

For Research Use Only

# MAPKAPK2 Polyclonal antibody

Catalog Number: 13949-1-AP

11 Publications



## Basic Information

<b>Catalog Number:</b> 13949-1-AP	<b>GenBank Accession Number:</b> BC036060	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 500 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 9261	<b>Recommended Dilutions:</b> WB 1:500-1:1000 IHC 1:50-1:500 IF/ICC 1:200-1:800
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P49137	
<b>Isotype:</b> IgG	<b>Full Name:</b> mitogen-activated protein kinase-activated protein kinase 2	
<b>Immunogen Catalog Number:</b> AG5060	<b>Calculated MW:</b> 400 aa, 46 kDa	
	<b>Observed MW:</b> 47-50 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, ELISA	<b>Positive Controls:</b>
<b>Cited Applications:</b> WB, IHC	<b>WB :</b> HeLa cells, A549 cells, mouse skeletal muscle tissue, mouse colon tissue
<b>Species Specificity:</b> human, mouse	<b>IHC :</b> human breast cancer tissue, human kidney tissue
<b>Cited Species:</b> human, mouse	<b>IF/ICC :</b> HeLa cells,
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## Background Information

MAPKAPK2(mitogen-activated protein kinase-activated protein kinase 2) is also named as MK2, MAPKAP-K2, MK-2 and belongs to the CAMK Ser/Thr protein kinase family. MAPKAPK2, one of several kinases directly phosphorylated and activated by p38 MAPK, plays a central role in the inflammatory response and is in the nucleus of unstimulated cells and moves rapidly to the cytoplasm after stimulation(PMID:12171911). It is also involved in many other cellular processes including stress responses, nuclear export, gene expression regulation and cell proliferation. Multiple residues of MAPKAPK2 are generally phosphorylated in vivo in response to stress, but only 4 residues(Thr25, Thr222, Ser272, and Thr334) are phosphorylated by p38 MAPK in vitro(PMID:22351694). It has 2 isoforms produced by alternative splicing and the range of the molecular weight is 42-60 kDa according to the references(PMID:10666409; 11328854;8995385).

## Notable Publications

Author	Pubmed ID	Journal	Application
Yan Zhang	34731635	Cell Rep	WB
Rui Wang	31575657	Mol Cancer Res	WB
Fengze Sun	34795209	Cell Death Dis	WB,IHC

## Storage

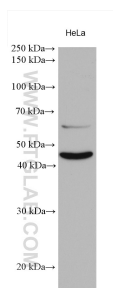
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

\*\*\* 20ul sizes contain 0.1% BSA

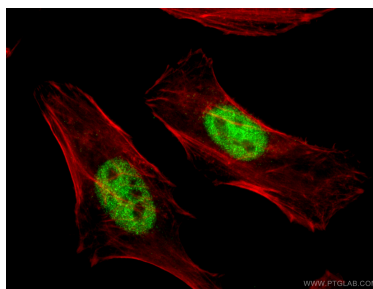
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

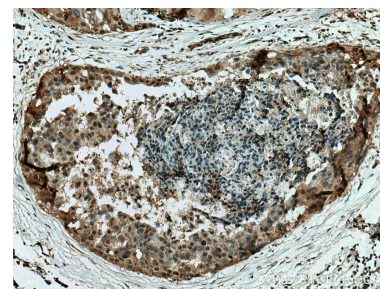
## Selected Validation Data



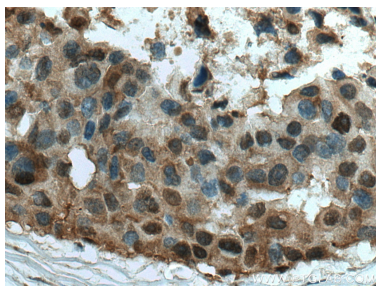
HeLa cells were subjected to SDS PAGE followed by western blot with 13949-1-AP (MAPKAPK2 antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using 13949-1-AP (MAPKAPK2 antibody), at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L); F-actin is stained using CL555-phalloidin (red).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 13949-1-AP (MAPKAPK2 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 13949-1-AP (MAPKAPK2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).