

**ZPK Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP7214a****Specification**

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**ZPK Antibody (C-term) Blocking Peptide - Product Information**Primary Accession [Q12852](#)**ZPK Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 7786**Other Names**

Mitogen-activated protein kinase kinase kinase 12, Dual leucine zipper bearing kinase, DLK, Leucine-zipper protein kinase, ZPK, MAPK-upstream kinase, MUK, Mixed lineage kinase, MAP3K12, ZPK

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP7214a](/product/products/AP7214a) was selected from the C-term region of human ZPK. 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.

**ZPK Antibody (C-term) Blocking Peptide - Protein Information****Name** MAP3K12**Synonyms** ZPK**Function**

Part of a non-canonical MAPK signaling pathway (PubMed: [28111074](http://www.uniprot.org/citations/28111074)). Activated by APOE, enhances the AP-1-mediated transcription of APP, via a MAP kinase signal transduction pathway composed of MAP2K7 and MAPK1/ERK2 and MAPK3/ERK1 (PubMed: [28111074](http://www.uniprot.org/citations/28111074)). May be an activator of the JNK/SAPK pathway.

**Cellular Location**

Cytoplasm {ECO:0000250|UniProtKB:Q60700}. Cell membrane {ECO:0000250|UniProtKB:Q60700}. Note=Behaves essentially as an integral membrane protein. {ECO:0000250|UniProtKB:Q60700}

**Tissue Location**

Highly expressed in brain and kidney.

**ZPK Antibody (C-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**ZPK Antibody (C-term) Blocking Peptide - Images****ZPK Antibody (C-term) Blocking Peptide - Background**

ZPK, a member of the Ser/Thr protein kinase family (MAP kinase kinase kinase subfamily), may be an activator of the JNK/SAPK pathway. It phosphorylates beta-casein, histone 1 and myelin basic protein in vitro, and interacts with MBIP through the leucine-zipper motif. ZPK is highly expressed in brain and kidney. It is phosphorylated in cytosol under basal conditions and dephosphorylated when membrane-associated.

**ZPK Antibody (C-term) Blocking Peptide - References**

Fukuyama, K., et al., J. Biol. Chem. 275(28):21247-21254 (2000). Reddy, U.R., et al., Biochem. Biophys. Res. Commun. 202(1):613-620 (1994).