



# MAPKAPK-2 (phospho Ser272) Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-14504
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	MAPKAPK2
<b>Protein Name</b>	MAP kinase-activated protein kinase 2
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human MAPKAPK2 around the phosphorylation site of Ser272. AA range:238-287
<b>Specificity</b>	Phospho-MAPKAPK-2 (S272) Polyclonal Antibody detects endogenous levels of MAPKAPK-2 protein only when phosphorylated at S272.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	MAPKAPK2; MAP kinase-activated protein kinase 2; MAPK-activated protein kinase 2; MAPKAP kinase 2; MAPKAP-K2; MAPKAPK-2; MK-2; MK2
<b>Observed Band</b>	45-52kD
<b>Cell Pathway</b>	Cytoplasm . Nucleus . Phosphorylation and subsequent activation releases the autoinhibitory helix, resulting in the export from the nucleus into the cytoplasm.
<b>Tissue Specificity</b>	Expressed in all tissues examined.
<b>Function</b>	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 alpha-stimulated exocytosis of secretory vesicles in neutrophils. Plays a role in phagocytosis-induced respiratory burst activity.,PTM:Phosphorylated and activated by MAP k



**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],

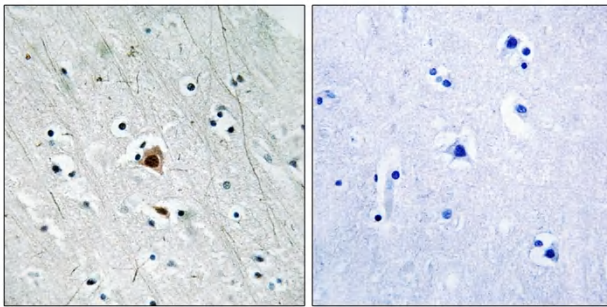
**matters needing attention**

Avoid repeated freezing and thawing!

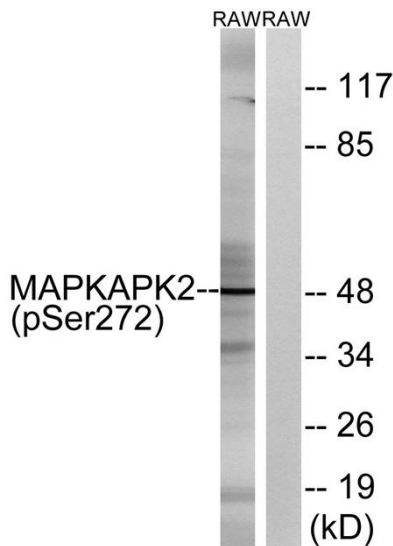
**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

**Products Images**



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.