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MAPKAPK2 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant MAPKAPK2.
Catalog # AT2795a

Product Information

Application	WB, IHC, IF, IP, E
Primary Accession	P49137
Other Accession	NM_032960
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2b Kappa
Clone Names	2B3
Calculated MW	45568

Additional Information

Gene ID	9261
Other Names	MAP kinase-activated protein kinase 2, MAPK-activated protein kinase 2, MAPKAP kinase 2, MAPKAP-K2, MAPKAPK-2, MK-2, MK2, MAPKAPK2
Target/Specificity	MAPKAPK2 (NP_116584, 302 a.a. ~ 400 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	MAPKAPK2 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

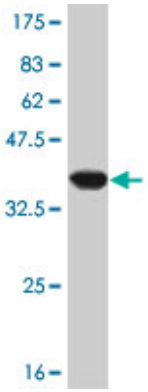
This gene encodes a member of the Ser/Thr protein kinase family. This kinase is regulated through direct phosphorylation by p38 MAP kinase. In conjunction with p38 MAP kinase, this kinase is known to be involved in many cellular processes including stress and inflammatory responses, nuclear export, gene expression regulation and cell proliferation. Heat shock protein HSP27 was shown to be one of the substrates of this kinase in vivo. Two transcript variants encoding two different isoforms have been found for this gene.

References

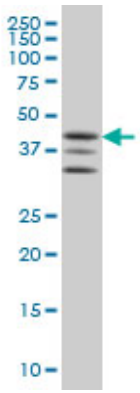
TRIF signaling stimulates translation of TNF-alpha mRNA via prolonged activation of MK2. Gais P, et al. J

Immunol, 2010 May 15. PMID 20375303.p38 MAPK/MK2-mediated induction of miR-34c following DNA damage prevents Myc-dependent DNA replication. Cannell IG, et al. Proc Natl Acad Sci U S A, 2010 Mar 23. PMID 20212154.MK2 signaling: lessons on tissue specificity in modulation of inflammation. Fyhrquist N, et al. J Invest Dermatol, 2010 Feb. PMID 20081887.p38 mitogen-activated protein kinase-driven MAPKAPK2 regulates invasion of bladder cancer by modulation of MMP-2 and MMP-9 activity. Kumar B, et al. Cancer Res, 2010 Jan 15. PMID 20068172.The MAP kinase-activated protein kinase 2 (MK2) contributes to the Shiga toxin-induced inflammatory response. Saenz JB, et al. Cell Microbiol, 2010 Apr 1. PMID 19951368.

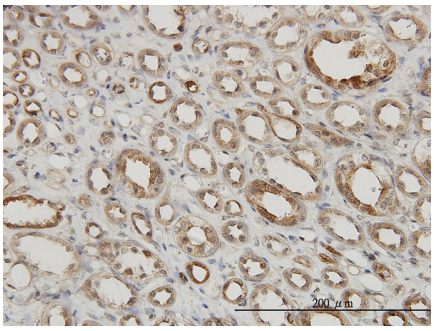
Images



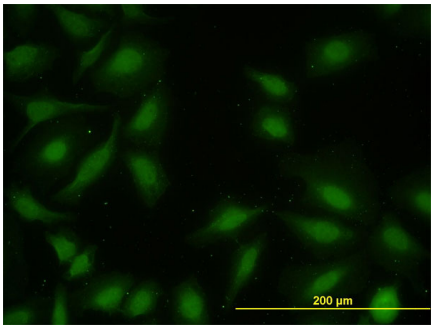
Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.63 KDa) .



MAPKAPK2 monoclonal antibody (M01), clone 2B3 Western Blot analysis of MAPKAPK2 expression in K-562 ((Cat # AT2795a)

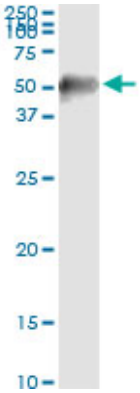


Immunoperoxidase of monoclonal antibody to MAPKAPK2 on formalin-fixed paraffin-embedded human kidney. [antibody concentration 3 ug/ml]

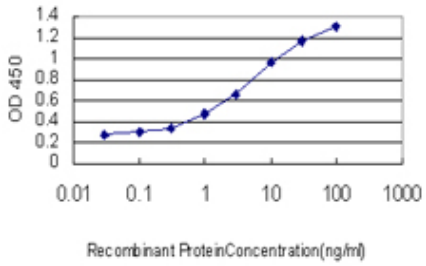


Immunofluorescence of monoclonal antibody to MAPKAPK2 on HeLa cell. [antibody concentration 10 ug/ml]

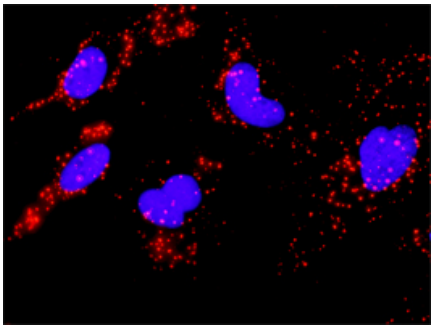
Immunoprecipitation of MAPKAPK2 transfected lysate



using anti-MAPKAPK2 monoclonal antibody and Protein A Magnetic Bead (U0007), and immunoblotted with MAPKAPK2 MaxPab rabbit polyclonal antibody.



Detection limit for recombinant GST tagged MAPKAPK2 is approximately 0.1ng/ml as a capture antibody.



Proximity Ligation Analysis of protein-protein interactions between AKT1 and MAPKAPK2 HeLa cells were stained with anti-AKT1 rabbit purified polyclonal 1:1200 and anti-MAPKAPK2 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).