

**DUSP7 Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP8450a****Specification**

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**DUSP7 Antibody (N-term) Blocking Peptide - Product Information**

Primary Accession [O16829](#)  
Other Accession [NP\\_001938](#)

**DUSP7 Antibody (N-term) Blocking Peptide - Additional Information**

**Gene ID** 1849

**Other Names**

Dual specificity protein phosphatase 7, Dual specificity protein phosphatase PYST2, DUSP7, PYST2

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP8450a](/product/products/AP8450a) was selected from the N-term region of human DUSP7. 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.

**DUSP7 Antibody (N-term) Blocking Peptide - Protein Information**

**Name** DUSP7 ([HGNC:3073](#))

**Function**

Dual specificity protein phosphatase (PubMed: [9788880](http://www.uniprot.org/citations/9788880)). Shows high activity towards MAPK1/ERK2 (PubMed: [9788880](http://www.uniprot.org/citations/9788880)). Also has lower activity towards MAPK14 and MAPK8 (PubMed: [9788880](http://www.uniprot.org/citations/9788880)). In arrested oocytes, plays a role in meiotic resumption (By similarity). Promotes nuclear envelope breakdown and activation of the CDK1/Cyclin-B complex in oocytes, probably by dephosphorylating and inactivating the conventional protein kinase C (cPKC) isozyme PRKCB (By similarity). May also inactivate PRKCA and/or PRKCG (By similarity). Also important in oocytes for normal chromosome alignment on the metaphase plate and progression to anaphase, where it might regulate activity of the spindle-assembly checkpoint (SAC) complex (By similarity).

**Cellular Location**

Cytoplasm.

**Tissue Location**

Strongly expressed in liver (PubMed:8670865). Expressed at significantly higher levels in malignant hematopoietic cells than in corresponding non-malignant cells (PubMed:14576828)

**DUSP7 Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**DUSP7 Antibody (N-term) Blocking Peptide - Images****DUSP7 Antibody (N-term) Blocking Peptide - Background**

DUSP7 is a member of the dual specificity protein phosphatase subfamily. These phosphatases inactivate their target kinases by dephosphorylating both the phosphoserine/threonine and phosphotyrosine residues. They negatively regulate members of the mitogen-activated protein (MAP)kinase superfamily (MAPK/ERK, SAPK/JNK, p38), which are associated with cellular proliferation and differentiation. Different members of the family of dual specificity phosphatases show distinct substrate specificities for various MAP kinases, different tissue distribution and subcellular localization, and different modes of inducibility of their expression by extracellular stimuli.

**DUSP7 Antibody (N-term) Blocking Peptide - References**

Immunol. Lett. 92 (1-2), 149-156 (2004)Oncogene 22 (48), 7649-7660 (2003)Meth. Enzymol. 366, 103-113 (2003)J. Cell. Sci. 111 (PT 22), 3389-3399 (1998)EMBO J. 15 (14), 3621-3632 (1996)