

Product datasheet for RC231752

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OriGene Technologies, Inc.

GADD45A (NM 001199741) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: GADD45A (NM_001199741) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: GADD45A

Synonyms: DDIT1; GADD45

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide >RC231752 representing NM_001199741
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGACTTTGGAGGAATTCTCGGCTGGAGAGCAGAAGACCGAAAGCGACCCCGATAACGTGGTGTTGTGCC
TGCTGGCGGCGACGACGACGACAGAGATGTGGCTCTGCAGATCCACCTTCACCCTGATCCAGGCGTT
TTGCTGCGAGAACGACATCAACATCCTGCGCGTCAGCAACCCGGGCCGGCTGGCGGAGCTCCTGCTCTTG
GAGACCGACGCTGGCCCCGCGGCGAGCGAGCGCCCGAGCAGCCCCCGGACCTGCACTGCTGCTGA
CGAATCCACATTCATCTCAATGGAAGGATCCTGCCTTAAGTCAACTTATTTGTTTTTTGCCGGGAAAGTCG

CTACATGGATCAATGGGTTCCAGTGATTAATCTCCCTGAACGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC231752 representing NM_001199741

Red=Cloning site Green=Tags(s)

MTLEEFSAGEQKTESDPDNVVLCLLAADEDDDRDVALQIHFTLIQAFCCENDINILRVSNPGRLAELLLL

ETDAGPAASEGAEQPPDLHCVLVTNPHSSQWKDPALSQLICFCRESRYMDQWVPVINLPER

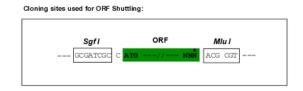
TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

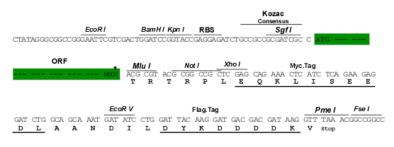
Restriction Sites: Sgfl-Mlul





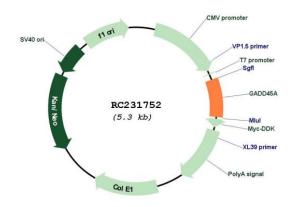
Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001199741

ORF Size: 393 bp

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. More info



GADD45A (NM_001199741) Human Tagged ORF Clone - RC231752

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.

RefSeq: <u>NM 001199741.2</u>

 RefSeq Size:
 1296 bp

 RefSeq ORF:
 396 bp

 Locus ID:
 1647

 UniProt ID:
 P24522

 Cytogenetics:
 1p31.3

Protein Families: Druggable Genome, Stem cell - Pluripotency

Protein Pathways: Cell cycle, MAPK signaling pathway, p53 signaling pathway

MW: 15.1 kDa

Gene Summary: This gene is a member of a group of genes whose transcript levels are increased following

stressful growth arrest conditions and treatment with DNA-damaging agents. The protein encoded by this gene responds to environmental stresses by mediating activation of the p38/JNK pathway via MTK1/MEKK4 kinase. The DNA damage-induced transcription of this gene is mediated by both p53-dependent and -independent mechanisms. Alternatively spliced transcript variants encoding distinct isoforms have been found for this gene.[provided

by RefSeq, Dec 2010]