

**DUSP10 Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP8453a****Specification**

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**DUSP10 Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [Q9Y6W6](#)**DUSP10 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 11221**Other Names**

Dual specificity protein phosphatase 10, Mitogen-activated protein kinase phosphatase 5, MAP kinase phosphatase 5, MKP-5, DUSP10, MKP5

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP8453a](/product/products/AP8453a) was selected from the N-term region of human DUSP10. 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.

**DUSP10 Antibody (N-term) Blocking Peptide - Protein Information****Name** DUSP10**Synonyms** MKP5**Function**

Protein phosphatase involved in the inactivation of MAP kinases. Has a specificity for the MAPK11/MAPK12/MAPK13/MAPK14 subfamily. It preferably dephosphorylates p38.

**Cellular Location**

Cytoplasm. Nucleus.

**Tissue Location**

Expressed in keratinocytes (at protein level) (PubMed:29043977). Detected in brain (PubMed:16806267)

## **DUSP10 Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

## **DUSP10 Antibody (N-term) Blocking Peptide - Images**

## **DUSP10 Antibody (N-term) Blocking Peptide - Background**

Dual specificity protein phosphatases inactivate their target kinases by dephosphorylating both the phosphoserine/threonine and phosphotyrosine residues. They negatively regulate members of the MAPK superfamily (MAPK/ERK, SAPK/JNK, p38), which is associated with cellular proliferation and differentiation. Different members of this family of dual specificity phosphatases show distinct substrate specificities for MAPKs, different tissue distribution and subcellular localization, and different modes of inducibility of their expression by extracellular stimuli. DUSP10 binds to and inactivates p38 and SAPK/JNK, but not MAPK/ERK. Its subcellular localization is unique; it is evenly distributed in both the cytoplasm and the nucleus. The protein is widely expressed in various tissues and organs, and its expression is elevated by stress stimuli.

## **DUSP10 Antibody (N-term) Blocking Peptide - References**

Tanoue, T., et al., J. Biol. Chem. 274(28):19949-19956 (1999).Theodosiou, A., et al., Oncogene 18(50):6981-6988 (1999).Martell, K.J., et al., Mol. Cells 8(1):2-11 (1998).Masuda, K., et al., Cytogenet. Cell Genet. 90 (1-2), 71-74 (2000) (): ().