

Product datasheet for **RC201597**

MAPK6 (NM_002748) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MAPK6 (NM_002748) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MAPK6
Synonyms:	ERK3; HsT17250; p97MAPK; PRKM6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC201597 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCAGAGAAAATTTGAAAGTCTCATGAACATTATGTTTGGATCTGGTTCTAGGTATATGGACTTAA
 AACCATGGGTTGTGGAGGCAATGGCTTGGTTTTCTGCTGTAGACAATGACTGTGACAAAAGAGTAGC
 CATCAAGAAAATTGTCCTTACTGATCCCCAGAGTGTCAAACATGCTCTACGTGAAATCAAAATTATTAGA
 AGACTTGACCATGATAACATTGTGAAAGTGTGGAGATTCTTGGTCCCAGTGGAAGCCAATTAACAGACG
 ATGTGGGCTCTTACGGAAGTGAACAGTGTACATTGTTTCCAGGAGTACATGGAGACAGACTTGGCTAA
 TGTGCTGGAGCAGGGCCCTTACTGGAAGAGCATGCCAGGCTTTTCATGTATCAGCTGCTACGGGGGCTC
 AAGTATATTCACCTCTGCAATGTACTGCACAGAGATCTCAAACCAGCTAATCTTTTCATTAATACGGAAG
 ACTTGGTCTGAAGATAGGTGACTTTGGTCTTGCACGGATCATGGATCCTCATTATCCCATAAGGGTCA
 TCTTTCTGAAGGATTGGTTACTAAATGGTACAGATCTCCACGTCTTTACTTTCTCCTAATAATTATACT
 AAAGCCATTGACATGTGGGCTGCAGGCTGCATCTTTGCTGAAATGCTGACTGGTAAAACCCTTTTTCGAG
 GTGCACATGAACCTGAACAGATGCAGCTGATTTTGAATCTATTCTGTTGTACATGAGGAAGATCGTCA
 GGAGCTTCTCAGCGTAATTCAGTTTACATTAGAAATGACATGACTGAGCCACACAAAACCTTTAACTCAG
 CTGCTTCCAGGAATTAGTCGAGAAGCAGTGGATTTCTGGAACAAAATTTTACATTTAGCCCCATGGATC
 GGTTAACAGCAGAAGAAGCACTCTCCCATCTTACATGAGCATATATTCTTTTCCAATGGATGAGCCAAT
 TTCAAGCCATCCTTTTTCATTTGAAGATGAAGTTGATGATATTTTGGCTTATGGATGAAACTCACAGTCA
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 GGCAAATCAAAATGTGAAAGGAATGGATTGGTTAAAGCCAGATAGCGCTAGAGGAAGCATCACAGCAAC
 TGGCTGAAAAGAAAGGAAAAGAATCAGGGATTTGATTTTGGATTTTATTGATCCTTTATTGCAGGAAC
 TAGTTCCAGCATGAGCCTACTGATGTTGTTGATAAATTAATGACTTGAATAGCTCAGTGTCCCAACTA
 GAATTGAAAAGTTTATATCAAAGTCAGTAAGCCAAGAAAACAGGAAAAGGAATGGCAAATCTGGCTC
 AATTAGAAAGCCTTGTACCAGTCTTCTTGGGACAGCCAGTTTGTGAGTGGTGGGGAGGACTGTTTTTCAT
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 AAGTTCTTTAGCAGGAAAGAAGATACTGAAATGCTAGAAACTGAGCCAGTAGAGGATGGGAAGCTTGGGG
 AGAGAGGACATGAGGAAGGATTTCTGAACAACAGTGGGGAGTTTCTCTTTTAAACAGCAGCTCGAGTCCAT
 AGGCATCCCACAGTTTACAGTCCAGTTGGGTCAACCTTAAGTCAATACAGGCCACATTAACACCTTCT
 GCTATGAAATCTTCCCCTCAAATTCCTCATCAAACATACAGCAGCATTCTGAAACATCTGAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC201597 protein sequence
Red=Cloning site Green=Tags(s)

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MAEKFESLMNIHGFDLGSRYMDLPLGCGGNL VFSAVDNDCKRVAIKKIVL TDPQSVKHALREIKIIR
RLDHDNI VKVFEILGPSGSQLTDDVGS L TELNSVYIVQ EYMETDLANVLEQGPLEEHARLFMYQLRGL
KYIHSANVLRDLK PANLFINTEDLV LKIGDFGLARIMDPHYSHKGHLSEGLVTKWYRSPRLLSPNNYT
KAIDMWAAGCIFAEMLTGKTLFAGAHELEQMQLILESIPVVHEEDRQELLSVIPVYIRNDMTEPHKPLTQ
LLPGISREAVDFLEQILTFSPMDRLTAEALSHPYMSIYSFPMDEPISSH PFHIEVDILLMDETHSH
IYNWERYHDCQFSEHDWPVHNNFDI DEVQLDPRALSDVTDEEEVQVDP RKYLDGDREKYLEDPAFDTNYS
TEPCWQYSDH HENKYCDLECSHTCNYKTRSSSYLDNLVWRESEVNHYYEPKLIIDL SNWKEQSKEKSDKK
GKSKCERNGLVKAQIALEEASQQLAGKEREKNQGFDFDSFIAGTIQLSSQHEPTDVVDKLN LNSSVSQL
ELKSLISKSVSQEKQEKGMANLAQLEALYQSSWDSQFVSGGEDCFFINQFCEVRKDEQVEKENTYTSYLD
KFFSRKEDTEMLETEPVEDGKLG ERGHEEGFLNNSGEFLFNKQLESIGIPQFHSPVGSPLKSIQATLTPS
AMKSSPQIPHQTYSSILKHLN
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TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6041_b10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_002748

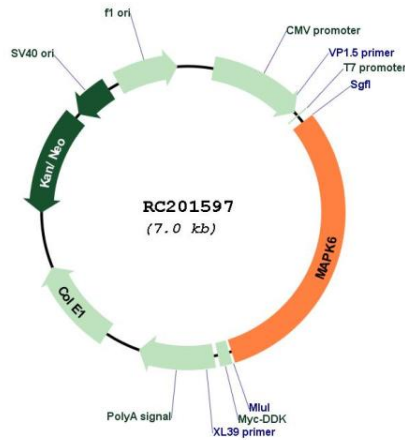
ORF Size: 2163 bp

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](#)

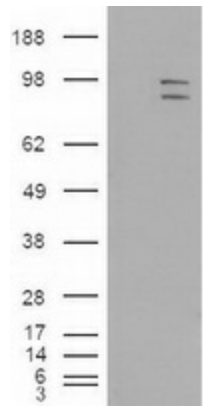
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<ol style="list-style-type: none">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_002748.4
RefSeq Size:	4225 bp
RefSeq ORF:	2166 bp
Locus ID:	5597
UniProt ID:	Q16659
Cytogenetics:	15q21.2
Domains:	pkinase, TyrKc, S_TKc
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase
MW:	82.7 kDa
Gene Summary:	The protein encoded by this gene is a member of the Ser/Thr protein kinase family, and is most closely related to mitogen-activated protein kinases (MAP kinases). MAP kinases also known as extracellular signal-regulated kinases (ERKs), are activated through protein phosphorylation cascades and act as integration points for multiple biochemical signals. This kinase is localized in the nucleus, and has been reported to be activated in fibroblasts upon treatment with serum or phorbol esters. [provided by RefSeq, Jul 2008]

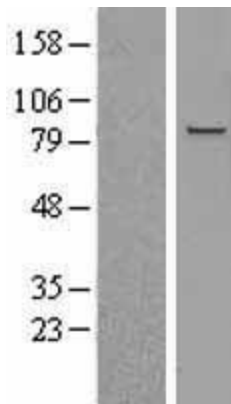
Product images:



Circular map for RC201597



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MAPK6 (Cat# RC201597, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MAPK6(Cat# [TA500077]). Positive lysates [LY400969] (100ug) and [LC400969] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400969]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201597 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).