

#### Phospho-MAP2K2(S226) Antibody Blocking peptide Synthetic peptide Catalog # BP3452a

## Specification

## Phospho-MAP2K2(S226) Antibody Blocking peptide - Product Information

Primary Accession

<u>P36507</u>

# Phospho-MAP2K2(S226) Antibody Blocking peptide - Additional Information

Gene ID 5605

**Other Names** 

Dual specificity mitogen-activated protein kinase kinase 2, MAP kinase kinase 2, MAPKK 2, ERK activator kinase 2, MAPK/ERK kinase 2, MEK 2, MAP2K2, MEK2, MKK2, PRKMK2

#### Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/products/AP3452a>AP3452a</a> was selected from the region of human Phospho-MAP2K2-S226. 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-MAP2K2(S226) Antibody Blocking peptide - Protein Information

Name MAP2K2

Synonyms MEK2, MKK2, PRKMK2

#### Function

Catalyzes the concomitant phosphorylation of a threonine and a tyrosine residue in a Thr-Glu-Tyr sequence located in MAP kinases. Activates the ERK1 and ERK2 MAP kinases (By similarity). Activates BRAF in a KSR1 or KSR2-dependent manner; by binding to KSR1 or KSR2 releases the inhibitory intramolecular interaction between KSR1 or KSR2 protein kinase and N-terminal domains which promotes KSR1 or KSR2-BRAF dimerization and BRAF activation (PubMed:<a href="http://www.uniprot.org/citations/29433126" target="\_blank">>29433126</a>).

#### **Cellular Location**

Cytoplasm. Membrane; Peripheral membrane protein. Note=Membrane localization is probably



regulated by its interaction with KSR1.

## Phospho-MAP2K2(S226) Antibody Blocking peptide - Protocols

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

#### <u>Blocking Peptides</u>

## Phospho-MAP2K2(S226) Antibody Blocking peptide - Images

## Phospho-MAP2K2(S226) Antibody Blocking peptide - Background

MAP2K2 is a dual specificity protein kinase that belongs to the MAP kinase kinase family. This kinase is known to play a critical role in mitogen growth factor signal transduction. It phosphorylates and thus activates MAPK1/ERK2 and MAPK2/ERK3. The activation of this kinase itself is dependent on the Ser/Thr phosphorylation by MAP kinase kinase kinases. The inhibition or degradation of this kinase is found to be involved in the pathogenesis of Yersinia and anthrax.

## Phospho-MAP2K2(S226) Antibody Blocking peptide - References

Burroughs, K.D., et al., Mol. Cancer Res. 1(4):312-322 (2003).Tran, H., et al., Mol. Cell. Biol. 23(20):7177-7188 (2003).Li, S.P., et al., Cancer Res. 63(13):3473-3477 (2003).Li, Y., et al., J. Biol. Chem. 278(16):13663-13671 (2003).Liu, X., et al., J. Biol. Chem. 277(42):39312-39319 (2002).