

## **Product datasheet for TP527338**

## OriGene Technologies, Inc.

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## Ddit4 (NM\_029083) Mouse Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Purified recombinant protein of Mouse DNA-damage-inducible transcript 4 (Ddit4), with C-

terminal MYC/DDK tag, expressed in HEK293T cells, 20ug

Species: Mouse

**Expression Host:** HEK293T

**Expression cDNA Clone** >MR227338 representing NM\_029083 or AA Sequence: Red=Cloning site Green=Tags(s)

MPSLWDRFSSSSSSSSSSRTPAADRPPRSAWGSAAREEGLDRCASLESSDCESLDSSNSGFGPEEDSSYL DGVSLPDFELLSDPEDEHLCANLMQLLQESLSQARLGSRRPARLLMPSQLVSQVGKELLRLAYSEPCGLR GALLDVCVEQGKSCHSVAQLALDPSLVPTFQLTLVLRLDSRLWPKIQGLLSSANSSLVPGYSQSLTLSTG

FRVIKKKLYSSEQLLIEEC

**TRTRPL**EQKLISEEDLAANDILDYKDDDDKV

Tag: C-MYC/DDK

**Predicted MW:** 25.3 kDa

Concentration:  $>0.05 \mu g/\mu L$  as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C after receiving vials.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** NP 083359

Locus ID: 74747

UniProt ID: Q9D3F7, B7ZNP9

RefSeq Size: 1685





## Ddit4 (NM\_029083) Mouse Recombinant Protein - TP527338

Cytogenetics: 10 B4

RefSeq ORF: 687

Synonyms: 5830413E08Rik; AA415483; dig2; REDD1; Rtp801

**Summary:** Regulates cell growth, proliferation and survival via inhibition of the activity of the mammalian

> target of rapamycin complex 1 (mTORC1). Inhibition of mTORC1 is mediated by a pathway that involves DDIT4/REDD1, AKT1, the TSC1-TSC2 complex and the GTPase RHEB. Plays an important role in responses to cellular energy levels and cellular stress, including responses to hypoxia and DNA damage. Regulates p53/TP53-mediated apoptosis in response to DNA damage via its effect on mTORC1 activity. Its role in the response to hypoxia depends on the cell type; it mediates mTORC1 inhibition in fibroblasts and thymocytes, but not in hepatocytes. Inhibits neuronal differentiation and neurite outgrowth mediated by NGF via its effect on

mTORC1 activity. Required for normal neuron migration during embryonic brain

development. Plays a role in neuronal cell death. Required for mTORC1-mediated defense against viral protein synthesis and virus replication.[UniProtKB/Swiss-Prot Function]