



# Recombinant Rat Dual specificity protein phosphatase 1 (Dusp1)

<b>Product Code</b>	CSB-EP717559RA
<b>Abbreviation</b>	Dusp1
<b>Storage</b>	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
<b>Uniprot No.</b>	Q64623
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Rattus norvegicus (Rat)
<b>Purity</b>	≥85% (SDS-PAGE)
<b>Sequence</b>	MVMEVGILDA GGLRALLRER AAQCLLLDCR SFFAFNAGHI VGSVNVRFST IVRRRAKGAM GLEHIVPNT E LRGRLLAGAY HAVVLLDERS AALDGAKRDG TLALAAGALC REARSTQVFF LQGGYEAFFSA SCPELCSKQS TPMGLSLPLS TSVPDSAESG CSSCSTPLYD QGGPVEILSF LYLGSAYHAS RKDMLDALGI TALINVSANC PNHFEGHYQY KSIPVEDNHK ADISSWFNEA IDFIDSIKDA GGRVVFVHCQA GISRSATICL AYLMRTNRVK LDEAFEFVKQ RRSIISP NFS FMGQLLQFES QVLAPHCSAE AGSPAMAVLD RGTSTTTVFN FVSIPIVHPT NSALNYLQSP ITTSPSC
<b>Source</b>	E.coli
<b>Target Names</b>	Dusp1
<b>Protein Names</b>	Recommended name: Dual specificity protein phosphatase 1 EC= 3.1.3.16 EC= 3.1.3.48 Alternative name(s): Mitogen-activated protein kinase phosphatase 1 Short name= MAP kinase phosphatase 1 Short name= MKP-1 Protein-t
<b>Expression Region</b>	1-367
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	full length protein
<b>Target Details</b>	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.

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**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

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