

Datasheet for ABIN7127609

Recombinant anti-MAPKAP Kinase 2 antibody[Go to Product page](#)**1** Image

Overview

Quantity:	100 µL
Target:	MAPKAP Kinase 2 (MAPKAPK2)
Reactivity:	Human
Host:	Rabbit
Antibody Type:	Recombinant Antibody
Clonality:	Monoclonal
Conjugate:	This MAPKAP Kinase 2 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Immunogen:	A synthesized peptide derived from human MAPKAP Kinase 2
Clone:	4G7
Isotype:	IgG
Cross-Reactivity:	Human, Mouse
Purification:	Affinity-chromatography

Target Details

Target:	MAPKAP Kinase 2 (MAPKAPK2)
Alternative Name:	MAPKAPK2 (MAPKAPK2 Products)
Background:	Background: Stress-activated serine/threonine-protein kinase involved in cytokine production,

Target Details

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, CEP131, ELAVL1, HNRNPA0, HSP27/HSPB1, KRT18, KRT20, LIMK1, LSP1, PABPC1, PARN, PDE4A, RCSD1, RPS6KA3, TAB3 and TTP/ZFP36. Phosphorylates HSF1, leading to the interaction with HSP90 proteins and inhibiting HSF1 homotrimerization, DNA-binding and transactivation activities (PubMed:16278218). Mediates phosphorylation of HSP27/HSPB1 in response to stress, leading to the dissociation of HSP27/HSPB1 from large small heat-shock protein (sHsps) oligomers and impairment of 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, HNRNPA0, PABPC1 and TTP/ZFP36, leading to the regulation of 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 transcripts. Phosphorylates CEP131 in response to cellular stress induced by ultraviolet irradiation which promotes binding of CEP131 to 14-3-3 proteins and inhibits formation of novel centriolar satellites (PubMed:26616734). 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 HNRNPA0 and PARN, leading to stabilization of GADD45A mRNA. Involved in toll-like receptor signaling pathway (TLR) in dendritic cells: required for acute TLR-induced macropinocytosis by phosphorylating and activating RPS6KA3.

Aliases: MAP kinase-activated protein kinase 2 (MAPK-activated protein kinase 2) (MAPKAP kinase 2) (MAPKAP-K2) (MAPKAPK-2) (MK-2) (MK2) (EC 2.7.11.1), MAPKAPK2

UniProt: [P49137](#)

Pathways: [MAPK Signaling](#), [Neurotrophin Signaling Pathway](#), [Activation of Innate immune Response](#), [Toll-Like Receptors Cascades](#)

Application Details

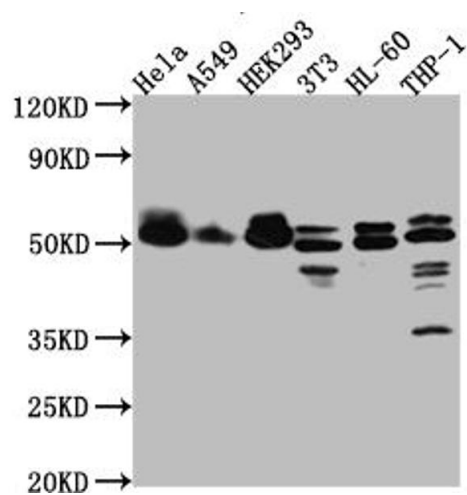
Application Notes: Recommended dilution: WB:1:500-1:5000,

Restrictions: For Research Use only

Handling

Format:	Liquid
Buffer:	Rabbit IgG in phosphate buffered saline, pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



Western Blotting

Image 1. Western Blot Positive WB detected in: Hela whole cell lysate, A549 whole cell lysate, HEK293 whole cell lysate, NIH/3T3 whole cell lysate, HL-60 whole cell lysate, THP-1 whole cell lysate All lanes: MAPKAPK2 antibody at 1:1000 Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution Predicted band size: 46, 43 kDa Observed band size: 50 kDa