

Product datasheet for **AP21137PU-N**

DUSP1 (+MKP2) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	Western blot: 1/500 - 1/1000. Immunohistochemistry on paraffin sections 1/50 - 1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of MKP-1/2 protein. (region surrounding Gln290)
Formulation:	Phosphate buffered saline (PBS), pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction Preservative: 0.05% sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity chromatography (> 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 41 kDa
Gene Name:	dual specificity phosphatase 1
Database Link:	<u>Entrez Gene 19252 Mouse</u> <u>Entrez Gene 114856 Rat</u> <u>Entrez Gene 1843 Human</u> <u>P28562</u>



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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 proliferation.

Synonyms:

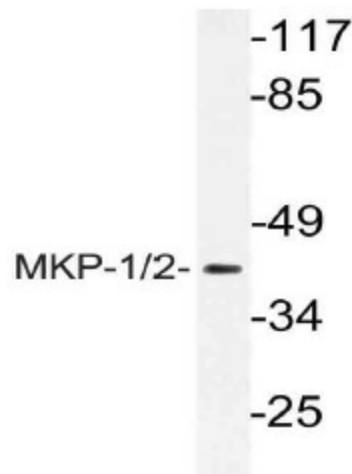
CL100, MKP-1, PTPN10, VH1, MAP kinase phosphatase 1

Protein Families:

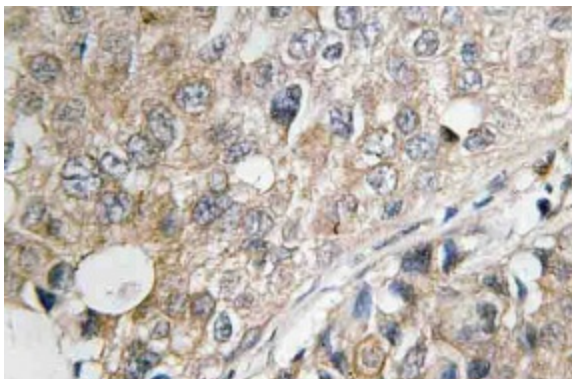
Druggable Genome, Phosphatase

Protein Pathways:

MAPK signaling pathway

Product images:

Western blot (WB) analysis of MKP-1/2 antibody (Cat.-No.: AP21137PU-N) in extracts from Jurkat cells.



Immunohistochemistry (IHC) analyzes of MKP-1/2 antibody (Cat.-No.: AP21137PU-N) in paraffin-embedded human breast carcinoma tissue.