

MAPKAPK-2 (phospho Ser272) Polyclonal Antibody

Catalog No: YP0819

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: MAPKAPK2

Fields: >>MAPK signaling pathway;>>Cellular senescence;>>VEGF signaling

pathway;>>C-type lectin receptor signaling pathway;>>Neurotrophin signaling

pathway;>>Kaposi sarcoma-associated herpesvirus infection;>>Viral

carcinogenesis

Gene Name: MAPKAPK2

Protein Name: MAP kinase-activated protein kinase 2

P49137

P49138

Human Gene Id: 9261

Human Swiss Prot

No:

Mouse Gene Id: 17164

Mouse Swiss Prot

No:

Immunogen: The antiserum was produced against synthesized peptide derived from human

MAPKAPK2 around the phosphorylation site of Ser272. AA range:238-287

Specificity: Phospho-MAPKAPK-2 (S272) Polyclonal Antibody detects endogenous levels of

MAPKAPK-2 protein only when phosphorylated at S272.

Formulation: Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution : WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

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chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 45-52kD

Cell Pathway: MAPK_ERK_Growth;MAPK_G_Protein;VEGF;Neurotrophin;

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. [provided by RefSeq, Jul 2008].

Function: catalytic activity:ATP + a protein = ADP + a phosphoprotein..enzyme

regulation: Seems to be activated by two distinct pathways: the first involves the stimulation of p42/p44 MAPK by growth factors, the second, triggered by stress

and heat shock, depends on the activation of MPK2 and upstream

MAPKK/MAPKKK.,function:Its physiological substrate seems to be the small heat shock protein (HSP27/HSP25). In vitro can phosphorylate glycogen synthase at

'Ser-7' and tyrosine hydroxylase (on 'Ser-19' and 'Ser-40'). This kinase

phosphorylates Ser in the peptide sequence, Hyd-X-R-X(2)-S, where Hyd is a large hydrophobic residue (By similarity). Mediates both ERK and p38

MAPK/MAPK14 dependent neutrophil responses. Participates in TNF alphastimulated exocytosis of secretory vesicles in neutrophils. Plays a role in

phagocytosis-induced respiratory burst activity.,PTM:Phosphorylated and

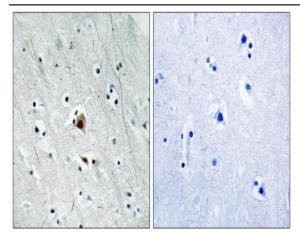
activated by MAP k

Subcellular Cytoplasm . Nucleus . Phosphorylation and subsequent activation releases the autoinhibitory helix, resulting in the export from the nucleus into the cytoplasm.

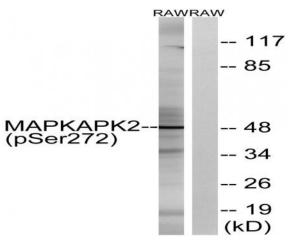
Expression: Expressed in all tissues examined.

Products Images

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Immunohistochemistry analysis of paraffin-embedded human brain, using MAPKAPK2 (Phospho-Ser272) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from RAW264.7 cells treated with UV 15', using MAPKAPK2 (Phospho-Ser272) Antibody. The lane on the right is blocked with the phospho peptide.