Product Datasheet

MAP3K7 (Ab-187) Antibody

Catalog No: #33234

Package Size: #33234-1 50ul #33234-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

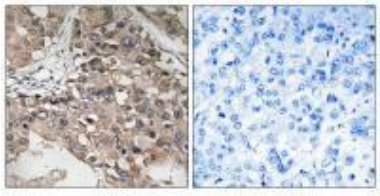
Product Name	MAP3K7 (Ab-187) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Applications	WB IHC
Species Reactivity	Hu
Specificity	The antibody detects endogenous levels of total MAP3K7 protein.
Immunogen Type	Peptide
Immunogen Description	Synthesized non-phosphopeptide derived from human MAP3K7 around the phosphorylation site of threonine 187 (H-M-T(p)-N-N).
Target Name	MAP3K7
Other Names	EC 2.7.11.25; kinase TAK1; M3K7; MAP3K7; Mitogen-activated protein kinase kinase kinase 7
Accession No.	Swiss-Prot: O43318NCBI Gene ID: 6885
Uniprot	O43318
GeneID	6885;
SDS-PAGE MW	70kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

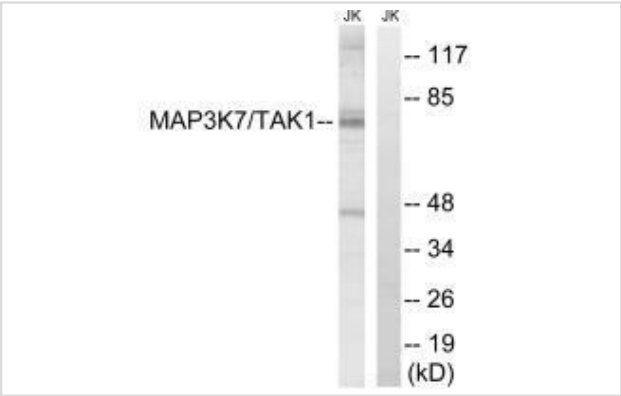
Western blotting: 1:500~1:3000

Immunohistochemistry: 1:50~1:100

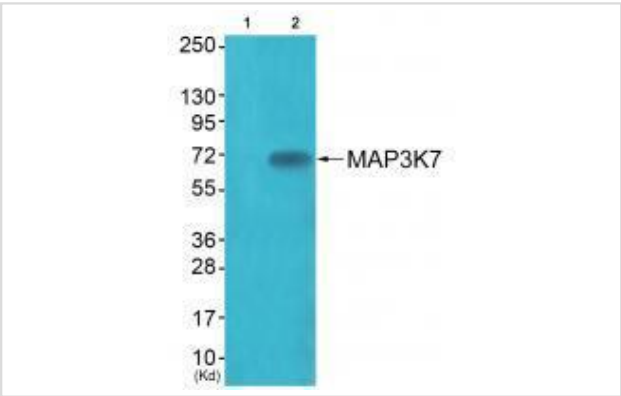
Images



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue using MAP3K7 (Ab-187) antibody #33234.



Western blot analysis of extracts from Jurkat cells, treated with heat shock, using MAP3K7 (Ab-187) antibody #33234.



Western blot analysis of extracts from JK cells (Lane 2), using MAP3K7 (Ab-187) antiobdy #33234. The lane on the left is treated with synthesized peptide.

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).

Note: This product is for in vitro research use only