

MAP3K5 Antibody (monoclonal) (M03)

Mouse monoclonal antibody raised against a partial recombinant MAP3K5. Catalog # AT2777a

Product Information

Application	WB, IF, E
Primary Accession	<u>Q99683</u>
Other Accession	<u>BC054503</u>
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Lambda
Clone Names	2D11
Calculated MW	154537

Additional Information

Gene ID	4217
Other Names	Mitogen-activated protein kinase kinase kinase 5, Apoptosis signal-regulating kinase 1, ASK-1, MAPK/ERK kinase kinase 5, MEK kinase 5, MEKK 5, MAP3K5, ASK1, MAPKKK5, MEKK5
Target/Specificity	MAP3K5 (AAH54503, 1231 a.a. ~ 1374 a.a) partial 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	MAP3K5 Antibody (monoclonal) (M03) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

Mitogen-activated protein kinase (MAPK) signaling cascades include MAPK or extracellular signal-regulated kinase (ERK), MAPK kinase (MKK or MEK), and MAPK kinase kinase (MAPKKK or MEKK). MAPKK kinase/MEKK phosphorylates and activates its downstream protein kinase, MAPK kinase/MEK, which in turn activates MAPK. The kinases of these signaling cascades are highly conserved, and homologs exist in yeast, Drosophila, and mammalian cells. MAPKKK5 contains 1,374 amino acids with all 11 kinase subdomains. Northern blot analysis shows that MAPKKK5 transcript is abundantly expressed in human heart and pancreas. The MAPKKK5 protein phosphorylates and activates MKK4 (aliases SERK1, MAPKK4) in vitro, and activates c-Jun N-terminal kinase (JNK)/stress-activated protein kinase (SAPK) during transient expression in COS and 293 cells; MAPKKK5 does not activate MAPK/ERK.

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.ASK1-JNK signaling cascade mediates Ad-ST13-induced apoptosis in colorectal HCT116 cells. Yang M, et al. J Cell Biochem, 2010 Jun 1. PMID 20512919.Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.Mechanism of oxidative stress-induced ASK1-catalyzed MKK6 phosphorylation. Sturchler E, et al. Biochemistry, 2010 May 18. PMID 20364819.DJ-1 modulates the p38 mitogen-activated protein kinase pathway through physical interaction with apoptosis signal-regulating kinase 1. Mo JS, et al. J Cell Biochem, 2010 May. PMID 20213747.

Images



Immunofluorescence of monoclonal antibody to MAP3K5 on A-431 cell. [antibody concentration 10 ug/ml]





Detection limit for recombinant GST tagged MAP3K5 is approximately 0.3ng/ml as a capture antibody.

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