



MAPKAPK-2 (phospho Thr222) Polyclonal Antibody

Catalog No	YP-Ab-14460
Isotype	IgG
Reactivity	Human;Mouse;Rat;Monkey
Applications	WB;IHC;IF;ELISA
Gene Name	MAPKAPK2
Immunogen	The antiserum was produced against synthesized peptide derived from human MAPKAPK-2 around the phosphorylation site of Thr222. AA range:188-237
Specificity	Phospho-MAPKAPK-2 (T222) Polyclonal Antibody detects endogenous levels of MAPKAPK-2 protein only when phosphorylated at T222.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/20000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	MAPKAP-K2;MAPKAPK 2;MAPKAP kinase 2;MAPK-activated protein kinase 2; MAP kinase-activated protein kinase 2;MAPKAPK2;MAPKAPK-2;MK-2;MK2
Observed Band	45kD
Calculated Molecular Weight	45kD
Cell Pathway	Cytoplasm . Nucleus . Phosphorylation and subsequent activation releases the autoinhibitory helix, resulting in the export from the nucleus into the cytoplasm.
Tissue Specificity	Expressed in all tissues examined.
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 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

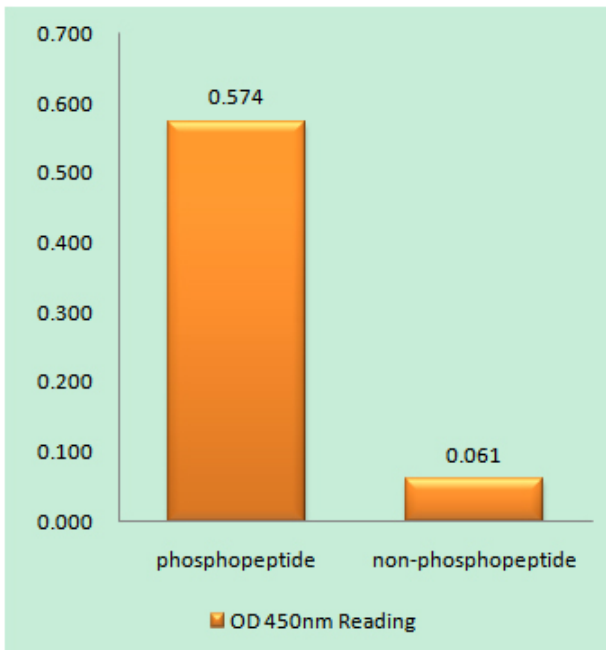
Avoid repeated freezing and thawing!

Usage suggestions

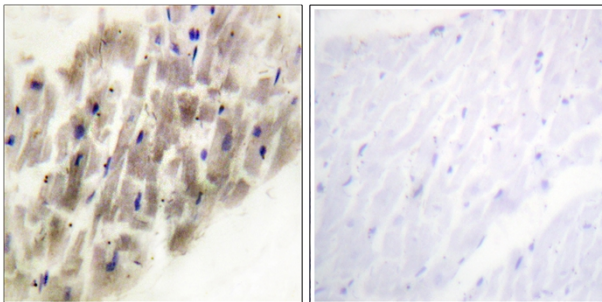
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



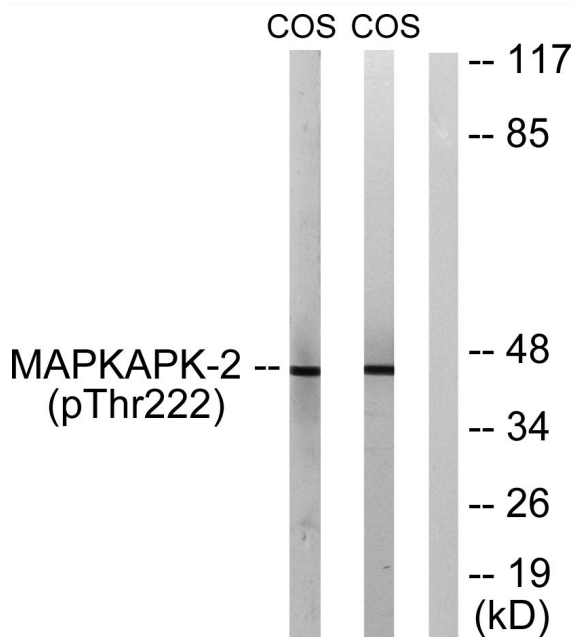
Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using MAPKAPK-2 (Phospho-Thr222) Antibody



Immunohistochemistry analysis of paraffin-embedded human heart, using MAPKAPK-2 (Phospho-Thr222) Antibody. The picture on the right is blocked with the phosphopeptide.



Western blot analysis of lysates from COS7 cells treated with UV 15', using MAPKAPK-2 (Phospho-Thr222) Antibody. The lane on the right is blocked with the phosphopeptide.