

### Summary

Production Name	MKP-1/2 (phospho Ser296/318) Rabbit Polyclonal Antibody	
Description	Rabbit Polyclonal Antibody	
Host	Rabbit	
Application	IHC,WB,	
Reactivity	Human, Mouse, Rat	

### Performance

Conjugation	Unconjugated	
Modification	Phospho Antibody	
lsotype	lgG	
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	DUSP1/4
	DUSP1; CL100; MKP1; PTPN10; VH1; Dual specificity protein phosphatase 1; Dual
Alternative Names	specificity protein phosphatase hVH1; Mitogen-activated protein kinase phosphatase
	1; MAP kinase phosphatase 1; MKP-1; Protein-tyrosine phosphatase CL100; DUSP4;
Gene ID	1843/1846
	P28562/Q13115.The antiserum was produced against synthesized peptide derived
SwissProt ID	from human MKP-1/2 around the phosphorylation site of Ser296/318. AA range:261-
	310

## Application

Dilution Ratio WE	B 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000
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# Product Name: MKP-1/2 (phospho Ser296/318) Rabbit Ciperate Contract Contract Ciperate Contract Ciperate Contract Ciperate Ciperat Catalog #: APRab05025



**Molecular Weight** 45kD

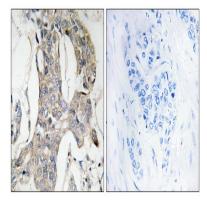
### Background

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.,

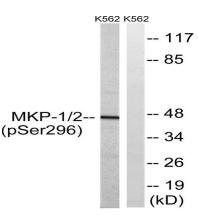
### **Research Area**

MAPK\_ERK\_Growth;MAPK\_G\_Protein;

### Image Data

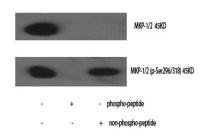


Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using MKP-1/2 (Phospho-Ser296/318) Antibody. The picture on the right is blocked with the phospho peptide.

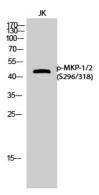


EnkiLife

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.



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).

#### Note

For research use only.