

Product datasheet for PH302847

DDIT4 (NM_019058) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	DDIT4 MS Standard C13 and N15-labeled recombinant protein (NP_061931)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC202847
Predicted MW:	25.4 kDa
Protein Sequence:	>RC202847 protein sequence Red=Cloning site Green=Tags(s) MPSLWDRFSSSTSSPSSLPRTPDRPPRSAGSATREEGFDRSTSLESSDCESLDSSNSGFGPEEDT AYLDGVSLPDFELLSDPEDEHLCANLMQLLQESLAQARLGSRPARLLMPSQLVSQVKGELLRLAYSEPC GLRGALLDVCVEQGKSCHSVGQLALDPSLVPTFQLTLVLRDLSRLWPKIQGLFSSANSPFLPGFSQSLTL STGFRVIKKKLYSSEQLLIEEC TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_061931
RefSeq Size:	1752
RefSeq ORF:	696
Synonyms:	Dig2; REDD-1; REDD1
Locus ID:	54541
UniProt ID:	Q9NX09 , A0A024QZQ6



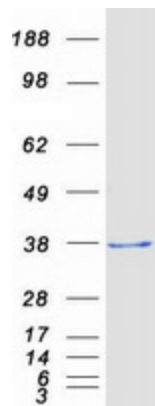
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Cytogenetics: 10q22.1

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]).