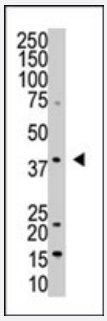
DUSP1 polyclonal antibody

Catalog # PAB4162 Size 100 uL

Applications



Western Blot (Cell lysate)

The DUSP1 polyclonal antibody (Cat # PAB4162) is used in Western blot to detect DUSP1 in 293 cell lysate.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of DUSP1.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to amino acids 318-367 of human DUSP1.
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Protein G purification
Recommend Usage	ELISA (1:20000) Immunohistochemistry (1:100) Western Blot (1:500-2000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (50% glycerol, 0.5% BSA, 0.02% sodium azide).
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.

Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

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- Immunohistochemistry

- Enzyme-linked Immunoabsorbent Assay

Gene Info — DUSP1

Entrez GeneID	1843
Protein Accession#	P28562
Gene Name	DUSP1
Gene Alias	CL100, HVH1, MKP-1, MKP1, PTPN10
Gene Description	dual specificity phosphatase 1
Omim ID	600714
Gene Ontology	Hyperlink
Gene Summary	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-recepto r-type protein-tyrosine phosphatase family, and which has significant amino-acid sequence simila rity to a Tyr/Ser-protein phosphatase encoded by the late gene H1 of vaccinia virus. The bacteriall y expressed and purified DUSP1 protein has intrinsic phosphatase activity, and specifically inacti vates mitogen-activated protein (MAP) kinase in vitro by the concomitant dephosphorylation of bo th 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 impo rtant role in the human cellular response to environmental stress as well as in the negative regulati on of cellular proliferation. [provided by RefSeq
Other Designations	serine/threonine specific protein phosphatase

Publication Reference

- Glucocorticoid receptor-induced MAPK phosphatase-1 (MPK-1) expression inhibits paclitaxel-associated MAPK activation and contributes to breast cancer cell survival.

  Wu W, Pew T, Zou M, Pang D, Conzen SD.

  The Journal of Biological Chemistry 2005 Feb; 280(6):4117.

  Application: WB, Human, MDA-MB-231 cells

- Evidence that mitogen-activated protein kinase phosphatase-1 induction by proteasome inhibitors plays an antiapoptotic role.

  Small GW, Shi YY, Edmund NA, Somasundaram S, Moore DT, Orlowski RZ.

  Molecular Pharmacology 2004 Dec; 66(6):1478.

  Application: IHC, WB, Human, Mouse, BT-474 cells, Mouse tumors

- Role of CL-100, a dual specificity phosphatase, in thrombin-induced endothelial cell activation.

  Chandrasekharan UM, Yang L, Walters A, Howe P, DiCorleto PE.

  The Journal of Biological Chemistry 2004 Nov; 279(45):46678.

  Application: IP, Human, HUVECs

Pathway

- MAPK signaling pathway

Disease

- Arthritis
- Asthma
- Cardiovascular Diseases
- Diabetes Mellitus
- Edema
- Genetic Predisposition to Disease
- Kidney Failure
- Lung Neoplasms

- Multiple Sclerosis