

MKP-1 (phospho Ser359) Polyclonal Antibody

Catalog No: YP1010

Reactivity: Human; Rat; Mouse;

Applications: IHC;IF;ELISA

Target: MKP-1

Fields: >>MAPK signaling pathway;>>Serotonergic synapse;>>Parkinson

disease;>>Fluid shear stress and atherosclerosis

Gene Name: DUSP1

Protein Name: Dual specificity protein phosphatase 1

P28562

P28563

Human Gene Id: 1843

Human Swiss Prot

No:

Mouse Swiss Prot

No:

Immunogen: The antiserum was produced against synthesized peptide derived from human

MKP1 around the phosphorylation site of Ser359. AA range:318-367

Specificity: Phospho-MKP-1 (S359) Polyclonal Antibody detects endogenous levels of

MKP-1 protein only when phosphorylated at S359.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

1/3



Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 39kD

Cell Pathway : MAPK_ERK_Growth;MAPK_G_Protein;

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 proliferati

Function: catalytic activity:A phosphoprotein + H(2)O = a protein + phosphate.,catalytic

activity:Protein tyrosine phosphate + H(2)O = protein tyrosine +

phosphate.,function:Dual specificity phosphatase that dephosphorylates MAP kinase ERK2 on both 'Thr-183' and 'Tyr-185'.,induction:By oxidative stress and heat shock.,similarity:Belongs to the protein-tyrosine phosphatase family. Non-receptor class dual specificity subfamily.,similarity:Contains 1 rhodanese domain.,similarity:Contains 1 tyrosine-protein phosphatase domain.,tissue specificity: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.,

Subcellular Location:

Nucleus.

Expression: Expressed at high levels in the lung, liver placenta and pancreas. Moderate

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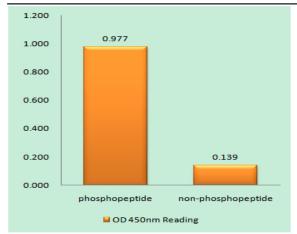
kidney.

Sort : 9660

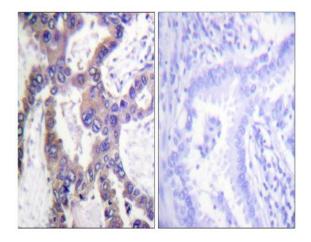
No2: 2857S

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Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using MKP1 (Phospho-Ser359) Antibody



Immunohistochemistry analysis of paraffin-embedded human lung carcinoma, using MKP1 (Phospho-Ser359) Antibody. The picture on the right is blocked with the phospho peptide.