

DUSP1 Rabbit mAb

Catalog No: #49296

Package Size: #49296-1 50ul #49296-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

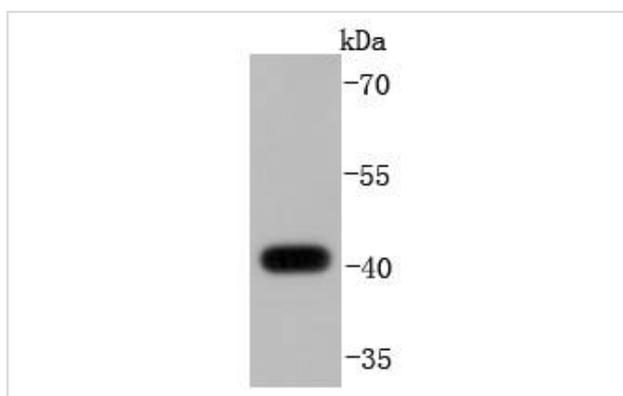
Description

Product Name	DUSP1 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	JJ0930
Purification	ProA affinity purified
Applications	WB;IHC;IP;FC;ICC/IF
Species Reactivity	Hu;Ms;Rt
Immunogen Description	recombinant protein
Conjugates	Unconjugated
Other Names	CL 100 antibody CL100 antibody Dual Specificity Phosphatase 1 antibody Dual specificity protein phosphatase 1 antibody Dual specificity protein phosphatase hVH1 antibody DUS1_HUMAN antibody DUSP 1 antibody Dusp1 antibody HVH1 antibody MAP kinase phosphatase 1 antibody Mitogen-activated protein kinase phosphatase 1 antibody MKP-1 antibody MKP1 antibody Protein tyrosine phosphatase CL100 antibody Protein-tyrosine phosphatase CL100 antibody PTPN10 antibody Serine/threonine specific protein phosphatase antibody VH1 antibody
Accession No.	Swiss-Prot#:P28562
Calculated MW	40 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

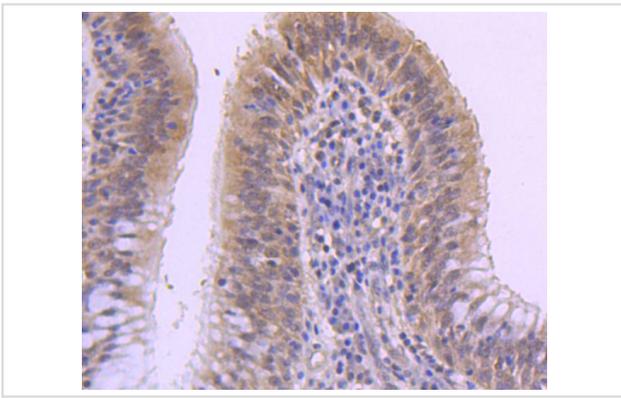
Application Details

WB: 1:1,000 IHC: 1:50-1:200 FC: 1:50-1:100 ICC/IF 1:50-1:200

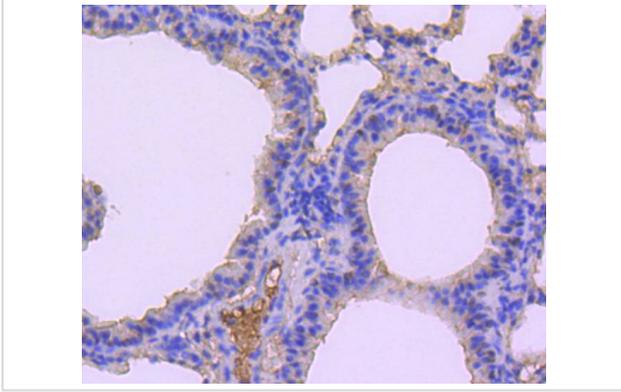
Images



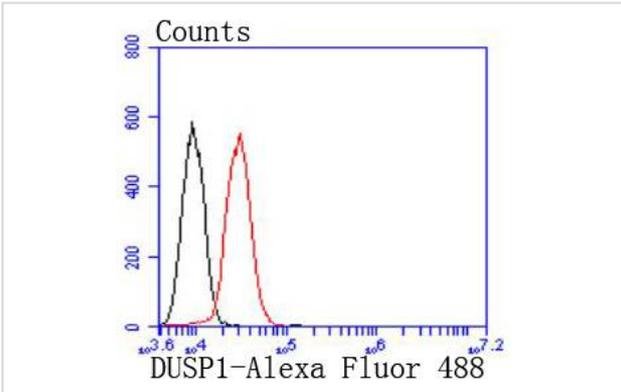
Western blot analysis of DUSP1 on mouse spleen lysates using anti-DUSP1 antibody at 1/1,000 dilution.



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue using anti-DUSP1 antibody. Counter stained with hematoxylin.



Immunohistochemical analysis of paraffin-embedded mouse lung tissue using anti-DUSP1 antibody. Counter stained with hematoxylin.



Flow cytometric analysis of HepG2 cells with DUSP1 antibody at 1/50 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody

Background

A key element in the pathway involved in the transduction of signals from activated protein-tyrosine kinase transmembrane receptors has been identified as the family of mitogen-activated protein kinases (MAP kinases). The most well known of these Ser/Thr kinases are ERK 1 and ERK 2. Mitogenic stimulation of cells triggers the activation of MAP kinases through phosphorylation of both tyrosyl (Y185) and threonyl (T183) residues. Phosphorylation of the T183 and Y185 ERK regulatory site is mediated by MAP kinase (MEK), which in turn is regulated by the proto-oncogene product Raf. Two highly related phosphatases, designated MKP-1 and MKP-2, exhibit 59% sequence identity at the amino acid level and oppose the action of MEK by downregulating the kinase activity of ERK 1 and ERK 2. MAP kinase phosphatase-1 and -2 proteins function by dephosphorylating ERK 1 and ERK 2 at their T-E-Y regulatory motif. An additional phosphatase encoded by the DUSP2 gene, designated PAC-1, also functions to downregulate ERK 1 and ERK 2 kinase activity. PAC-1 is a nuclear protein whose expression is strongly induced in response to mitogen.

References

1. Szelenyi ER & Urso ML Time-course analysis of injured skeletal muscle suggests a critical involvement of ERK1/2 signaling in the acute inflammatory response. *Muscle Nerve* 45:552-61 (2012).
2. Asrih M et al. Role of ERK1/2 activation in microtubule stabilization and glucose transport in cardiomyocytes. *Am J Physiol Endocrinol Metab* 301:E836-43 (2011).

Note: This product is for in vitro research use only and is not intended for use in humans or animals.