Datasheet for ABIN7180042

anti-MAP3K7 antibody (Ser271)

2 Images

Go to Product page

Overview

Quantity:	100 µL
Target:	MAP3K7
Binding Specificity:	Ser271
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This MAP3K7 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Immunogen:	Synthesized non-phosphopeptide derived from Human MAP2K7 around the phosphorylation site of serine 271 (V-D-S(p)-K-A).
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:	MAP3K7
Alternative Name:	MAP3K7 (MAP3K7 Products)

Target Details

Background:	Background: Serine/threonine kinase which acts as an essential component of the MAP kinase signal transduction pathway. Plays an important role in the cascades of cellular responses evoked by changes in the environment. Mediates signal transduction of TRAF6, various cytokines including interleukin-1 (IL-1), transforming growth factor-beta (TGFB), TGFB-related factors like BMP2 and BMP4, toll-like receptors (TLR), tumor necrosis factor receptor CD40 and B-cell receptor (BCR). Ceramides are also able to activate MAP3K7/TAK1. Once activated, acts as an upstream activator of the MKK/JNK signal transduction cascade and the p38 MAPK signal transduction cascade through the phosphorylation and activation of several MAP kinase kinases like MAP2K1/MEK1, MAP2K3/MKK3, MAP2K6/MKK6 and MAP2K7/MKK7. These MAP2Ks in turn activate p38 MAPKs, c-jun N-terminal kinases (JNKs) and I-kappa-B kinase complex (IKK). Both p38 MAPK and JNK pathways control the transcription factors activator protein-1 (AP-1), while nuclear factor-kappa B is activated by IKK. MAP3K7 activates also IKBKB and MAPK8/JNK1 in response to TRAF6 signaling and mediates BMP2-induced apoptosis. In osmotic stress signaling, plays a major role in the activation of MAPK8/JNK1, but not that of NF-kappa-B. Promotes TRIM5 capsid-specific restriction activity. Sakurai H., Biochem. Biophys. Res. Commun. 243:545-549(1998). Mungall A.J., Nature 425:805-811(2003). The MGC Project Team, Genome Res. 14:2121-2127(2004). Aliases: M3K7_HUMAN antibody, MAP3K 7 antibody, Map3k7 antibody, MEKK7 antibody, Mitogen activated protein kinase kinase kinase 7 antibody, Mitogen-activated protein kinase kinase kinase 7 antibody, TAK1 antibody, TGF beta activated kinase 1 antibody, TGF-beta-activated kinase 1 antibody, TGF1a antibody, Transforming growth factor beta activated kinase 1 antibody, Transforming growth factor-beta-activated kinase 1 antibody
UniProt:	O43318
Pathways:	NF-kappaB Signaling, TCR Signaling, TLR Signaling, Fc-epsilon Receptor Signaling Pathway, Activation of Innate immune Response, Regulation of Leukocyte Mediated Immunity, Positive Regulation of Immune Effector Process, Production of Molecular Mediator of Immune Response, Tube Formation, Toll-Like Receptors Cascades, BCR Signaling, Ubiquitin Proteasome Pathway

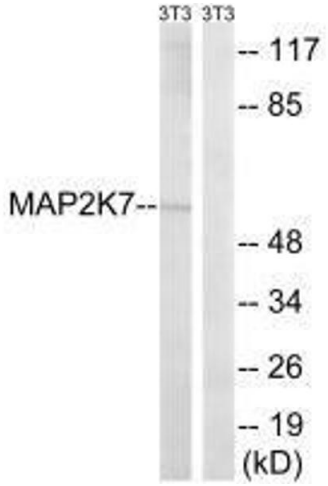
Application Details

Application Notes:	WB:1:500-1:3000,
Restrictions:	For Research Use only

Handling

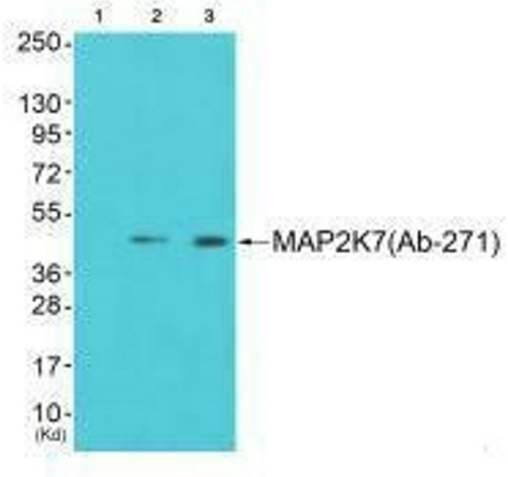
Format:	Liquid
Buffer:	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained 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 analysis of extracts from HeLa cells, using MAP2K7 (Ab-271) antibody.



Western Blotting

Image 2. Western blot analysis of extracts from 293 cells (Lane 2) and cos-7 cells (Lane 3), using MAP2K7 (Ab-271) antiobdy. The lane on the left is treated with synthesized peptide.