

# MAPKAPK3 Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a partial recombinant MAPKAPK3. Catalog # AT2796a

### **Product Information**

Application	WB, IHC, E
Primary Accession	<u>Q16644</u>
Other Accession	<u>BC001662</u>
Reactivity	Human, Mouse
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	2B5
Calculated MW	42987

### **Additional Information**

Gene ID	7867
Other Names	MAP kinase-activated protein kinase 3, MAPK-activated protein kinase 3, MAPKAP kinase 3, MAPKAP-K3, MAPKAPK-3, MK-3, Chromosome 3p kinase, 3pK, MAPKAPK3
Target/Specificity	MAPKAPK3 (AAH01662, 272 a.a. ~ 382 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 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	MAPKAPK3 Antibody (monoclonal) (M02) 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 functions as a mitogen-activated protein kinase (MAP kinase)- activated protein kinase. MAP kinases are also known as extracellular signal-regulated kinases (ERKs), act as an integration point for multiple biochemical signals. This kinase was shown to be activated by growth inducers and stress stimulation of cells. In vitro studies demonstrated that ERK, p38 MAP kinase and Jun N-terminal kinase were all able to phosphorylate and activate this kinase, which suggested the role of this kinase as an integrative element of signaling in both mitogen and stress responses. This kinase was reported to interact with, phosphorylate and repress the activity of E47, which is a basic helix-loop-helix transcription factor known to be involved in the regulation of tissue-specific gene expression and cell differentiation.

## References

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.High-resolution crystal structure of human Mapkap kinase 3 in complex with a high affinity ligand. Cheng R, et al. Protein Sci, 2010 Jan. PMID 19937655.Gene-centric association signals for lipids and apolipoproteins identified via the HumanCVD BeadChip. Talmud PJ, et al. Am J Hum Genet, 2009 Nov. PMID 19913121.Identification of neuroglycan C and interacting partners as potential susceptibility genes for schizophrenia in a Southern Chinese population. So HC, et al. Am J Med Genet B Neuropsychiatr Genet, 2010 Jan 5. PMID 19367581.A polymorphism in MAPKAPK3 affects response to interferon therapy for chronic hepatitis C. Tsukada H, et al. Gastroenterology, 2009 May. PMID 19208361.

#### Images



Immunoperoxidase of monoclonal antibody to MAPKAPK3 on formalin-fixed paraffin-embedded human placenta. [antibody concentration 3 ug/ml]





Detection limit for recombinant GST tagged MAPKAPK3 is approximately 0.03ng/ml as a capture antibody.



Proximity Ligation Analysis of protein-protein interactions between MAPK13 and MAPKAPK3 HeLa cells were stained with anti-MAPK13 rabbit purified polyclonal 1:1200 and anti-MAPKAPK3 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'.