

**DUSP1 Antibody (N-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP8470a**

**Specification**

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**DUSP1 Antibody (N-term) - Product Information**

Application	IF, WB,E
Primary Accession	<a href="#">P28562</a>
Other Accession	<a href="#">P28563</a>
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	46-76

**DUSP1 Antibody (N-term) - Additional Information**

**Gene ID** 1843

**Other Names**

Dual specificity protein phosphatase 1, Dual specificity protein phosphatase hVH1, Mitogen-activated protein kinase phosphatase 1, MAP kinase phosphatase 1, MKP-1, Protein-tyrosine phosphatase CL100, DUSP1, CL100, MKP1, PTPN10, VH1

**Target/Specificity**

This DUSP1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 46-76 amino acids from the N-terminal region of human DUSP1.

**Dilution**

IF~~1:10~50  
WB~~1:1000

**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**

DUSP1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**DUSP1 Antibody (N-term) - Protein Information**

**Name** DUSP1 ([HGNC:3064](#))

**Function** Dual specificity phosphatase that dephosphorylates MAP kinase MAPK1/ERK2 on both 'Thr-183' and 'Tyr-185', regulating its activity during the meiotic cell cycle.

**Cellular Location**

Nucleus {ECO:0000250|UniProtKB:Q91790}.

**Tissue Location**

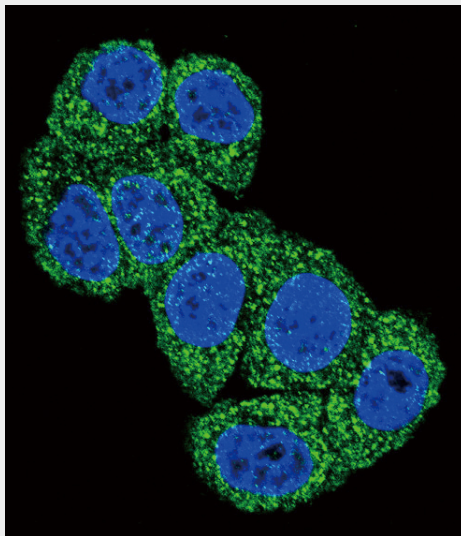
Expressed at high levels in the lung, liver placenta and pancreas. Moderate levels seen in the heart and skeletal muscle. Lower levels found in the brain and kidney

**DUSP1 Antibody (N-term) - Protocols**

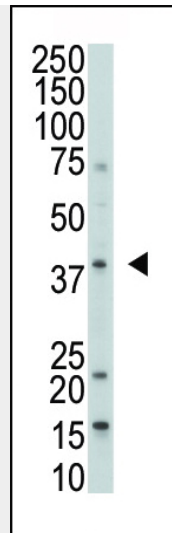
Provided below are standard protocols that you may find useful for product applications.

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

**DUSP1 Antibody (N-term) - Images**



Confocal immunofluorescent analysis of DUSP1 Antibody (N-term)(Cat#AP8470a) with HeLa cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).



The anti-DUSP1 Pab (Cat. #AP8470a) is used in Western blot to detect DUSP1 in 293 cell lysate.

#### **DUSP1 Antibody (N-term) - Background**

The expression of DUSP1 gene is induced in human skin fibroblasts by oxidative/heat stress and growth factors. It specifies a protein with structural features similar to members of the non-receptor-type protein-tyrosine phosphatase family, and which has significant amino-acid sequence similarity to a Tyr/Ser-protein phosphatase encoded by the late gene H1 of vaccinia virus. The bacterially expressed and purified DUSP1 protein has intrinsic phosphatase activity, and specifically inactivates mitogen-activated protein (MAP) kinase in vitro by the concomitant dephosphorylation of both its phosphothreonine and phosphotyrosine residues. Furthermore, it suppresses the activation of MAP kinase by oncogenic ras in extracts of *Xenopus* oocytes. Thus, DUSP1 may play an important role in the human cellular response to environmental stress as well as in the negative regulation of cellular proliferation.

#### **DUSP1 Antibody (N-term) - References**

- Wu,W., et al., J. Biol. Chem. 280 (6), 4117-4124 (2005).
- Small,G.W., et al., Mol. Pharmacol. 66 (6), 1478-1490 (2004).
- Chandrasekharan,U.M., et al., J. Biol. Chem. 279 (45), 46678-46685 (2004).
- Mizuno,R., et al., J. Urol. 172 (2), 723-727 (2004).
- Vicent,S., et al., Clin. Cancer Res. 10 (11), 3639-3649 (2004).