



# MKP-1/2 (phospho Ser296/318) rabbit pAb

Cat No.:ES1498

For research use only

## Overview

<b>Product Name</b>	MKP-1/2 (phospho Ser296/318) rabbit pAb
<b>Host species</b>	Rabbit
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Species Cross-Reactivity</b>	Human;Mouse;Rat
<b>Recommended dilutions</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications.
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human MKP-1/2 around the phosphorylation site of Ser296/318. AA range:261-310
<b>Specificity</b>	Phospho-MKP-1/2 (S296/318) Polyclonal Antibody detects endogenous levels of MKP-1/2 protein only when phosphorylated at S296/318.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Storage</b>	Store at -20°C. Avoid repeated freeze-thaw cycles.
<b>Protein Name</b>	Dual specificity protein phosphatase 1/4
<b>Gene Name</b>	DUSP1/4
<b>Cellular localization</b>	Nucleus .
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Clonality</b>	Polyclonal
<b>Concentration</b>	1 mg/ml
<b>Observed band</b>	45kD
<b>Human Gene ID</b>	1843/1846
<b>Human Swiss-Prot Number</b>	P28562/Q13115
<b>Alternative Names</b>	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; DUSP4;

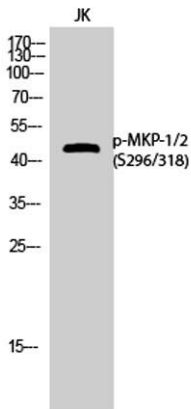
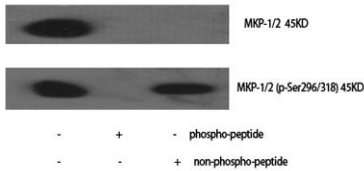




### Background

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

Western Blot analysis of various cells using Phospho-MKP-1/2 (S296/318) Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA).

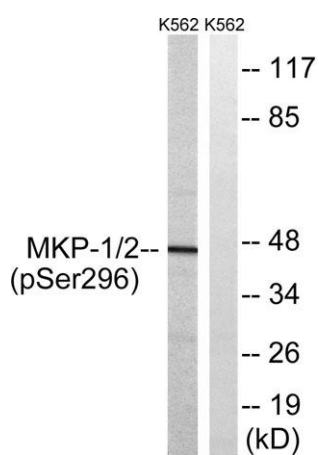
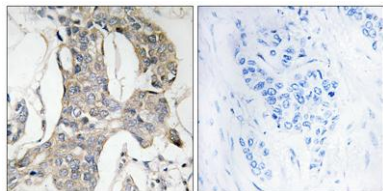


Western Blot analysis of JK cells using Phospho-MKP-1/2 (S296/318) Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA).





Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using MKP-1/2 (Phospho-Ser296/318) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from K562 cells treated with heat shock , using MKP-1/2 (Phospho-Ser296/318) Antibody. The lane on the right is blocked with the phospho peptide.

