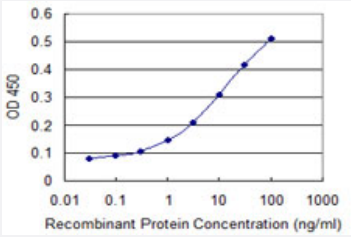
DUSP1 monoclonal antibody (M02), clone 4H7

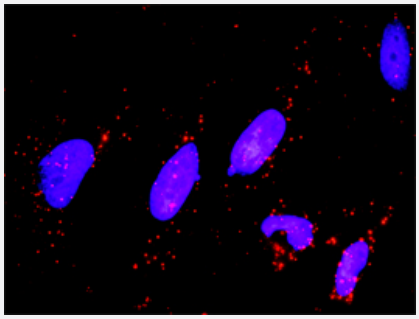
Catalog # H00001843-M02 Size 100 ug

Applications



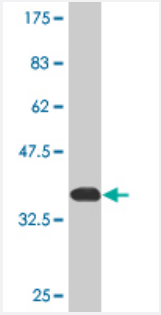
Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged DUSP1 is 0.3 ng/ml as a capture antibody.



In situ Proximity Ligation Assay (Cell)

Proximity Ligation Analysis of protein-protein interactions between MAPK3 and DUSP1. HeLa cells were stained with anti-MAPK3 rabbit purified polyclonal 1:1200 and anti-DUSP1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



Western Blot detection against Immunogen (32.67 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a partial recombinant DUSP1.

Immunogen	DUSP1 (NP_004408, 305 a.a. ~ 367 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	LLQFESQVLAPHCSAEAGSPAMAVLDRGTSTTTVFNFPVSIPVHSTNSALSYLQSPITTSPSC
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (95); Rat (97)
Isotype	IgG1 Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (32.67 KDa) .
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Recombinant protein)

  Protocol Download

- Sandwich ELISA (Recombinant protein)

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  Protocol Download

- ELISA

- *In situ* Proximity Ligation Assay (Cell)

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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-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
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