

## Product datasheet for **SC308928**

### **MCK10 (DDR1) (NM\_013993) Human Untagged Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** MCK10 (DDR1) (NM\_013993) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** MCK10  
**Synonyms:** CAK; CD167; DDR; EDDR1; HGK2; MCK10; NEP; NTRK4; PTK3; PTK3A; RTK6; TRKE  
**Mammalian Cell Selection:** None  
**Vector:** [pCMV6-XL4](#)  
**E. coli Selection:** Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_013993 edited  
 AGCCCCGAGGGATCAGGAGCTATGGGACCAGAGGCCCTGTCATCTTTACTGCTGCTGCTC  
 TTGGTGGCAAGTGGAGATGCTGACATGAAGGGACATTTTGATCCTGCCAAGTGCCGCTAT  
 GCCTGGGCATGCAGGACCGGACCATCCCAGACAGTGCATCTCTGCTTCCAGCTCCTGG  
 TCAGATCCACTGCCGCCGCCACAGCAGGTTGGAGAGCAGTGACGGGGATGGGGCTGG  
 TGCCCCGAGGGTCGGTGTTCCTCAAGGAGGAGGAGTACTTGCAGGTGGATCTACAACGA  
 CTCCACCTGGTGGCTCTGGTGGGCACCCAGGGACGGCATGCCGGGGCCTGGGCAAGGAG  
 TTCTCCCGGAGCTACCGGCTGCGTTACTCCCGGATGGTCGCCGCTGGATGGGCTGGAAG  
 GACCGCTGGGGTCAGGAGGTGATCTCAGGCAATGAGGACCCTGAGGGAGTGGTGTGAAG  
 GACCTTGGGCCCCCATGGTTGCCGACTGGTTCGCTTCTACCCCGGGCTGACCGGGTC  
 ATGAGCGTCTGTCTGCGGTAGAGCTCTATGGCTGCCTCTGGAGGGATGGACTCCTGTCT  
 TACACCGCCCCTGTGGGCAGACAATGTATTTATCTGAGGCCGTGACCTCAACGACTCC  
 ACCTATGACGGACATACCGTGGGCGGACTGCAGTATGGGGTCTGGGCCAGCTGGCAGAT  
 GGTGTGGTGGGGCTGGATGACTTTAGGAAGAGTCAGGAGCTGCGGGTCTGGCCAGGCTAT  
 GACTATGTGGGATGGAGCAACCACAGCTTCTCCAGTGGCTATGTGGAGATGGAGTTTGAG  
 TTTGACCGGCTGAGGGCCTTCCAGGCTATGCAGGTCCACTGTAACAACATGCACACGCTG  
 GGAGCCCGTCTGCCTGGCGGGTGAATGTCGCTTCCGGCGTGGCCCTGCCATGGCCTGG  
 GAGGGGAGCCCCATGCGCCACAACCTAGGGGGCAACCTGGGGGACCCAGAGCCCGGGCT  
 GTCTCAGTGGCCCTTGGCGCCGTGTGGCTCGCTTCTGCAGTGCCGCTTCTCTTTGCG  
 GGGCCCTGGTTACTCTTACGCGAAATCTCCTTCATCTCTGATGTGGTGAACAATTCTCT  
 CCGGCACTGGGAGGCACCTTCCCGCCAGCCCCCTGGTGGCCGCCTGGCCACCTCCCACC  
 AACTTCAGCAGCTTGGAGCTGGAGCCCAGAGGCCAGCAGCCGTTGGCCAAGGCCGAGGGG  
 AGCCCCGACCGCCATCCTCATCGGCTGCCTGGTGGCCATCATCCTGCTCCTGCTGCTCATC  
 ATTGCCCTCATGCTCTGGCGGCTGCACTGGCGCAGGCTCCTCAGCAAGGCTGAACGGAGG  
 GTGTTGGAAGAGGAGCTGACGGTTCACCTCTCTGTCCCTGGGACACTATCCTCATCAAC  
 AACCGCCAGGCTCTAGAGAGCCACCCCGTACCAGGAGCCCCGGCCTCGTGGGAATCCG  
 CCCCACTGCTCCCTGTGTCCCAATGGCTCTGCGTTGCTGCTCTCCAATCCAGCCTAC



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CGCCTCCTTCTGGCCACTTACGCCCGTCCCCCTCGAGGCCCGGGCCCCCACACCCGCC  
 TGGGCCAAACCCACCAACACCCAGGCCCTACAGTGGGGACTATATGGAGCCTGAGAAGCCA  
 GGCGCCCCGCTTCTGCCCCACCTCCCCAGAACAGCGTCCCCATTATGCCGAGGCTGAC  
 ATTGTTACCCTGCAGGGCGTCACCGGGGCAACACCTATGCTGTGCCTGCACTGCCCCCA  
 GGGGCAGTCGGGATGGGCCCCAGAGTGGATTTCCCTCGATCTCGACTCCGCTTCAAG  
 GAGAAGCTTGGCGAGGGCCAGTTTGGGGAGGTGCACCTGTGTGAGGTGCACAGCCCTCAA  
 GATCTGGTCAGTCTTGAATTTCCCTTAATGTGCGTAAGGGACACCCTTTGCTGGTAGCT  
 GTCAAGATCTTACGGCCAGATGCCACCAAGAATGCCAGGAATGATTTCTGAAAGAGGTG  
 AAGATCATGTGCGAGGCTCAAGGACCCAAACATCATTTCGGCTGCTGGGCGTGTGTGTCAG  
 GACGACCCCTCTGCATGATTACTGACTACATGGAGAACGGTGACCTCAACCAGTTCTCTC  
 AGTGCCACCAGCTGGAGGACAAGGCAGCCGAGGGGGCCCTGGGGACGGGCAGGCTGCG  
 CAGGGGCCACCATCAGTACCCAATGTGCTGCATGTGGCAGCCAGATCGCTCCGGC  
 ATGCGCTATCTGGCCCACTCAACTTTGTACATCGGGACCTGGCCACGCGGAACCTGCCTA  
 GTTGGGAAAATTTACCATCAAAATCGCAGACTTTGGCATGAGCCGGAACCTCTATGCT  
 GGGGACTATTACCGTGTGCAGGGCCGGGCAGTGTGCCATCCGCTGGATGGCCTGGGAG  
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 TGGGAGGTGCTGATGCTCTGTAGGGCCAGCCCTTTGGGAGCTCACCGACGAGCAGGTC  
 ATCGAGAACGCGGGGAGTTCTTCCGGGACCAGGGCCGGCAGGTGTACCTGTCCCGCCG  
 CCTGCCTGCCCGCAGGGCCTATATGAGCTGATGCTTCGGTGTGGAGCCGGGAGTCTGAG  
 CAGCGACCACCCTTTCCAGCTGCATCGGTTCTTGGCAGAGGATGCACTCAACACGGTG  
 TGAATCACACATCCAGCTGCCCTCCCTCAGGGAGCGATCCAGGGGAAGCCAGTGACACT  
 AAAACAAGAGGACACAATGGCACCTCTGCCCTTCCCTCCCGACAGCCCATCACCTCTAA  
 TAGAGGCAGTGAGACTGCAGGTGGGCTGGGCCACCCAGGGAGCTGATGCCCTTCTCCC  
 CTTCCTGGACACACTCTCATGTCCCTTCTGTTCTTCTTCTAGAAAGCCCTGTCCGC  
 CACCCAGCTGGTCTGTGGATGGGATCCTCTCCACCCTCCTTAGCCATCCCTTGGGGAA  
 GGGTGGGAGAAAATAGGATAGACACTGGACATGGCCATTGGAGCACCTGGGCCCCAC  
 TGGACAACACTGATTCTGGAGAGGTGGCTGCGCCCCAGCTTCTCTCCCTGTACAC  
 ACTGGACCCCACTGGCTGAGAATCTGGGGGTGAGGAGGACAAGAAGGAGAGGAAAATGTT  
 TCCTTGTGCTGCTCCTGTACTTGTCTCAGCTTGGGCTTCTTCTCCTCCATCACCTGA  
 AACACTGGACCTGGGGTAGCCCCGCCAGCCCTCAGTACCCCACTTCCCACTTGCA  
 GTCTTGTAGCTAGAACTTCTAAGCCTATACGTTTCTGTGGAGTAAATATTGGGATTGG  
 GGGGAAAGAGGGAGCAACGGCCATAGCCTTGGGGTTGGACATCTCTAGTGTAGCTGCCA  
 CATTGATTTTTCTATAATCACTTGGGGTTGTACATTTTGGGGGAGAGACACAGATTT  
 TTACACTAATATATGGACCTAGCTTGGGCAATTTAATCCCCTGCACTAGGCAGGTAAT  
 AATAAAGGTTGAGTTTTCCACAAAAAAAAAAAAAAAAAAAA

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_013993 unedited  
 GTCAAATTTTGTATACGACTCATATAGGCGGCCGCGNAATTCGCACGAGGCCCGAGGGAT  
 CAGGAGCTATGGGACCAGAGGCCCTGTATCTTTACTGCTGCTGCTTGGTGGCAAGTG  
 GAGATGCTGACATGAAGGGACATTTTATCCTGCCAAGTGCCGCTATGCCCTGGGCATGC  
 AGGACCGGACCATCCCAGACAGTGACATCTCTGCTTCCAGCTCCTGGTACATTCCACTG  
 CCGCCCGCCACAGCAGGTTGGAGAGCAGTGACGGGGATGGGGCCTGGTGGCCCGCAGGGT  
 CCGTGTTCCTCAAGGAGGAGGAGTACTTGACAGGTGGATCTACAACGACTCCACCTGGTGG  
 CTCTGGTGGGCACCCAGGGACGGCATGCCGGGGCCTGGGCAAGGAGTTCTCCCGGAGCT  
 ACCGGCTGCGTTACTCCCGGGATGGTCCCGCTGGATGGGCTGGAAGGACCGCTGGGGTC  
 AGGAGGTGATCTCAGGCAATGAGGACCCTGAGGGAGTGGTCTGAAGGACCTTGGGCCCC  
 CCATGGTTGCCCGACTGGTTCGCTTCTACCCCGGGCTGACCGGGTCATGAGCGTCTGTC  
 TCGGGGTAGAGCTCTATGGCTGCCTCTGGAGGGATGGACTCCTGTCTTACACCGCCCTG  
 TGGGGCAGACAATGATTTATCTGAAGCCGTGTACCTCAACGACTCCACCTATGACGGAC  
 ATACCGTNGGCGGACTGCAGTATGGGGTCTGGGCCAGCTGGCAAAGGTGTGGTGGGGCT  
 GGATGACTTTAGGAAGAGTCAGGAGCTGCGGGTCTGGCC

**Restriction Sites:**

Please inquire

<b>ACCN:</b>	NM_013993
<b>Insert Size:</b>	3700 bp
<b>OTI Disclaimer:</b>	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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></p>
<b>OTI Annotation:</b>	The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.
<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_013993.2</a> , <a href="#">NP_054699.2</a>
<b>RefSeq Size:</b>	3877 bp
<b>RefSeq ORF:</b>	2742 bp
<b>Locus ID:</b>	780
<b>UniProt ID:</b>	<a href="#">Q08345</a>
<b>Cytogenetics:</b>	6p21.33
<b>Domains:</b>	F5_F8_type_C, pkinase, TyrKc, S_TKc
<b>Protein Families:</b>	Druggable Genome, Protein Kinase, Transmembrane

**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]

Transcript Variant: This variant (2) contains an additional in-frame coding exon compared to variant 1, resulting in a longer isoform (2, also known as DDR1b) with a 37 aa protein segment not found in isoform 1. Variants 2 and 9 encode the same isoform (2).