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# Phospho-MEK6(S202) Antibody Blocking peptide

**Synthetic peptide**
**Catalog # BP3162a**

## Specification

### Phospho-MEK6(S202) Antibody Blocking peptide - Product Information

Primary Accession P52564

### Phospho-MEK6(S202) Antibody Blocking peptide - Additional Information

**Gene ID** 5608

**Other Names**
Dual specificity mitogen-activated protein kinase kinase 6, MAP kinase kinase 6, MAPKK 6, MAPK/ERK kinase 6, MEK 6, Stress-activated protein kinase kinase 3, SAPK kinase 3, SAPKK-3, SAPKK3, MAP2K6, MEK6, MKK6, PRKMK6, SKK3

**Target/Specificity**
The synthetic peptide sequence used to generate the antibody <a href=/product/products/AP3162a>AP3162a</a> was selected from the 252-265 <CR>region of human Phospho-MEK6-S202. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### Phospho-MEK6(S202) Antibody Blocking peptide - Protein Information

**Name** MAP2K6

**Synonyms** MEK6, MKK6, PRKMK6, SKK3

**Function**
Dual specificity protein kinase which acts as an essential component of the MAP kinase signal transduction pathway. With MAP3K3/MKK3, catalyzes the concomitant phosphorylation of a threonine and a tyrosine residue in the MAP kinases p38 MAPK11, MAPK12, MAPK13 and MAPK14 and plays an important role in the regulation of cellular responses to cytokines and all kinds of stresses. Especially, MAP2K3/MKK3 and MAP2K6/MKK6 are both essential for the activation of MAPK11 and MAPK13 induced by environmental stress, whereas MAP2K6/MKK6 is the major MAPK11 activator in response to TNF. MAP2K6/MKK6 also phosphorylates and activates PAK6. The p38 MAP kinase signal transduction pathway leads to direct activation of transcription factors.

Nuclear targets of p38 MAP kinase include the transcription factors ATF2 and ELK1. Within the p38 MAPK signal transduction pathway, MAP3K6/MKK6 mediates phosphorylation of STAT4 through MAPK14 activation, and is therefore required for STAT4 activation and STAT4- regulated gene expression in response to IL-12 stimulation. The pathway is also crucial for IL-6-induced SOCS3 expression and down-regulation of IL-6-mediated gene induction; and for IFNG-dependent gene transcription. Has a role in osteoclast differentiation through NF- kappa-B transactivation by TNFSF11, and in endochondral ossification and since SOX9 is another likely downstream target of the p38 MAPK pathway. MAP2K6/MKK6 mediates apoptotic cell death in thymocytes. Acts also as a regulator for melanocytes dendricity, through the modulation of Rho family GTPases.

**Cellular Location**
Nucleus. Cytoplasm. Cytoplasm, cytoskeleton. Note=Binds to microtubules

**Tissue Location**
Isoform 2 is only expressed in skeletal muscle. Isoform 1 is expressed in skeletal muscle, heart, and in lesser extent in liver or pancreas.

## Phospho-MEK6(S202) Antibody Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

## Phospho-MEK6(S202) Antibody Blocking peptide - Images

## Phospho-MEK6(S202) Antibody Blocking peptide - Background

This gene encodes a dual specificity protein kinase that belongs to the Ser/Thr protein kinase family. This kinase is a direct activator of MAP kinases in response to various environmental stresses or mitogenic stimuli. It has been shown to activate MAPK8/JNK1, MAPK9/JNK2, and MAPK14/p38, but not MAPK1/ERK2 or MAPK3/ERK3. This kinase is phosphorylated, and thus activated by MAP3K1/MEKK. The knockout studies in mice suggested the roles of this kinase in mediating survival signal in T cell development, as well as in the organogenesis of liver.

## Phospho-MEK6(S202) Antibody Blocking peptide - References

Gensch, E., et al., J. Biol. Chem. 279(37):39085-39093 (2004).Woo, J.H., et al., Oncogene 23(10):1845-1853 (2004).Dirsch, V.M., et al., Oncogene 23(8):1586-1593 (2004).Ho, D.T., et al., J. Biol. Chem. 278(35):32662-32672 (2003).Sundarrajan, M., et al., Arthritis Rheum. 48(9):2450-2460 (2003).