

Datasheet for ABIN7553660

DDIT4 Protein (AA 1-232) (His tag)



Overview

Quantity:	1 mg
Target:	DDIT4
Protein Characteristics:	AA 1-232
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This DDIT4 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details	
Purpose:	Custom-made recombinat DDIT4 Protein expressed in mammalien cells.
Sequence:	MPSLWDRFSS SSTSSSPSSL PRTPTPDRPP RSAWGSATRE EGFDRSTSLE SSDCESLDSS
	NSGFGPEEDT AYLDGVSLPD FELLSDPEDE HLCANLMQLL QESLAQARLG SRRPARLLMP
	SQLVSQVGKE LLRLAYSEPC GLRGALLDVC VEQGKSCHSV GQLALDPSLV PTFQLTLVLR
	LDSRLWPKIQ GLFSSANSPF LPGFSQSLTL STGFRVIKKK LYSSEQLLIE EC Sequence without
	tag. The proposed Purification-Tag is based on experiences with the expression system, a
	different complexity of the protein could make another tag necessary. In case you have a
	special request, please contact us.
Characteristics:	Key Benefits:
	Made to order protein - from design to production - by highly experienced protein experts.
	Protein expressed in mammalien cells and purified in one-step affinity chromatography
	 The optimized expression system ensures reliability for intracellular, secreted and

transmembrane proteins.

· State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

Grade:

custom-made

Target Details

Target:

DDIT4

Alternative Name:

DDIT4 (DDIT4 Products)

Background:

DNA damage-inducible transcript 4 protein (HIF-1 responsive protein RTP801) (Protein regulated in development and DNA damage response 1) (REDD-1),FUNCTION: 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. {ECO:0000250, ECO:0000269|PubMed:15545625, ECO:0000269|PubMed:15632201,

ECO:0000269|PubMed:15988001, ECO:0000269|PubMed:17005863,

ECO:0000269|PubMed:17379067, ECO:0000269|PubMed:19557001,

ECO:0000269|PubMed:20166753, ECO:0000269|PubMed:21460850}.

Target Details

Molecular Weight:	25.4 kDa
UniProt:	Q9NX09
Pathways:	Neurotrophin Signaling Pathway, Regulation of Carbohydrate Metabolic Process
Application Details	
Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies
	as well. As the protein has not been tested for functional studies yet we cannot offer a
	guarantee though.
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months