Product Name: MKP-1 Rabbit Polyclonal Antibody
Catalog #: APRab13931

Summary

Production Name	MKP-1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IHC,WB,
Reactivity	Human,Rat,Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	DUSP1
Alternative Names	DUSP1; CL100; MKP1; PTPN10; VH1; 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
Gene ID	1843.0
SwissProt ID	P28562.The antiserum was produced against synthesized peptide derived from human MKP1. AA range:318-367

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000..
Molecular Weight	39kD

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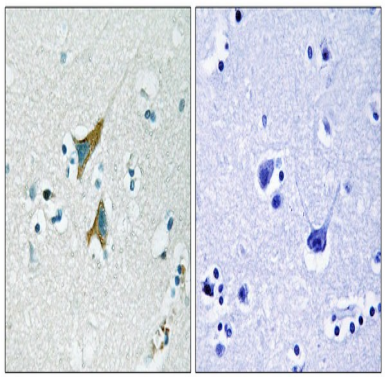
Background

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 proliferaticatalytic 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.,

Research Area

MAPK_ERK_Growth;MAPK_G_Protein;

Image Data



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using MKP1 Antibody. The picture on the right is blocked with the synthesized peptide.

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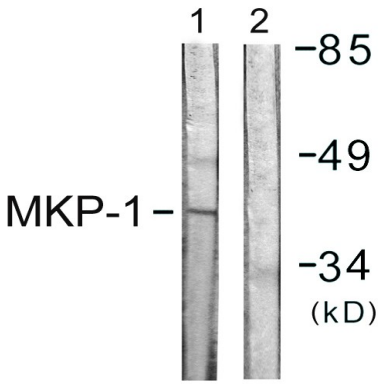
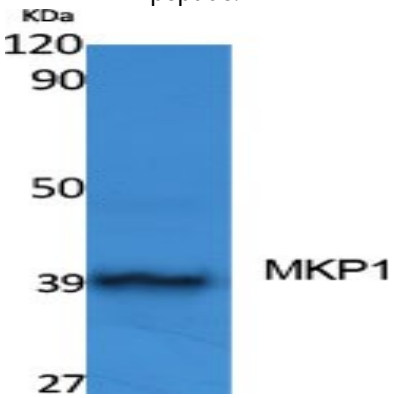
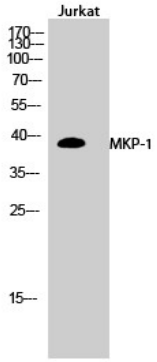


Western blot analysis of lysates from Jurkat cells, using MKP1 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using MKP-1 Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit （SC-003,Inventbiotech,MN,USA）.



Western Blot analysis of Jurkat cells using MKP-1 Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit （SC-003,Inventbiotech,MN,USA）.

Note

For research use only.