Datasheet for ABIN743678

anti-MAPKAP Kinase 2 antibody (pThr222)

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Overview

Quantity:	100 µL
Target:	MAPKAP Kinase 2 (MAPKAPK2)
Binding Specificity:	pThr222
Reactivity:	Mouse, Rat, Monkey
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This MAPKAP Kinase 2 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	KLH conjugated synthetic phosphopeptide derived from human MAPKAPK2 around the phosphorylation site of Thr222
Isotype:	IgG
Cross-Reactivity:	Monkey, Mouse, Rat
Predicted Reactivity:	Human,Dog,Cow,Rabbit
Purification:	Purified by Protein A.

Target Details

Target:	MAPKAP Kinase 2 (MAPKAPK2)

Target Details

Alternative Name:	MAPKAPK2 (MAPKAPK2 Products)
Background:	Synonyms: MK2, MK-2, MAPKAP-K2, MAP kinase-activated protein kinase 2, MAPK-activated protein kinase 2, MAPKAP kinase 2, MAPKAPK-2, MAPKAPK2 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.
Gene ID:	9261
UniProt:	P49137
Pathways:	MAPK Signaling, Neurotrophin Signaling Pathway, Activation of Innate immune Response, Toll-Like Receptors Cascades

Application Details

Application Notes:	WB 1:300-5000 ELISA 1:500-1000 IHC-P 1:200-400 IHC-F 1:100-500

Application Details

	IF(IHC-P) 1:50-200
	IF(IHC-F) 1:50-200
	IF(ICC) 1:50-200

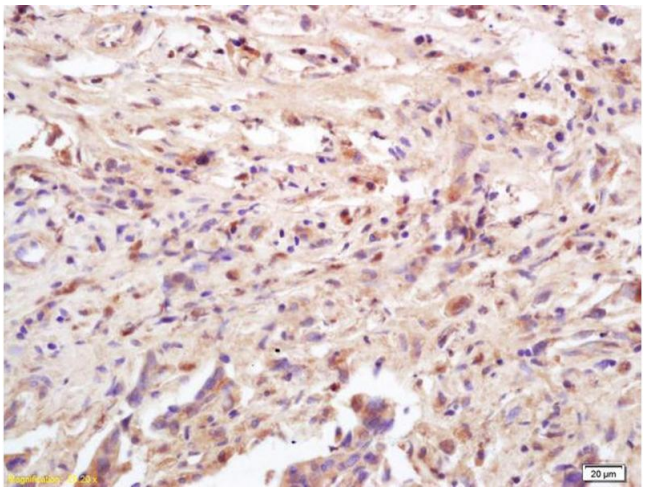
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 µg/µL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

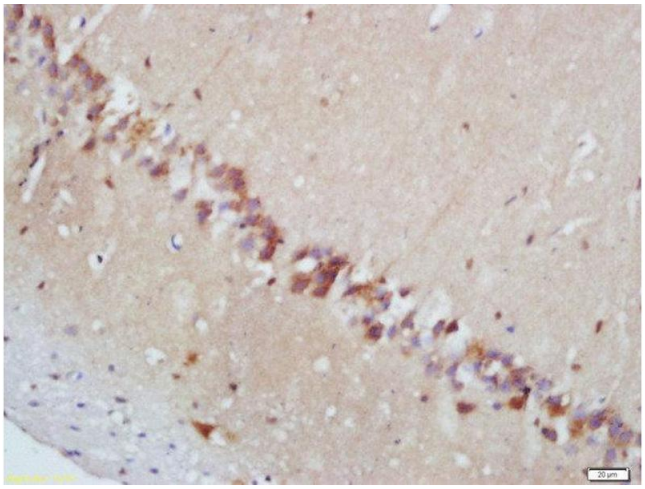
Publications

Product cited in:	Rosenzweig, Djap, Ou, Quinn: "Mechanical injury of bovine cartilage explants induces depth-dependent, transient changes in MAP kinase activity associated with apoptosis." in: **Osteoarthritis and cartilage / OARS, Osteoarthritis Research Society**, Vol. 20, Issue 12, pp. 1591-602, (2012) (PubMed).



Immunohistochemistry

Image 1. Formalin-fixed and paraffin embedded human colon carcinoma labeled with Anti-Phospho-MAPKAPK2 (Thr222) Polyclonal Antibody, Unconjugated (ABIN743678) at 1:200 followed by conjugation to the secondary antibody and DAB staining



Immunohistochemistry (Paraffin-embedded Sections)

Image 2. Formalin-fixed and paraffin embedded mouse brain labeled with Rabbit Anti-MAPKAPK2 (Thr222) Polyclonal Antibody, Unconjugated at 1:200 followed by conjugation to the secondary antibody and DAB staining

