**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 MR201400

## Ddit3 (NM_007837) Mouse Tagged ORF Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | Ddit3 (NM_007837) Mouse Tagged ORF Clone |
| **Tag:** | Myc-DDK |
| **Symbol:** | Ddit3 |
| **Synonyms:** | chop; CHOP-10; CHOP10; gadd153 |
| **Mammalian Cell Selection:** | Neomycin |
| **Vector:** | pCMV6-Entry (PS100001) |
| **E. coli Selection:** | Kanamycin (25 ug/mL) |

**ORF Nucleotide Sequence:**

>MR201400 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCAGCTGAGTCCCTGCCTTTCACCTTGGAGACGGTGTCCAGCTGGGAGCTGGAAGCCTGGTATGAGG
ATCTGCAGGAGGTCCTGTCCTCAGATGAAAATGGGGGCACCTATATCTCATCCCCAGGAAACGAAGAGGA
AGAATCAAAAACCTTCACTACTCTTGACCCTGCGTCCCTAGCTTGGCTGACAGAGGAGCCAGGGCCAACA
GAGGTCACACGCACATCCCAAAGCCCTCGCTCTCCAGATTCCAGTCAGAGTTCTATGGCCCAGGAGGAAG
AGGAGGAAGAGCAAGGAAGAACTAGGAAACGGAAACAGAGTGGTCAGTGCCCAGCCCGGCCTGGGAAGCA
ACGCATGAAGGAGAAGGAGCAGGAGAACGAGCGGAAAGTGGCACAGCTAGCTGAAGAGAACGAGCGGCTC
AAGCAGGAAATCGAGCGCCTGACCAGGGAGGTGGAGACCACACGGCGGGCTCTGATCGACCGCATGGTCA
GCCTGCACCAAGCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR201400 protein sequence
Red=Cloning site Green=Tags(s)

MAAESLPFTLETVSSWELEAWYEDLQEVLSSDENGGTYISSPGNEEEESKTFTTLDPASLAWLTEEPGPT
EVTRTSQSPRSPDSSQSSMAQEEEEEEQGRTRKRKQSGQCPARPGKQRMKEKEQENERKVAQLAEENERL
KQEIERLTREVETTRRALIDRMVSLHQA

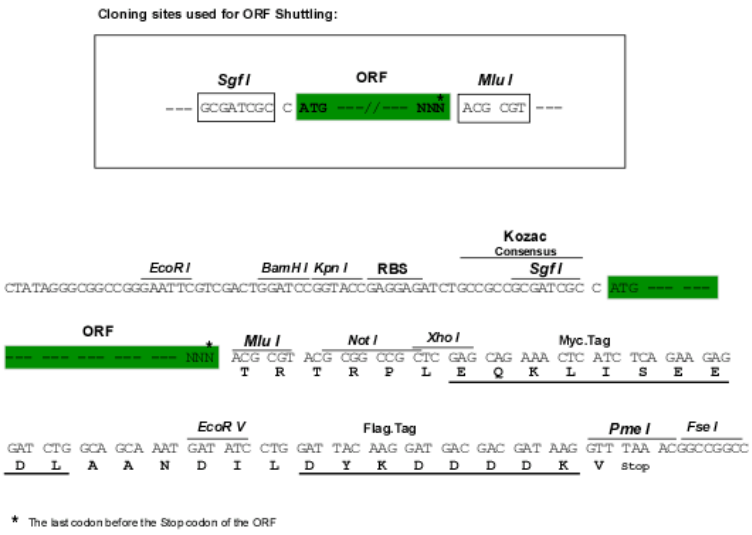
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

View online »

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2025 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

**Cloning Scheme:**




**ACCN:** NM_007837

**ORF Size:** 504 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:**

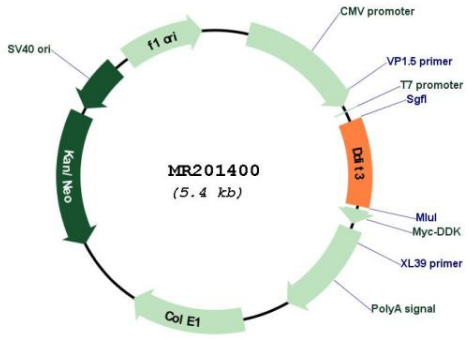
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2025 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

| | |
|---|---|
| **Note:** | Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required. |
| **RefSeq:** | NM_007837.2, NP_031863.2 |
| **RefSeq Size:** | 888 bp |
| **RefSeq ORF:** | 507 bp |
| **Locus ID:** | 13198 |
| **UniProt ID:** | P35639 |
| **Cytogenetics:** | 10 D3 |
| **MW:** | 19.2 kDa |
| **Gene Summary:** | Multifunctional transcription factor in ER stress response. Plays an essential role in the response to a wide variety of cell stresses and induces cell cycle arrest and apoptosis in response to ER stress. Plays a dual role both as an inhibitor of CCAAT/enhancer-binding protein (C/EBP) function and as an activator of other genes. Acts as a dominant-negative regulator of C/EBP-induced transcription: dimerizes with members of the C/EBP family, impairs their association with C/EBP binding sites in the promoter regions, and inhibits the expression of C/EBP regulated genes. Positively regulates the transcription of TRIB3, IL6, IL8, IL23, TNFRSF10B/DR5, PPP1R15A/GADD34, BBC3/PUMA, BCL2L11/BIM and ERO1L. Negatively regulates; expression of BCL2 and MYOD1, ATF4-dependent transcriptional activation of asparagine synthetase (ASNS), CEBPA-dependent transcriptional activation of hepcidin (HAMP) and CEBPB-mediated expression of peroxisome proliferator-activated receptor gamma (PPARG). Inhibits the canonical Wnt signaling pathway by binding to TCF7L2/TCF4, impairing its DNA-binding properties and repressing its transcriptional activity. Plays a regulatory role in the inflammatory response through the induction of caspase-11 (CASP4/CASP11) which induces the activation of caspase-1 (CASP1) and both these caspases increase the activation of pro-IL1B to mature IL1B which is involved in the inflammatory response. Acts as a major regulator of postnatal neovascularization through regulation of endothelial nitric oxide synthase (NOS3)-related signaling.[UniProtKB/Swiss-Prot Function] |

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2025 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

## Product images:




Circular map for MR201400

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2025 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US