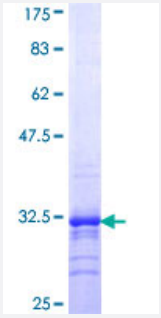
DUSP1 (Human) Recombinant Protein (Q01)

Catalog # H00001843-Q01 Size 25 ug, 10 ug

Applications



Specification

Product Description	Human DUSP1 partial ORF (NP_004408, 305 a.a. - 367 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	LLQFESQVLAPHCSAEAGSPAMAVLDRGTSTTTVFNFPVSIPVHSTNSALSYLQSPITTSPSC
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	32.67
Interspecies Antigen Sequence	Mouse (95); Rat (97)
Preparation Method	*in vitro* wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — DUSP1

Entrez GeneID	1843
GeneBank Accession#	NM_004417
Protein Accession#	NP_004408
Gene Name	DUSP1
Gene Alias	CL100, HVH1, MKP-1, MKP1, PTPN10
Gene Description	dual specificity phosphatase 1
Omim ID	600714
Gene Ontology	Hyperlink
Gene Summary	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-recepto r-type protein-tyrosine phosphatase family, and which has significant amino-acid sequence simila rity to a Tyr/Ser-protein phosphatase encoded by the late gene H1 of vaccinia virus. The bacteriall y expressed and purified DUSP1 protein has intrinsic phosphatase activity, and specifically inacti vates mitogen-activated protein (MAP) kinase in vitro by the concomitant dephosphorylation of bo th 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 impo rtant role in the human cellular response to environmental stress as well as in the negative regulati on of cellular proliferation. [provided by RefSeq
Other Designations	serine/threonine specific protein phosphatase

Pathway

- MAPK signaling pathway

Disease

- Arthritis
- Asthma
- Cardiovascular Diseases
- Diabetes Mellitus
- Edema
- Genetic Predisposition to Disease
- Kidney Failure
- Lung Neoplasms
- Multiple Sclerosis