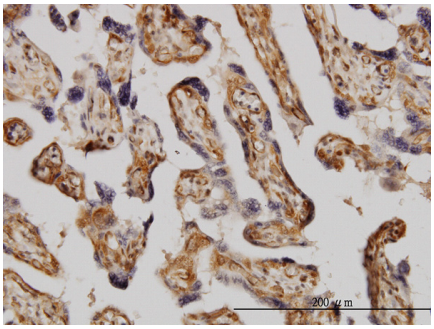
MAPK3 monoclonal antibody (M01), clone 3C9 Western Blot analysis of MAPK3 expression in A-431 ((Cat # AT2789a)

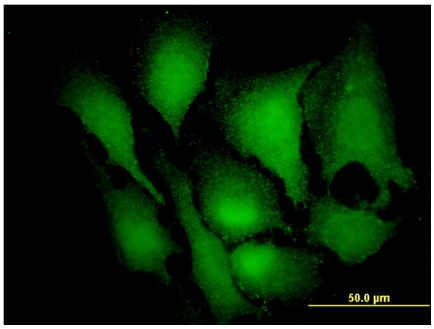


Western Blot analysis of MAPK3 expression in transfected 293T cell line by MAPK3 monoclonal antibody (M01), clone 3C9.

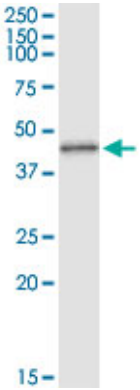
Lane 1: MAPK3 transfected lysate(43.1 KDa).
Lane 2: Non-transfected lysate.

Immunoperoxidase of monoclonal antibody to MAPK3 on formalin-fixed paraffin-embedded human placenta. [antibody concentration 3 ug/ml]

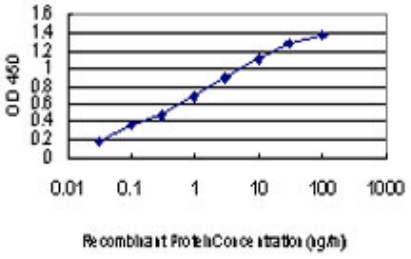




Immunofluorescence of monoclonal antibody to MAPK3 on HeLa cell. [antibody concentration 25 ug/ml]



Immunoprecipitation of MAPK3 transfected lysate using anti-MAPK3 monoclonal antibody and Protein A Magnetic Bead (U0007), and immunoblotted with MAPK3 monoclonal antibody.



Detection limit for recombinant GST tagged MAPK3 is approximately 0.1ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.