

Product datasheet for **RC213354**

GADD45B (NM_015675) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: GADD45B (NM_015675) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: GADD45B
Synonyms: GADD45BETA; MYD118
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC213354 representing NM_015675
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACGCTGGAAGAGCTCGTGCGTGCGACAACCGGGCGCAGAAGATGCAGACGGTGACCGCCGCGGTGG
AGGAGCTTTTGGTGGCCGCTCAGCGCCAGGATCGCCTCACAGTGGGGGTGTACGAGTCGGCCAAGTTGAT
GAATGTGGACCCAGACAGCGTGGTCTCTGCCTTTGGCCATTGACGAGGAGGAGGAGGATGACATCGCC
CTGCAAAATCCACTTCACGCTCATCCAGTCTTCTGCTGTGACAACGACATCAACATCGTGGGGTGTGCG
GCAATGCGCGCCTGGCGCAGCTCCTGGGAGAGCCGGCCGAGACCCAGGGCACCACCGAGGCCGAGACCT
CCACTGTCTTCCCTTCTACAGAACCTCACACGACGCCTGGAAGAGCCACGGCTTGGTGGAGGTGCC
AGCTACTGCGAAGAAAGCCGGGGCAACAACCAAGTGGGTCCCTACATCTCTCTTCCAGGAACGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC213354 representing NM_015675
Red=Cloning site Green=Tags(s)
MTLEELVACDAAQKMQTVTAAVEELLVAAQRQDRLTVGVYESAKLMNVDPDSVVLCLLAIDEEEDDIA
LQIHFTLIQSFCDDNDINIVRVSGNARLAQLLGEPAETQGTTEARDLHCLPFLQNPHTDAWKSHGLVEVA
SYCEESRGNNQWVPYISLQER

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6037_f01.zip



[View online »](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_015675

ORF Size: 483 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](#)

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_015675.1](#), [NP_056490.1](#)

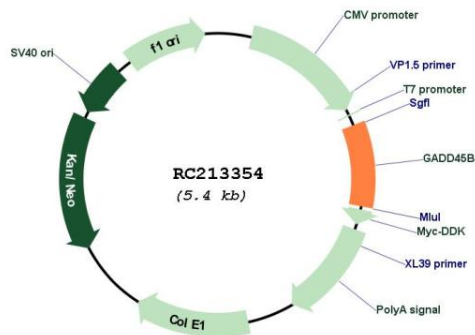
RefSeq Size: 1121 bp

RefSeq ORF: 483 bp

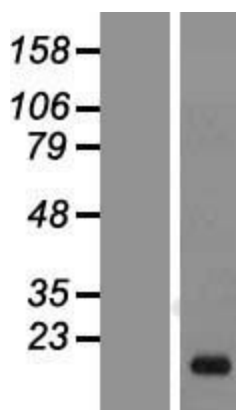
Locus ID: 4616
UniProt ID: [O75293](#)
Cytogenetics: 19p13.3
Domains: Ribosomal_L7Ae
Protein Families: Druggable Genome
Protein Pathways: Cell cycle, MAPK signaling pathway, p53 signaling pathway
MW: 17.6 kDa

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 genes in this group respond to environmental stresses by mediating activation of the p38/JNK pathway. This activation is mediated via their proteins binding and activating MTK1/MEKK4 kinase, which is an upstream activator of both p38 and JNK MAPKs. The function of these genes or their protein products is involved in the regulation of growth and apoptosis. These genes are regulated by different mechanisms, but they are often coordinately expressed and can function cooperatively in inhibiting cell growth. [provided by RefSeq, Jul 2008]

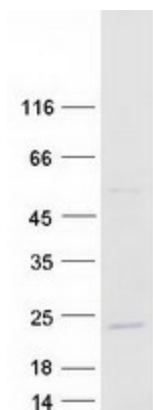
Product images:



Circular map for RC213354



Western blot validation of overexpression lysate (Cat# [LY414404]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213354 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GADD45B protein (Cat# [TP313354]). The protein was produced from HEK293T cells transfected with GADD45B cDNA clone (Cat# RC213354) using MegaTran 2.0 (Cat# [TT210002]).