

Product datasheet for RC208563

MAPKAP Kinase 2 (MAPKAPK2) (NM_032960) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MAPKAP Kinase 2 (MAPKAPK2) (NM_032960) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MAPKAP Kinase 2
Synonyms:	MAPKAP-K2; MK-2; MK2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC208563 representing NM_032960 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGCTGTCCAACCTCCAGGGCCAGAGCCCGCCGGTGCCGTTCCCGCCCCGGCCCCGCCGCCGAGCCCC
CCACCCCTGCCCTGCCGACCCCCCGGCGCAGCCGCCCGCCGCCCGCCCCGAGCAGTTCCCGCAGTTCCA
CGTCAAGTCCGGCTGCAGATCAAGAAGAAGCCATCATCGATGACTACAAGGTCACCAGCCAGGTCCTG
GGGCTGGGCATCAACGGCAAAGTTTGCAGATCTTCAACAAGAGGACCCAGGAGAAATTCGCCCTCAAAA
TGCTTCAGGACTGCCCAAGGCCGAGGGAGGTGGAGCTGCACTGGCGGGCCTCCAGTGCCTGCACAT
CGTACGGATCGTGGATGTGTACGAGAATCTGTACGAGGGAGGAAGTGCCTGCTGATTGTCATGGAATGT
TTGGACGGTGGAGAACTCTTAGCCGAATCCAGGATCGAGGAGACCAGGCATTCACAGAAAGAGAAGCAT
CCGAAATCATGAAGAGCATCGGTGAGGCCATCCAGTATCTGCATTCAATCAACATTGCCCATCGGGATGT
CAAGCCTGAGAATCTCTTATACACCTCCAAAAGGCCAACGCCATCTGAAACTCACTGACTTTGGCTTT
GCCAAGGAAACCACGAGCCACAACCTCTTGACCACTCCTTGTATACACCGTACTATGTGGCTCCAGAAG
TGCTGGGTCCAGAGAAGTATGACAAGTCTGTGACATGTGGTCCCTGGGTGTCATCATGTACATCCTGCT
GTGTGGGTATCCCCCTTCTACTCCAACCACGGCCTTGCCATCTCTCCGGCATGAAGACTCGCATCCGA
ATGGGCCAGTATGAATTTCCCAACCCAGAATGGTCAGAAGTATCAGAGGAAGTGAAGATGCTCATTCGGA
ATCTGCTGAAAACAGAGCCACCCAGAGAATGACCATCACCGAGTTTATGAACCACCTTGATCATGCA
ATCAACAAGGTCCCTCAAACCCACTGCACACCAGCCGGTCTGAAGGAGGACAAAGGAGCGGTGGGAG
GATGTCAAGGAGGAGATGACCAGTGCCTTGGCCACAATGCGCGTTGACTACGAGCAGATCAAGATAAAAA
AGATTGAAGATGCATCCAACCTCTGCTGCTGAAGAGGCGGAAGAAAGCTCGGGCCCTGGAGGCTGCGGC
TCTGGCCAC

ACGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC208563 representing NM_032960
Red=Cloning site Green=Tags(s)

MLSNSQGQSPVPFPAPAPPPQPPTPALPHPPAQPPPPPPQFPQFHVKSGLQIKKNAIIDDYKVT SQVL
 GLGINGKVLQIFNKRTQEFALKMLQDCPKARREVELHWRASQCPHIVRIVDVYENLYAGRKCLLI VMEC
 LDGGELFSRIQDRGDQAFTEREASEIMKSIGEAIQYLHSINIAHRDVKPENLLYTSKRPNAILKLTDFGF
 AKETTSHNSLTPCYTPYYVAPEVLGPEKYDKSCDMWSLGVIMYILLCGYPPPFYSNHGLAISPGMKTRIR
 MGQYEFNPPEWSEYSEEVKMLIRNLLKTEPTQRMTITEFMNHPWIMQSTKVPQTPLHTSRVLKEDKERWE
 DVKEEMTSALATMRVDYEQIKIKKIEDASNPLLLKRRKKARALEAAALAH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg4124_b09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_032960

ORF Size: 1200 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_032960.4](#)

RefSeq Size: 3071 bp

RefSeq ORF: 1203 bp

Locus ID: 9261

UniProt ID: [P49137](#)

Cytogenetics: 1q32.1

Domains: pkinase, TyrKc, S_TKc

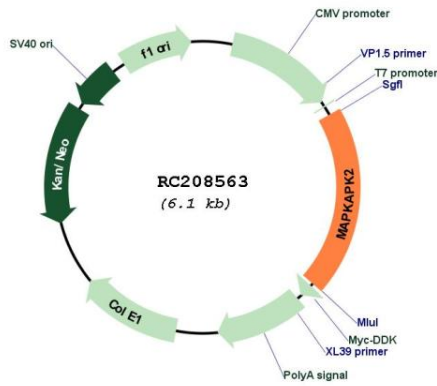
Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: MAPK signaling pathway, Neurotrophin signaling pathway, VEGF signaling pathway

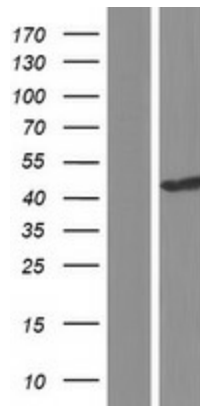
MW: 45.4 kDa

Gene Summary: This gene encodes a member of the Ser/Thr protein kinase family. This kinase is regulated through direct phosphorylation by p38 MAP kinase. In conjunction with p38 MAP kinase, this kinase is known to be involved in many cellular processes including stress and inflammatory responses, nuclear export, gene expression regulation and cell proliferation. Heat shock protein HSP27 was shown to be one of the substrates of this kinase in vivo. Two transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

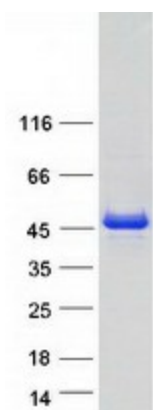
Product images:



Circular map for RC208563



Western blot validation of overexpression lysate (Cat# [LY409844]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208563 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MAPKAPK2 protein (Cat# [TP308563]). The protein was produced from HEK293T cells transfected with MAPKAPK2 cDNA clone (Cat# RC208563) using MegaTran 2.0 (Cat# [TT210002]).