

Product datasheet for **RC222689**

MACROD2 (NM_080676) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MACROD2 (NM_080676) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MACROD2
Synonyms:	C2orf133; C20orf133
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC222689 representing NM_080676
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTACCCAGCAACAAGAAGAAAAAGGTGTGGAGAGAGGAGAAAGAACGTTTATTGAAGATGACCTTAG
 AAGAGAGACGCAAGAATACCTAAGAGACTATATCCCTGAACAGCATTCTGTGCATGGAAGGAGGAGAT
 GAAGGGCAAGGGCCAAAATGATGAAGAAAATACTCAGGAAACATCCCAGGTGAAGAAAAGTTTACTGAA
 AAAGTTTCTCTATAGAGGTGACATCACATTGCTAGAGGTAGATGCTATAGTCAATGCCCAAATGCCA
 GTCTTCTTGGAGGAGGAGGTGTGGATGGCTGTATTCATAGAGCAGCCGCCCTGTTTGCTAGCTGAATG
 TCGTAACCTGAATGGCTGTGATACTGGACATGCAAAAATCACATGTGGCTATGACCTTCTGCAAAAAT
 GTCATCCATACTGTAGGGCCAATAGCCAGGGGCCATTAATGGTTCCCACAAGGAAGACCTTGCAAAAT
 GCTATAAATCATCTCTGAAGCTCGTGAAGAAAATAACATCCGATCAGTTGCATTTCCCTGCATCTCAAC
 AGGCATTTATGGCTTTCCCAACGAGCCTGCTGCAGTCATTGCCCTCAACACCATTAAAGGAATGGCTTGC
 AAGAATACCATGAGGTGGATCGGATCATTTTCTGTGCTTCTTAGAAGTTGACTTCAAAAATCTACAAAA
 AGAAAATGAATGAGTTTTTCTCCGTAGACGATAATAATGAAGAAGAAGAGGATGTTGAAATGAAAGAAGA
 TTCAGATGAGAACGGTCCAGAGGAGAAGCAAAGTGTGGAAGAAATGGAAGAGCAGAGCCAAGATGCAGAT
 GGTGTCAACACTGCTACTGTGCCCGGCCCTGCTTCAGAAGAGGCAGTTGAAGACTGTAAGATGAAGATT
 TTGCAAAGGATGAAAATATTACAAAAGGCGGTGAAGTGACAGATCATTCTGTGCGTGACCAAGATCATCC
 CGATGGACAAGAGAATGATTCACGAAGAATGAAATAAAATGAAACAGAATCGCAGAGCTCATATG
 GAAACAGAAGAACTTTCATCAAACCAAGAAGATGCCGTGATTGTGGAGCAACCAGAAGTGATTCCATTAA
 CAGAGGACCAAGAAGAAAAGAAGGTGAAAAGCTCCAGGCGAGGACACACCTAGGATGCCTGGGAAAAG
 TGAAAGGCTCCAGTGACCTAGAAAATACTCCAGGTCTGATGCAGGGGCACAAGATGAAGCGAAGGAACAA
 AGAAATGGAACAAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC222689 representing NM_080676
 Red=Cloning site Green=Tags(s)

MYPSNKKKKVWREEKERLLKMTLEERRKEYLRDYIPLNSILSWKEEMKKGQNDEENTQETSQVKKSLTE
 KVSLYRGDITLLEVDIVNAANASLLGGGGVDGCIHRAAGPCLLAECRNLNGCDTGHAKITCGYDLPKY
 VIHTVGP IARGHINGSKEDLANCYKSSLKLVKENNIRSVAFPCISTGIYGFNPNEPAAVIALNTIKEWLA
 KNNHVEVDRIIFCVFLEVDFKIYKKKMNEFFSVDDNNEEEEDVEMKEDSDENGPEEKQSVEEMEEQSQDAD
 GVNTVTVPGPASEEAVEDCKDEDFAKDENITKGGVTDHSVRDQDHPDQGQENDSTKNEIKIETESQSSYM
 ETEELSSNQEDAVIVEQPEVIPLTEDQEEKEGEKAPGEDTPRMPGKSEGSSDLENTPGPDAGAQDEAKEQ
 RNGTK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6097_b01.zip

Restriction Sites:

Sgfl-Mlul

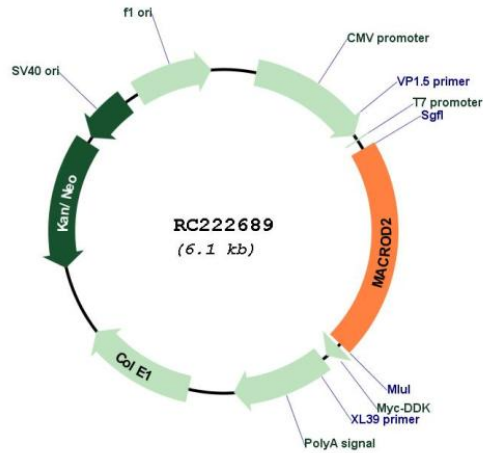
Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_080676

ORF Size: 1275 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.

RefSeq: [NM_080676.5](#), [NP_542407.2](#)

RefSeq Size: 4863 bp

RefSeq ORF: 1278 bp

Locus ID: 140733

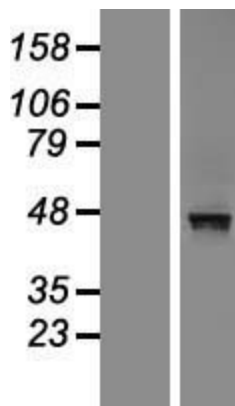
UniProt ID: [A1Z1Q3](#)

Cytogenetics: 20p12.1

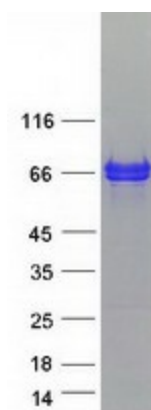
MW: 47.2 kDa

Gene Summary: The protein encoded by this gene is a deacetylase involved in removing ADP-ribose from mono-ADP-ribosylated proteins. The encoded protein has been shown to translocate from the nucleus to the cytoplasm upon DNA damage. [provided by RefSeq, May 2017]

Product images:



Western blot validation of overexpression lysate (Cat# [LY409100]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222689 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MACROD2 protein (Cat# [TP322689]). The protein was produced from HEK293T cells transfected with MACROD2 cDNA clone (Cat# RC222689) using MegaTran 2.0 (Cat# [TT210002]).