For Research Use Only

MAPKAPK2 Polyclonal antibody

Catalog Number:13949-1-AP 11 Publications

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Basic Information

Catalog Number:
13949-1-AP

Size:
500 μg/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG5060

GenBank Accession Number:
BC036060

GeneID (NCBI):
9261

UNIPROT ID:
P49137

Full Name:
mitogen-activated protein kinase-activated protein kinase 2

Calculated MW:
400 aa, 46 kDa

Observed MW:
47-50 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:1000
IHC 1:50-1:500
IF/ICC 1:200-1:800

Applications

Tested Applications:
WB, IHC, IF/ICC, ELISA

Cited Applications:
WB, IHC

Species Specificity:
human, mouse

Cited Species:
human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : HeLa cells, A549 cells, mouse skeletal muscle tissue, mouse colon tissue

IHC : human breast cancer tissue, human kidney tissue

IF/ICC : HeLa cells,

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

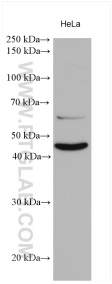
Author	Pubmed ID	Journal	Application
Yan Zhang	34731635	Cell Rep	WB
Rui Wang	31575657	Mol Cancer Res	WB
Fengze Sun	34795209	Cell Death Dis	WB,IHC

Storage

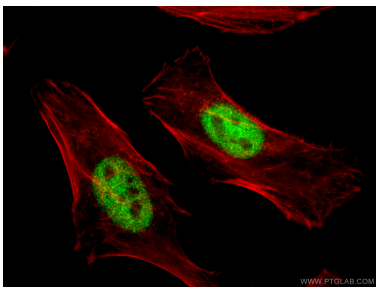
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

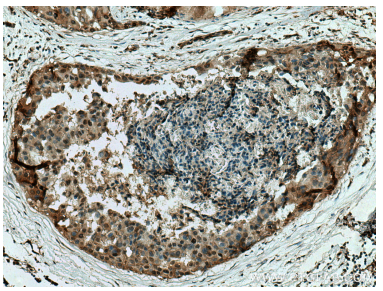
Selected Validation Data



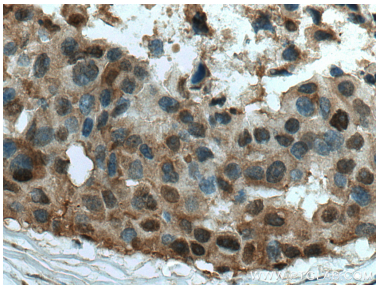
HeLa cells were subjected to SDS PAGE followed by western blot with 13949-1-AP (MAPKAPK2 antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



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).