



MAPKAPK-2 Rabbit mAb

Catalog No	YP-rAb-17560
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IF,IP,ELISA
Gene Name	MAPKAPK2
Protein Name	MAP kinase-activated protein kinase 2
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200;
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
Synonyms	MAPKAPK2;MAP kinase-activated protein kinase 2;MAPKAPK2 ; MAP kinase-activated protein kinase 2 ; MAPK-activated protein kinase 2 ; MAPKAP kinase 2 ; MAPKAP-K2 ; MAPKAPK-2 ; MK-2 ; MK2
Observed Band	46,55kD
Calculated Molecular Weight	46kD
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 kinase.,similarity:Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family.,similarity:Contains 1 protein kinase domain.,subunit:Interacts with PHC2.,tissue specificity:Expressed in all tissues examined.,

Background

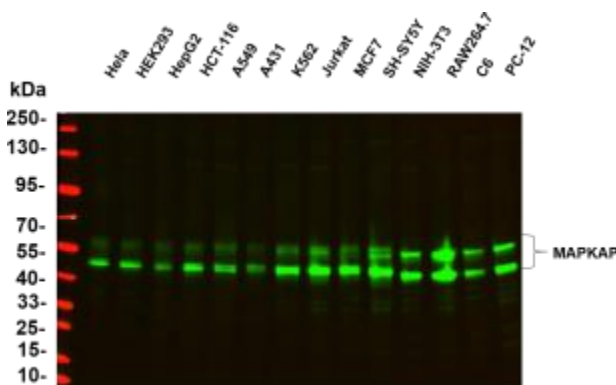
This gene encodes a member of the Ser/Thr protein kinase family. This kinase is regulated through direct phosphorylation by p38 MAP kinase. In conjunction with p38 MAP kinase, this kinase is known to be involved in many cellular processes including stress and inflammatory responses, nuclear export, gene 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

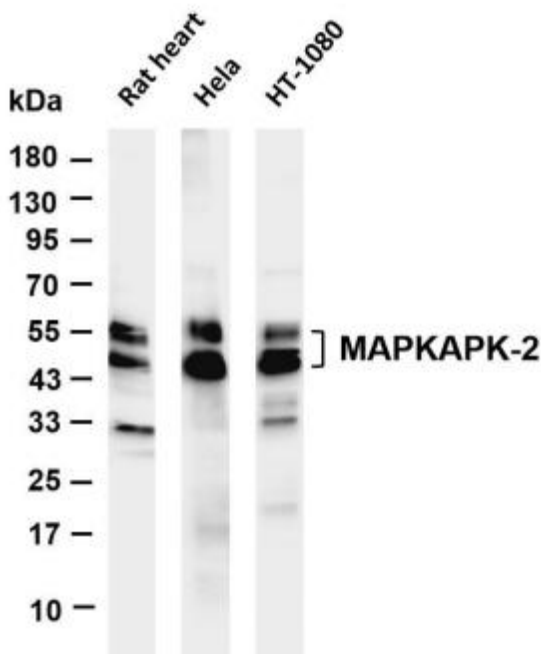
Avoid repeated freezing and thawing!

Usage suggestions

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

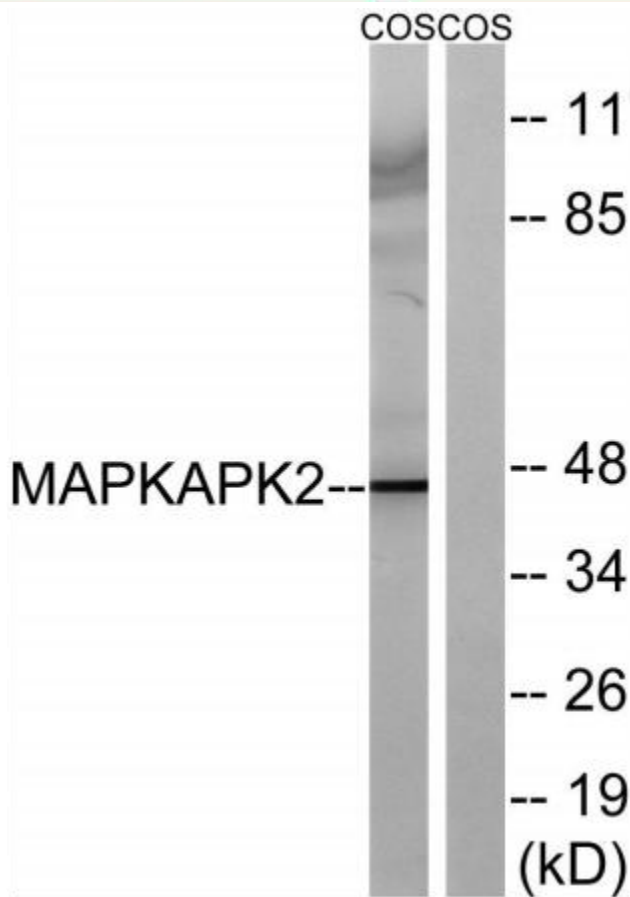


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the primary antibody was used at 4~C, over night with a 1:5000 dilution. The Dylight 800-conjugated Goat anti-Rabbit antibody

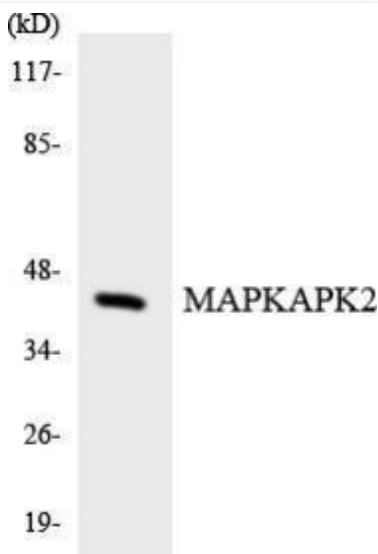


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-MAPKAPK-2 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Rat heart Lane 2: HeLa Lane 3: HT-1080 Predicted band size: 46kDa Observed band size: 46,55kDa





Western blot analysis of lysates from COS cells, using MAPKAPK2 Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HeLa cells using MAPKAPK2 antibody.

