

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Product datasheet for MR227338L4V

Ddit4 (NM_029083) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Ddit4 (NM_029083) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Ddit4
Synonyms:	5830413E08Rik; AA415483; dig2; REDD1; Rtp801
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_029083
ORF Size:	687 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR227338).
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <u>More info</u>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	<u>NM 029083.2, NP 083359.1</u>
RefSeq Size:	1685 bp
RefSeq ORF:	690 bp
Locus ID:	74747
UniProt ID:	Q9D3F7
Cytogenetics:	10 B4



This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2022 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

Ddit4 (NM_029083) Mouse Tagged ORF Clone Lentiviral Particle – MR227338L4V

Gene 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]

This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2022 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US