

Datasheet for ABIN7180045

**anti-MAPKAP Kinase 2 antibody (Ser272)****2** Images[Go to Product page](#)

## Overview

Quantity:	100 µL
Target:	MAPKAP Kinase 2 (MAPKAPK2)
Binding Specificity:	Ser272
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This MAPKAP Kinase 2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA

## Product Details

Immunogen:	Synthesized non-phosphopeptide derived from Human MAPKAPK2 around the phosphorylation site of serine 272 (A-I-S(p)-P-G).
Isotype:	IgG
Cross-Reactivity:	Human, Mouse
Purification:	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

## Target Details

Target:	MAPKAP Kinase 2 (MAPKAPK2)
Alternative Name:	MAPKAPK2 ( <a href="#">MAPKAPK2 Products</a> )

## Target Details

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**Background:** 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, HNRNPA0, HSF1, HSP27/HSPB1, KRT18, KRT20, 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, HNRNPA0, 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 HNRNPA0 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.

Zu Y.-L., Biochem. Biophys. Res. Commun. 200-1118-1124(1994).

Stokoe D., Biochem. J. 296:843-849(1993).

Coxon P.Y., Cell. Signal. 15:993-1001(2003).

Aliases: MAP kinase activated protein Kinase 2 antibody, MAP kinase-activated protein kinase 2 antibody, MAPK activated protein kinase 2 antibody, MAPK-activated protein kinase 2 antibody, MAPK2\_HUMAN antibody, MAPKAP K2 antibody, MAPKAP kinase 2 antibody, MAPKAPK 2 antibody, MAPKAPK-2 antibody, MAPKAPK2 antibody, Mitogen activated protein kinase activated protein kinase 2 antibody, MK 2 antibody, MK2 antibody

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**UniProt:** [P49137](#)

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

## Application Details

Application Notes: WB:1:500-1:3000, IHC:1:50-1:100,

Restrictions: For Research Use only

## Handling

Format: Liquid

Buffer: Rabbit IgG in phosphate buffered saline (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.

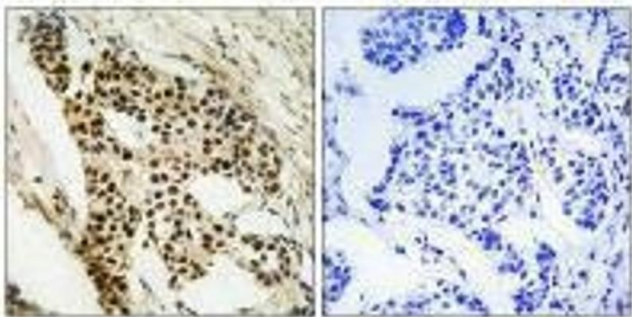
Preservative: Sodium azide

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

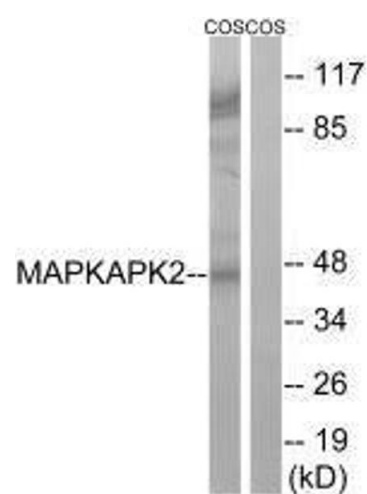
Storage Comment: Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

## Images



### Immunohistochemistry

**Image 1.** Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue using MAPKAPK2 (Ab-272) antibody.



Western Blotting

**Image 2.** Western blot analysis of extracts from COS cells, using MAPKAPK2 (Ab-272) antibody.