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Product datasheet for RC204481

MEK6 (MAP2K6) (NM_002758) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MEK6 (MAP2K6) (NM_002758) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MEK6
Synonyms:	MAPKK6; MEK6; MKK6; PRKMK6; SAPKK-3; SAPKK3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC204481 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCTCAGTCGAAAGGCAAGAAGCGAAACCCTGGCCTTAAAATTCCAAAAGAAGCATTTGAACAACCTC
AGACCAGTTCCACACCACCTCGAGATTTAGACTCCAAGGCTTGCATTTCTATTGGAAATCAGAACTTTGA
GGTGAAGGCAGATGACCTGGAGCCTATAATGGAACTGGGACGAGGTGCGTACGGGGTGGTGGAGAAGATG
CGGCACGTGCCCAGCGGGCAGATCATGGCAGTGAAGCGGATCCGAGCCACAGTAAATAGCCAGGAACAGA
AACGGCTACTGATGGATTTGGATATTTCCATGAGGACGGTGGACTGTCCATTCACTGTCACCTTTTATGG
CGCACTGTTTCGGGAGGGTGATGTGTGGATCTGCATGGAGCTCATGGATACATCACTAGATAAATTCTAC
AAACAAGTTATTGATAAAGGCCAGACAATTCCAGAGGACATCTTAGGGAAAATAGCAGTTTCTATTGTAA
AAGCATTAGAACATTTACATAGTAAGCTGTCTGTCATTCACAGAGACGTCAAGCCTTCTAATGTACTCAT
CAATGCTCTCGGTCAAGTGAAGATGTGCGATTTTGGAATCAGTGGCTACTTGGTGGACTCTGTTGCTAAA
ACAATTGATGCAGGTTGCAAACCATACATGGCCCCTGAAAGAATAAACCCAGAGCTCAACCAGAAGGGAT
ACAGTGTGAAGTCTGACATTTGGAGTCTGGGCATCACGATGATTGAGTTGGCCATCCTTCGATTTCCCTA
TGATTCATGGGGAACTCCATTTCAGCAGCTCAAACAGGTGGTAGAGGAGCCATCGCCACAACTCCCAGCA
GACAAGTTCTCTGCAGAGTTTGTTGACTTTACCTCACAGTGCTTAAAGAAGAATTCCAAAGAACGGCCTA
CATACCCAGAGCTAATGCAACATCCATTTTTCACCCTACATGAATCCAAAGGAACAGATGTGGCATCTTT
TGTAAAACTGATTCTTGGAGAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC204481 protein sequence
Red=Cloning site Green=Tags(s)

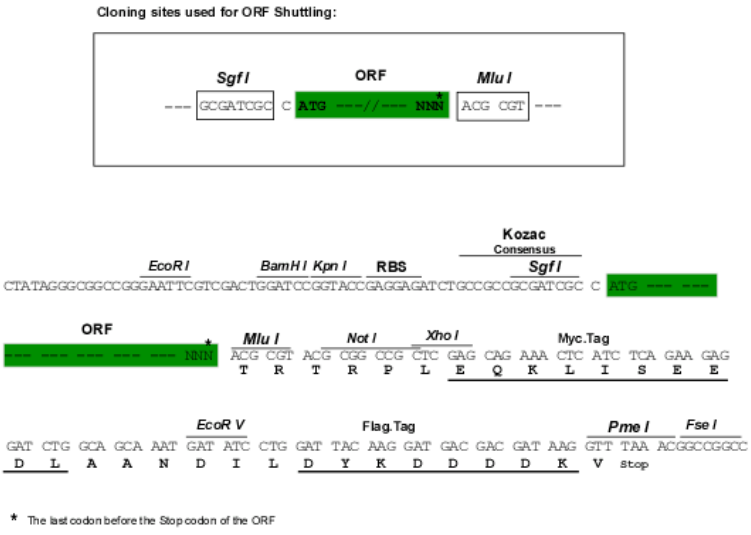
MSQSKGKKRNPGLKIPKEAFEQPQTSSTPPRDLDSKACISIGNQNFEVKADDLEPIMELGRGAYGVVEKM
RHVPSGQIMAVKRIRATVNSQEQKRLLMDLDISMRTVDCPFTVTFYGALFREGDVWICMELMDTSLDKFY
KQVIDKGQTIPEDILGKIAVSIVKALEHLHSKLSVIHRDVKPSNVLINALGQVKMCDFGISGYLVDSVAK
TIDAGCKPYMAPERINPELNQKGYSVKSDIWSLGITMIELAILRFPYDSWGTPFQQLKQVVEEPSPQLPA
DKFSAEFVDFTSQCLKKNSKERPTYPELMQHPFFTLHESKGTDVASFVKLILGD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6139_b04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002758

ORF Size: 1002 bp

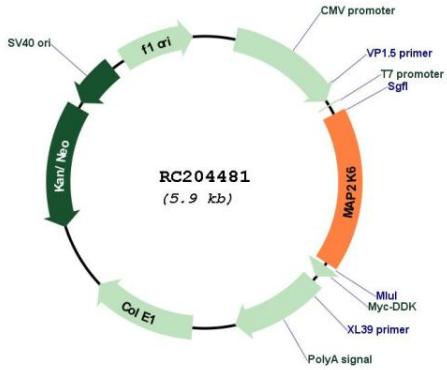
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

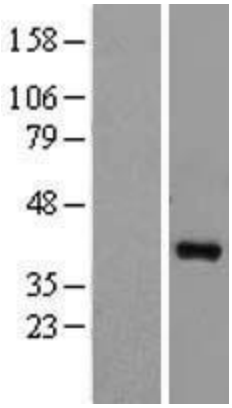
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_002758.4
RefSeq Size:	1879 bp
RefSeq ORF:	1005 bp
Locus ID:	5608
UniProt ID:	P52564
Cytogenetics:	17q24.3
Domains:	pkinase, TyrKc, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Amyotrophic lateral sclerosis (ALS), Fc epsilon RI signaling pathway, GnRH signaling pathway, MAPK signaling pathway, Toll-like receptor signaling pathway
MW:	37.5 kDa
Gene Summary:	This gene encodes a member of the dual specificity protein kinase family, which functions as a mitogen-activated protein (MAP) kinase kinase. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act as an integration point for multiple biochemical signals. This protein phosphorylates and activates p38 MAP kinase in response to inflammatory cytokines or environmental stress. As an essential component of p38 MAP kinase mediated signal transduction pathway, this gene is involved in many cellular processes such as stress induced cell cycle arrest, transcription activation and apoptosis. [provided by RefSeq, Jul 2008]

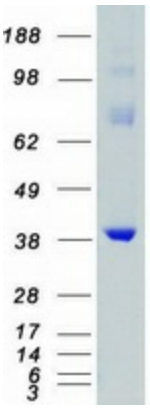
Product images:



Circular map for RC204481



Western blot validation of overexpression lysate (Cat# [LY400975]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204481 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MAP2K6 protein (Cat# [TP304481]). The protein was produced from HEK293T cells transfected with MAP2K6 cDNA clone (Cat# RC204481) using MegaTran 2.0 (Cat# [TT210002]).