

## **Product datasheet for CF812681**

### OriGene Technologies, Inc.

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## **DUSP1 Mouse Monoclonal Antibody [Clone ID: OTI5A8]**

### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI5A8

Applications: WB

Recommended Dilution: WB 1:500

Reactivity: Human, Mouse, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human DUSP1 (NP\_004408) produced in E.coli.

Formulation: Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

**Reconstitution Method:** For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Predicted Protein Size:** 39.1 kDa

**Gene Name:** dual specificity phosphatase 1

Database Link: NP 004408

Entrez Gene 19252 MouseEntrez Gene 114856 RatEntrez Gene 1843 Human

P28562





#### Background:

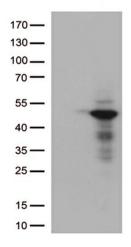
The expression of DUSP1 gene is induced in human skin fibroblasts by oxidative/heat stress and growth factors. It specifies a protein with structural features similar to members of the non-receptor-type protein-tyrosine phosphatase family, and which has significant amino-acid sequence similarity to a 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. [provided by RefSeq, Jul 2008]

Synonyms: CL100; HVH1; MKP-1; MKP1; PTPN10

**Protein Families:** Druggable Genome, Phosphatase

**Protein Pathways:** MAPK signaling pathway

# **Product images:**



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY DUSP1 ([RC205220], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-DUSP1 (1:500). Positive lysates [LY401403] (100ug) and [LC401403] (20ug) can be purchased separately from OriGene.