MAPKAP Kinase 2 Antibody HRP Conjugated

Catalog No: #C04356H

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Description

Product Name	MAPKAP Kinase 2 Antibody HRP Conjugated
Host Species	Rabbit
Clonality	Polyclonal
Isotype	IgG
Purification	Purified by Protein A.
Applications	WBB B IHC-PB IHC-F
Species Reactivity	HuB MsB RtB B B B
Immunogen Description	KLH conjugated synthetic peptide aa 337-363 400 derived from human MAPKAP Kinase 2
Conjugates	HRP
Target Name	MAPKAP Kinase 2
Other Names	MK2; MK-2; MAPKAP-K2; MAP kinase-activated protein kinase 2; MAPK-activated protein kinase 2; MAPKAP kinase 2; MAPKAPK-2; MAPKAPK2
Accession No.	Swiss-Prot#P49137NCBI Gene ID9261
Uniprot	P49137
GeneID	9261;
Excitation Emission	N A
Cell Localization	Cytoplasm, Nucleus
Concentration	1mg ml
Formulation	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Application Details

WB=1:500-2000B B IHC-P=1:50-200B IHC-F=1:50-200B

Background

Stress-activated serine threonine-protein kinase involved in cytokines production, endocytosis, reorganization of the cytoskeleton, cell migration, cell cycle control, chromatin remodeling, DNA damage response and transcriptional regulation. Following stress, it is phosphorylated and activated by MAP kinase p38-alpha MAPK14, leading to phosphorylation of substrates. Phosphorylates serine in the peptide sequence, Hyd-X-R-X(2)-S, where Hyd is a large hydrophobic residue. Phosphorylates ALOX5, CDC25B, CDC25C, ELAVL1, HNRNPA, HSF1, HSP27 HSPB1, KRT18, KRT2, LIMK1, LSP1, PABPC1, PARN, PDE4A, RCSD1, RPS6KA3, TAB3 and TTP ZFP36. Mediates phosphorylation of HSP27 HSPB1 in response to stress, leading to dissociate HSP27 HSPB1 from large small heat-shock protein (sHsps) oligomers and impair their chaperone activities and ability to protect against oxidative stress effectively. Involved in inflammatory response by regulating tumor necrosis factor (TNF) and IL6 production post-transcriptionally: acts by phosphorylating AU-rich elements (AREs)-binding proteins ELAVL1, HNRNPA, PABPC1 and TTP ZFP36, leading to regulate the stability and translation of TNF and IL6 mRNAs. Phosphorylation of TTP ZFP36, a major post-transcriptional regulator of TNF, promotes its binding to 14-3-3 proteins and reduces its ARE mRNA affinity leading to inhibition of dependent degradation of ARE-containing transcript. Also involved in late G2 M checkpoint following DNA damage through a process of post-transcriptional mRNA stabilization: following DNA damage, relocalizes from nucleus to cytoplasm and phosphorylates HNRNPA and PARN, leading to stabilize GADD45A mRNA. Involved in toll-like receptor signaling pathway (TLR) in dendritic cells: required for acute TLR-induced macropinocytosis by phosphorylating and activating RPS6KA3.

Note: This product is for in vitro research use only