

## Product datasheet for **TP302847L**

### DDIT4 (NM\_019058) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human DNA-damage-inducible transcript 4 (DDIT4), 1 mg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC202847 protein sequence <b>Red</b> =Cloning site <b>Green</b> =Tags(s)

MPSLWDRFSSSTSSSPSSLPRTPTPDRPPRSAWGSATREEGFDRSTSLESSDCESLDSSNSGFGPEEDT  
AYLDGVSLPDFELSDPEDEHLCANLMQLLQESLAQARLGSRPARLLMPSQLVSVQVGKELLRLAYSEPC  
GLRGALLDVCVEQGKCSHVGQLALDPSLVPTFQLTLVLRLDLWPKIQGLFSSANSPFLPGFSQSLTL  
STGFRVIKKKLYSSEQLLIEEC

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

Tag:	C-Myc/DDK
Predicted MW:	25.2 kDa
Concentration:	>0.05 µg/µL 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
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
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.
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:	<a href="#">NP_061931</a>
Locus ID:	54541
UniProt ID:	<a href="#">Q9NX09</a> , <a href="#">A0A024QZQ6</a>



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RefSeq Size: 1752

Cytogenetics: 10q22.1

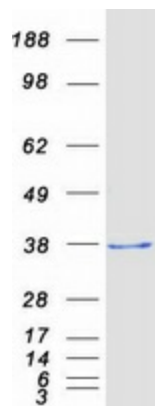
RefSeq ORF: 696

Synonyms: Dig2; REDD-1; REDD1

**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 (By similarity). Required for mTORC1-mediated defense against viral protein synthesis and virus replication (By similarity). 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.[UniProtKB/Swiss-Prot Function]

**Protein Pathways:** mTOR signaling pathway

### Product images:



Coomassie blue staining of purified DDIT4 protein (Cat# [TP302847]). The protein was produced from HEK293T cells transfected with DDIT4 cDNA clone (Cat# [RC202847]) using MegaTran 2.0 (Cat# [TT210002]).