

## Product datasheet for **RG222819**

### **MCK10 (DDR1) (NM\_013994) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	MCK10 (DDR1) (NM_013994) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MCK10
Synonyms:	CAK; CD167; DDR; EDDR1; HGK2; MCK10; NEP; NTRK4; PTK3; PTK3A; RTK6; TRKE
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG222819 representing NM\_013994  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGGACCAGAGGCCCTGTCATCTTTACTGCTGCTCTTGGTGCAAGTGAGATGCTGACATGAAGG  
 GACATTTTATCCTGCCAAGTGCCGCTATGCCCTGGGCATGCAGGACCGGACCATCCAGACAGTGACAT  
 CTCTGCTTCCAGCTCCTGGTCAGATTCCACTGCCGCCGCCACAGCAGGTTGGAGAGCAGTGACGGGGAT  
 GGGCCTGGTGCCCGCAGGGTCCGGTGTTCCTCAAGGAGGAGGAGTACTTGCAGGTGGATCTACAACGAC  
 TGCACCTGGTGGCTCTGGTGGGCACCCAGGGACGGCATGCCGGGGCCTGGGCAAGGAGTTCTCCCGGAG  
 CTACCGGCTGCGTTACTCCCGGATGGTCGCCGCTGGATGGGCTGGAAGGACCGTGGGGTCAGGAGGTG  
 ATCTCAGGCAATGAGGACCTGAGGAGTGGTGTGAAGGACCTTGGGCCCCCATGGTTGCCGACTGG  
 TTCGTTCTACCCCGGGCTGACCGGTCATGAGCGTCTGTCTGCCGGTAGAGCTCTATGGCTGCCTCTG  
 GAGGGATGGACTCTGTCTTACACCGCCCTGTGGGCAGACAATGTATTTATCTGAGGCCGTGTACCTC  
 AACGACTCCACCTATGACGGACATACCGTGGGCGGACTGCAGTATGGGGTCTGGCCAGCTGGCAGATG  
 GTGTGGTGGGGCTGGATGACTTTAGGAAGATCAGGAGCTGCCGGTCTGGCCAGGCTATGACTATGTGGG  
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 CAGGCTATGCAGGTCCACTGTAACAACATGCACACGCTGGGAGCCGCTGCCTGGCGGGGTGGAATGTC  
 GCTTCCGGCGTGGCCCTGCCATGGCCTGGGAGGGGAGCCATGCGCCACAACCTAGGGGGCAACCTGGG  
 GGACCCAGAGCCCGGGCTGTCTCAGTGCCCTTGGCGCCGTGGCTCGCTTCTGCAGTGCCGCTTC  
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 GCCTCCTTCTGGCACTTACGCCGTCCCTCGAGGCCCGGGCCCCCACACCCGCTGGGCCAAACC  
 CACCAACACCCAGGCTACAGTGGGACTATATGGAGCCTGAGAAGCCAGGCGCCCGCTTCTGCCCCCA  
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 ACACCTATGCTGTGCCTGCACTGCCCCAGGGGAGTCCGGGATGGGCCCCAGAGTGGATTTCCCTCG  
 ATCTCGACTCCGTTCAAGGAGAAGCTTGGCGAGGGCCAGTTTGGGGAGGTGCACCTGTGTGAGGTGAC  
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 AATGCTGCTGCATGTGGCAGCCAGATCGCCTCCGGCATGCGCTATCTGGCCACACTCACTTTGTACAT  
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 GCCGGAACCTCTATGCTGGGACTATTACCGTGTGCAGGGCCGGGAGTGTGCCATCCGCTGGATGGC  
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 GAGGTGCTGATGCTGTAGGGCCAGCCCTTTGGGACGCTACCCGACGAGCAGGTATCGAGAACGCGG  
 GGGAGTTCTTCCGGGACAGGGCCGGCAGGTGTACCTGTCCCGGCCGCTGCCTGCCCGAGGGCCTATA  
 TGAGCTGATGCTTCGGTGTGGAGCCGGGAGTCTGAGCAGCGACCACCTTTTCCAGCTGCATCGGTT  
 CTGGCAGAGGATGCACTAACACGGTG

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:** >RG222819 representing NM\_013994  
Red=Cloning site Green=Tags(s)

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MGPEALSSLLLLLLVASGDADMKGHFDPKCRYALGMQDRTIPDSDISASSSWSDSTAARHSRLESSDGD
GAWCPAGSVFPKEEYEQVDLQRLHLVALVGTQGRHAGGLGKEFSRSYRLRYSRDGRRWMGWKDRWQEV
ISGNEDPEGVVLKDLGPPMVARLVRFYPRADRVMSVCLRVELYGLWRDGLLSYAPVQTMYLSEAVYL
NDSTYDGHTVGGQLQYGGGLQGLADGVVGLDDFRKSSQELRVWPGYDYVGSNHSFSSGYVEMEFEDRLRAF
QAMQVHCNNMHTLGARLPGGVECRFRRGPAMAWEGEPMRHNLGGNLGDPRARAVSVPLGGRVARFLQCRF
LFAGPWLLFSEISFISDVVNNSSPALGGTFPPAPWPPGPPPTNFSSLELEPRGQQPVAKAEGSPTAILI
GCLVAIIIIIIIIALMLWRLHWRLLSKAERRVLEEELTVHLSVPGDTILINNRPGPREPPPYQEPRPR
GNPPHSAPCVNGSALLSNPAYRLLLATYARPPRGPGPPTPAWAKPTNTQAYS GDYMEPEKPGAPLLPP
PPQNSVPHYAEADIVTLQGVTTGGNTYAVPALPPGAVGDGPPRVDFPRSRLRFKEKLGEGQFGEVHLCEVD
SPQDLVSLDFPLNVRKGHPLLVAVKILRPDATKNASFSLFSRNDFLKEVKIMSRLKDPNIIRLLGVCVQD
DPLCMITDYMENGLNQFLSAHQLEDKAAEGAPGDGQAAQGPTISYPMLLHVAAQIASGMRYLATLNFVH
RDLATRNLVGENFTIKIADFGMSRNL YAGDYR VQGRAVLP IRWMAWECILMGKFTTASDVFVAFVTLW
EVLMLCRAQPFQGLTDEQVIENAGEFFRDQGRQVYLSRPPACQGLYELMLRCWSRESEQRPPFSQLHRF
LAEDALNTV
    
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TRTRPLE – GFP Tag – V

**Restriction Sites:**

SgfI-MluI

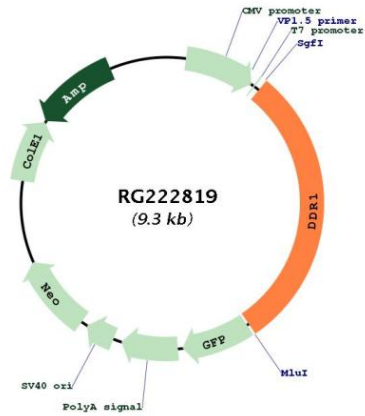
**Cloning Scheme:**



**ACCN:** NM\_013994

<b>ORF Size:</b>	2757 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_013994.2</a> , <a href="#">NP_054700.2</a>
<b>RefSeq Size:</b>	3678 bp
<b>RefSeq ORF:</b>	2760 bp
<b>Locus ID:</b>	780
<b>UniProt ID:</b>	<a href="#">Q08345</a>
<b>Cytogenetics:</b>	6p21.33
<b>Protein Families:</b>	Druggable Genome, Protein Kinase, Transmembrane
<b>Gene Summary:</b>	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]

Product images:



Circular map for RG222819