

Product datasheet for **RC600061**

MCK10 (DDR1) (NM_013993) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MCK10 (DDR1) (NM_013993) Human Tagged ORF Clone
Tag:	DDK-His
Symbol:	MCK10
Synonyms:	CAK; CD167; DDR; EDDR1; HGK2; MCK10; NEP; NTRK4; PTK3; PTK3A; RTK6; TRKE
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5-DDK-His (PS100068)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RC600061 representing leader sequence plus the extracellular domain region of NM_013993

Red=Cloning site Blue=ORF Green=Tags(s)

GTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCTGGTACCGAGGAGATCCGCCGCCG
CGATCGCC

ATGGGACCAGAGGCCCTGTCATCTTTACTGCTGCTCTTGGTGGCAAGTGGAGACATGAAGGGACATT
TTGATCTGCCAAGTGCCGCTATGCCCTGGGCATGCAGGACCGGACCATCCCAGACAGTGACATCTCTGC
TTCCAGCTCCTGGTCAGATTCCACTGCCGCCGCCACAGCAGGTTGGAGAGCAGTGACGGGGATGGGGCC
TGGTGCCCGCAGGGTCGGTGTTTCCCAAGGAGGAGGAGTACTTGCAGGTGGATCTACAACGACTGCACC
TGGTGGCTCTGGTGGCACCCAGGGACGGCATGCCGGGGCCCTGGGCAAGGAGTTCTCCCGGAGCTACCG
GCTGCGTTACTCCCGGATGGTCGCCGCTGGATGGGCTGGAAGGACCGCTGGGGTCAAGGAGTGATCTCA
GGCAATGAGGACCTGAGGGAGTGGTGTGAAGGACCTTGGGCCCCCATGGTTGCCGACTGGTTCGCT
TCTACCCCGGGCTGACCGGGTATGAGCGTCTGTCTGCGGGTAGAGCTCTATGGCTGCCTCTGGAGGGA
TGGACTCTGTCTTACACCGCCCTGTGGGGCAGACAATGATTTATCTGAGGCCGTGTACCTCAACGAC
TCCACCTATGACGGACATACCGTGGGCGGACTGCAGTATGGGGTCTGGGCCAGCTGGCAGATGGTGTGG
TGGGGCTGGATGACTTTAGGAAGAGTCAGGAGCTGCGGGTCTGGCCAGGCTATGACTATGTGGGATGGAG
CAACCACAGCTTCTCCAGTGGCTATGTGGAGATGGAGTTTGGAGTTGACCGGCTGAGGGCCTCCAGGCT
ATGCAGTCCACTGTAACAACATGCACACGCTGGGAGCCCGTCTGCCTGGCGGGTGGAAATGTCGCTTCC
GGCGTGGCCCTGCCATGGCCTGGGAGGGGGAGCCATGCGCCACAACCTAGGGGGCAACCTGGGGGACCC
CAGAGCCCGGGTGTCTCAGTGCCCTTGGCGCCGTGTGGCTCGCTTCTGCAGTGCCGCTTCTCTTT
CGGGGGCCCTGGTACTCTTACGCGAAATCTCCTCATCTCTGATGTGGTGAACAATCTCTCCGGCAC
TGGGAGGCACCTTCCCGCCAGCCCTGGTGGCCGCTGGCCACCTCCACCAACTTCAGCAGCTTGGAG
GCTGGAGCCAGAGGCCAGCAGCCGTGGCCAAGGCCAGGGGAGCCCGACCGCC

ACGCGTTCAGGCGACTACAAGGATGACGACGATAAGGGATCTCATCATCACCATCACCATTAATGAGATC
TGGTACCGATATCAAGCTTGTGACTCTAGA

Protein Sequence:

>RC600061 representing signal peptide plus the extracellular domain region of NM_013993

Red=Cloning sites Green= DDK and 6XHIS Tags

MGPEALSSLLLLL VASGDMKGFDPKCRYALGMQDRTIPDSDISASSWSWSDTAARHSRLESDDGDA
WCPAGSVFPKEEYLQVDLQRLHLVALVGTQGRHAGGLGKEFSRSYRLRYSRDGRRWGWKDRWQEVIS
GNEDPEGVVLKDLGPPMVARL VRFYPRADRVMSVCLRVELYGCLWRDGLLSYAPVQMTMYLSEAVYLN
STYDGHTVGGLQYGGQLADGVVGLDDFRKSQELRVWPGYDYVGSNHSFSSGYVEMEFDFDLRAFQA
MQVHCNNMHTLGARLPGVVECFRRGPAMAWEGEPMRHNLGGNLGDPRARAVSVPLGGRRVARFLQCRFLF
AGPWLLFSEISFISDVVNNSSPALGGTFPPAPWPPGPPPTNFSSELEPRGQQPVAKAEGSPTA

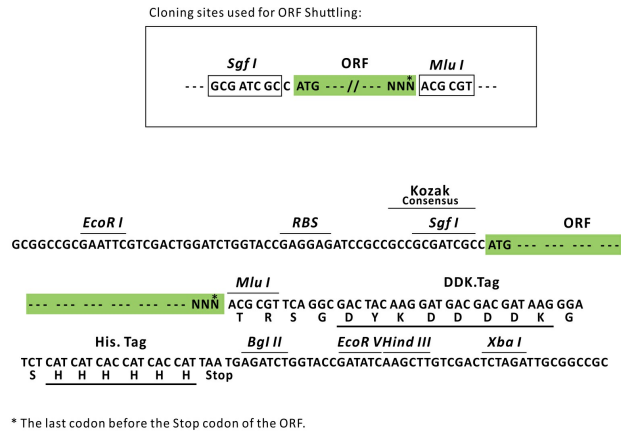
TRSGTRSGDYKDDDDKGSHHHHHH

Chromatograms:

https://cdn.origene.com/chromatograms/mk8117_g12.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_013993

ORF Size: 1245 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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 extra cellular domain of the protein 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_013993.2](#), [NP_054699.2](#)

RefSeq Size:	3877 bp
RefSeq ORF:	2742 bp
Locus ID:	780
UniProt ID:	Q08345
Cytogenetics:	6p21.33
Domains:	F5_F8_type_C, pkinase, TyrKc, S_TKc
Protein Families:	Druggable Genome, Protein Kinase, Transmembrane
MW:	45.8 kDa

Gene Summary: Receptor tyrosine kinases play a key role in the communication of cells with their microenvironment. These kinases are involved in the regulation of cell growth, differentiation and metabolism. The protein encoded by this gene belongs to a subfamily of tyrosine kinase receptors with homology to Dictyostelium discoideum protein discoidin I in their extracellular domain, and that are activated by various types of collagen. Expression of this protein is restricted to epithelial cells, particularly in the kidney, lung, gastrointestinal tract, and brain. In addition, it has been shown to be significantly overexpressed in several human tumors. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Feb 2011]