

**DUSP7 Antibody (N-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP8450a****Specification**

---

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

Application	IHC-P, WB,E
Primary Accession	<a href="#">Q16829</a>
Other Accession	<a href="#">Q91Z46</a> , <a href="#">NP_001938</a> , <a href="#">Q63340</a>
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	44957
Antigen Region	96-127

**DUSP7 Antibody (N-term) - Additional Information****Gene ID** 1849**Other Names**

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

**Target/Specificity**

This DUSP7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 96-127 amino acids from the N-terminal region of human DUSP7.

**Dilution**

IHC-P~~1:50~100

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

DUSP7 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**DUSP7 Antibody (N-term) - 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).

#### Cellular Location

Cytoplasm.

#### Tissue Location

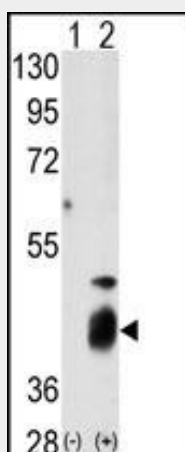
Strongly expressed in liver (PubMed:8670865). Expressed at significantly higher levels in malignant hematopoietic cells than in corresponding non-malignant cells (PubMed:14576828)

### DUSP7 Antibody (N-term) - Protocols

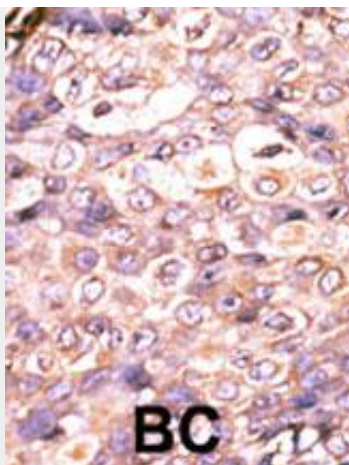
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### DUSP7 Antibody (N-term) - Images



Western blot analysis of DUSP7 (arrow) using DUSP7 Antibody (N-term) (RB05816). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the DUSP7 gene (Lane 2) (Origene Technologies).



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

#### **DUSP7 Antibody (N-term) - 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) - 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)

#### **DUSP7 Antibody (N-term) - Citations**

- [Structure-Activity Relationship of SPOP Inhibitors against Kidney Cancer](#)