10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MAPK1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant MAPK1.
Catalog # AT2781a

Product Information

Application	WB, IF, E
Primary Accession	P28482
Other Accession	BC017832
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 kappa
Clone Names	1D1
Calculated MW	41390

Additional Information

Gene ID	5594
Other Names	Mitogen-activated protein kinase 1, MAP kinase 1, MAPK 1, ERT1, Extracellular signal-regulated kinase 2, ERK-2, MAP kinase isoform p42, p42-MAPK, Mitogen-activated protein kinase 2, MAP kinase 2, MAPK 2, MAPK1, ERK2, PRKM1, PRKM2
Target/Specificity	MAPK1 (AAH17832, 261 a.a. ~ 360 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200 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	MAPK1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

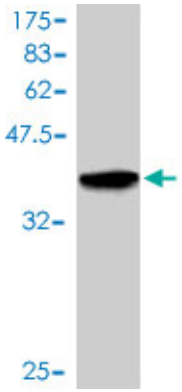
Background

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 as an integration point for multiple biochemical signals, and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation and development. The activation of this kinase requires its phosphorylation by upstream kinases. Upon activation, this kinase translocates to the nucleus of the stimulated cells, where it phosphorylates nuclear targets. Two alternatively spliced transcript variants encoding the same protein, but differing in the UTRs, have been reported for this gene.

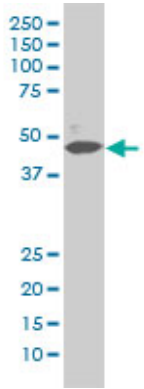
References

An approach based on a genome-wide association study reveals candidate loci for narcolepsy. Shimada M, et al. Hum Genet, 2010 Oct. PMID 20677014.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.Evaluation of candidate stromal epithelial cross-talk genes identifies association between risk of serous ovarian cancer and TERT, a cancer susceptibility hot-spot. Johnatty SE, et al. PLoS Genet, 2010 Jul 8. PMID 20628624.Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.Pseudorabies virus tegument protein Us2 recruits the mitogen-activated protein kinase extracellular-regulated kinase (ERK) to membranes through interaction with the ERK common docking domain. Kang MH, et al. J Virol, 2010 Sep. PMID 20554783.

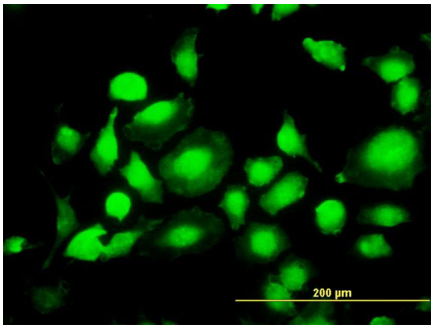
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.63 KDa) .

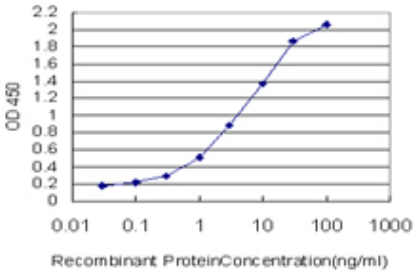


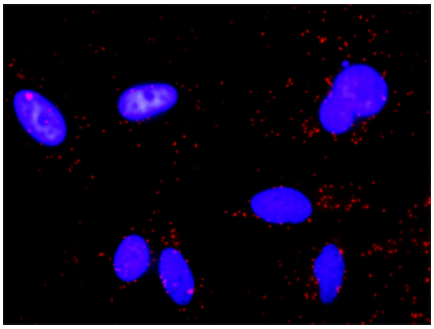
MAPK1 monoclonal antibody (M01), clone 1D1 Western Blot analysis of MAPK1 expression in Hela S3 NE ((Cat # AT2781a)



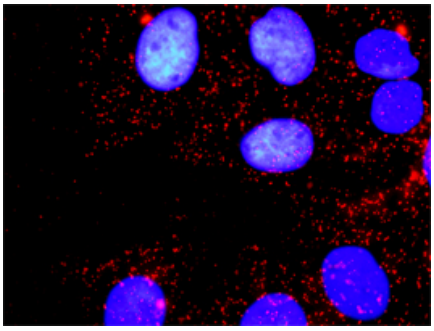
Immunofluorescence of monoclonal antibody to MAPK1 on HeLa cell. [antibody concentration 10 ug/ml]

Detection limit for recombinant GST tagged MAPK1 is approximately 0.03ng/ml as a capture antibody.





Proximity Ligation Analysis of protein-protein interactions between TP53 and MAPK1. HeLa cells were stained with anti-TP53 rabbit purified polyclonal 1:1200 and anti-MAPK1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



Proximity Ligation Analysis of protein-protein interactions between MAPK3 and MAPK1 Huh7 cells were stained with anti-MAPK3 rabbit purified polyclonal 1:1200 and anti-MAPK1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

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