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DUSP7 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP8450b

Specification

DUSP7 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession	Q16829
Other Accession	NP_001938

DUSP7 Antibody (C-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 AP8450b was selected from the C-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 (C-term) Blocking Peptide - Protein Information

Name DUSP7 (HGNC:3073)

Function
Dual specificity protein phosphatase (PubMed:9788880). Shows high activity towards MAPK1/ERK2 (PubMed:9788880). Also has lower activity towards MAPK14 and MAPK8 (PubMed: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).

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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 (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

DUSP7 Antibody (C-term) Blocking Peptide - Images

DUSP7 Antibody (C-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 associatedwith 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 (C-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)