

DUSP1/DUSP4 (Human) Cell-Based ELISA Kit

Catalog # KA2920

Size 1 Kit

Specification

Product Description	DUSP1/DUSP4 (Human) Cell-Based ELISA Kit is an indirect enzyme-linked immunoassay for qualitative determination of DUSP1/DUSP4 expression in cultured cells.
Suitable Sample	Attached Cell, Loosely Attached Cell, Suspension Cell
Label	HRP-conjugated
Detection Method	Colorimetric
Assay Type	Qualitative
Reactivity	Human, Mouse, Rat
Regulation Status	For research use only (RUO)
Storage Instruction	Store the kit at 4°C.

Applications

- Qualitative

Gene Info — DUSP1

Entrez GeneID	1843
Protein Accession#	P28562 (Gene ID : 1843);Q13115 (Gene ID : 1846)
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	<p>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. [provided by RefSeq]</p>
Other Designations	serine/threonine specific protein phosphatase

Gene Info — DUSP4

Entrez GeneID	1846
Protein Accession#	P28562 (Gene ID : 1843);Q13115 (Gene ID : 1846)
Gene Name	DUSP4
Gene Alias	HVH2, MKP-2, MKP2, TYP
Gene Description	dual specificity phosphatase 4
Omim ID	602747
Gene Ontology	Hyperlink
Gene Summary	<p>The protein encoded by this gene is a member of the dual specificity protein phosphatase subfamily. These phosphatases inactivate their target kinases by dephosphorylating both the phosphoserine/threonine and phosphotyrosine residues. They negatively regulate members of the mitogen-activated protein (MAP) kinase superfamily (MAPK/ERK, SAPK/JNK, p38), which are associated with cellular proliferation and differentiation. Different members of the family of dual specificity phosphatases show distinct substrate specificities for various MAP kinases, different tissue distribution and subcellular localization, and different modes of inducibility of their expression by extracellular stimuli. This gene product inactivates ERK1, ERK2 and JNK, is expressed in a variety of tissues, and is localized in the nucleus. Two alternatively spliced transcript variants, encoding distinct isoforms, have been observed for this gene. In addition, multiple polyadenylation sites have been reported. [provided by RefSeq]</p>
Other Designations	MAP kinase phosphatase 2[VH1 homologous phosphatase 2]serine/threonine specific protein phosphatase

Pathway

- [MAPK signaling pathway](#)
- [MAPK signaling pathway](#)

Disease

- [Arthritis](#)
- [Asthma](#)
- [Cardiovascular Diseases](#)
- [Diabetes Mellitus](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Kidney Failure](#)
- [Lung Neoplasms](#)
- [Multiple Sclerosis](#)