

## Product datasheet for **AR09836PU-N**

### DDIT4 (1-232, His-tag) Human Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	DDIT4 (1-232, His-tag) human recombinant protein, 50 µg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	<u>MGSSHHHHHH SSGLVPRGSH</u> MP <sub>5</sub> SLWDRFSS SSTSSSPSSL PRTPTPDRPP RSAWGSATRE EGFD <sub>1</sub> RSTSL <sub>1</sub> SSDCESLDSS NSGFGPEEDT AYLDGVSLPD FELLSDPEDE HLCANLMQLL QESLAQARLG SRRPARLLMP SQLVSQVGKE LLRLAYSEPC GLRGALLDVC VEQGKSCHSV GQLALDPSLV PTFQLTLVLR LDSRLWPKIQ GLFSSANSPF LPGFSQSLTL STGFRVIKKK LYSSEQLLIE EC
Tag:	His-tag
Predicted MW:	27.5 kDa
Concentration:	lot specific
Purity:	>90%
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 0.2M NaCl, 5 mM DTT, 1 mM EDTA, 30% glycerol
Preparation:	Liquid purified protein
Protein Description:	Recombinant human DDIT4 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Storage:	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	<u>NP_061931</u>
Locus ID:	54541
UniProt ID:	<u>Q9NX09</u> , <u>A0A024QZQ6</u>
Cytogenetics:	10q22.1
Synonyms:	Dig2; REDD-1; REDD1



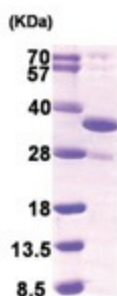
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**Summary:**

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:**

15% SDS-PAGE (3ug)