

**Phospho-MAP2K5(S142) Antibody Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP3343a****Specification**

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**Phospho-MAP2K5(S142) Antibody Blocking peptide - Product Information**Primary Accession [Q13163](#)**Phospho-MAP2K5(S142) Antibody Blocking peptide - Additional Information****Gene ID** 5607**Other Names**

Dual specificity mitogen-activated protein kinase kinase 5, MAP kinase kinase 5, MAPKK 5, MAPK/ERK kinase 5, MEK 5, MAP2K5, MEK5, MKK5, PRKMK5

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP3343a](/product/products/AP3343a) was selected from the region of human Phospho-MAP2K5-S142. 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-MAP2K5(S142) Antibody Blocking peptide - Protein Information****Name** MAP2K5**Synonyms** MEK5, MKK5, PRKMK5**Function**

Acts as a scaffold for the formation of a ternary MAP3K2/MAP3K3-MAP3K5-MAPK7 signaling complex. Activation of this pathway appears to play a critical role in protecting cells from stress-induced apoptosis, neuronal survival and cardiac development and angiogenesis. As part of the MAPK/ERK signaling pathway, acts as a negative regulator of apoptosis in cardiomyocytes via promotion of STUB1/CHIP-mediated ubiquitination and degradation of ICER-type isoforms of CREM (By similarity).

**Tissue Location**

Expressed in many adult tissues. Abundant in heart and skeletal muscle

**Phospho-MAP2K5(S142) Antibody Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

**Phospho-MAP2K5(S142) Antibody Blocking peptide - Images****Phospho-MAP2K5(S142) Antibody Blocking peptide - Background**

MAP2K5 is a dual specificity protein kinase that belongs to the MAP kinase kinase family. This kinase specifically interacts with and activates MAPK7/ERK5. This kinase itself can be phosphorylated and activated by MAP3K3/MEKK3, as well as by atypical protein kinase C isoforms (aPKCs). The signal cascade mediated by this kinase is involved in growth factor stimulated cell proliferation and muscle cell differentiation.

**Phospho-MAP2K5(S142) Antibody Blocking peptide - References**

Cameron, S.J., et al., J. Biol. Chem. 279(2):1506-1512 (2004). Mehta, P.B., et al., Oncogene 22(9):1381-1389 (2003). Weldon, C.B., et al., Surgery 132(2):293-301 (2002). Dinev, D., et al., EMBO Rep. 2(9):829-834 (2001). Nicol, R.L., et al., EMBO J. 20(11):2757-2767 (2001).