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Product datasheet for SC323555

MCK10 (DDR1) (NM_001954) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MCK10 (DDR1) (NM_001954) 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-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

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Fully Sequenced ORF:

>NCBI ORF sequence for NM_001954, the custom clone sequence may differ by one or more nucleotides

ATGGGACCAGAGGCCCTGTCATCTTTACTGCTGCTGCTCTTGGTGGCAAGTGGAGATGCTGACATGAAGG
GACATTTTGATCCTGCCAAGTGCCGCTATGCCCTGGGCATGCAGGACCGGACCATCCCAGACAGTGACAT
CTCTGCTTCCAGCTCCTGGTCAGATTCCACTGCCGCCCGCCACAGCAGGTTGGAGAGCAGTGACGGGGAT
GGGGCCTGGTGCCCCGCAGGGTCGGTGTTTCCCAAGGAGGAGGAGTACTTGCAGGTGGATCTACAACGAC
TGCACCTGGTGGCTCTGGTGGGCACCCAGGGACGGCATGCCGGGGGCCTGGGCAAGGAGTTCTCCCGGAG
CTACCGGCTGCGTTACTCCCGGGATGGTCGCCGCTGGATGGGCTGGAAGGACCGCTGGGGTCAGGAGGTG
ATCTCAGGCAATGAGGACCCTGAGGGAGTGGTGCTGAAGGACCTTGGGCCCCCCATGGTTGCCCGACTGG
TTCGCTTCTACCCCCGGGCTGACCGGGTCATGAGCGTCTGTCTGCGGGTAGAGCTCTATGGCTGCCTCTG
GAGGGATGGACTCCTGTCTTACACCGCCCCTGTGGGGCAGACAATGTATTTATCTGAGGCCGTGTACCTC
AACGACTCCACCTATGACGGACATACCGTGGGCGGACTGCAGTATGGGGGTCTGGGCCAGCTGGCAGATG
GTGTGGTGGGGCTGGATGACTTTAGGAAGAGTCAGGAGCTGCGGGTCTGGCCAGGCTATGACTATGTGGG
ATGGAGCAACCACAGCTTCTCCAGTGGCTATGTGGAGATGGAGTTTGAGTTTGACCGGCTGAGGGCCTTC
CAGGCTATGCAGGTCCACTGTAACAACATGCACACGCTGGGAGCCCGTCTGCCTGGCGGGGTGGAATGTC
GCTTCCGGCGTGGCCCTGCCATGGCCTGGGAGGGGGAGCCCATGCGCCACAACCTAGGGGGCAACCTGGG
GGACCCCAGAGCCCGGGCTGTCTCAGTGCCCCTTGGCGGCCGTGTGGCTCGCTTTCTGCAGTGCCGCTTC
CTCTTTGCGGGGCCCTGGTTACTCTTCAGCGAAATCTCCTTCATCTCTGATGTGGTGAACAATTCCTCTC
CGGCACTGGGAGGCACCTTCCCGCCAGCCCCCTGGTGGCCGCCTGGCCCACCTCCCACCAACTTCAGCAG
CTTGGAGCTGGAGCCCAGAGGCCAGCAGCCCGTGGCCAAGGCCGAGGGGAGCCCGACCGCCATCCTCATC
GGCTGCCTGGTGGCCATCATCCTGCTCCTGCTGCTCATCATTGCCCTCATGCTCTGGCGGCTGCACTGGC
GCAGGCTCCTCAGCAAGGCTGAACGGAGGGTGTTGGAAGAGGAGCTGACGGTTCACCTCTCTGTCCCTGG
GGACACTATCCTCATCAACAACCGCCCAGGTCCTAGAGAGCCACCCCCGTACCAGGAGCCCCGGCCTCGT
GGGAATCCGCCCCACTCCGCTCCCTGTGTCCCCAATGGCTCTGCCTACAGTGGGGACTATATGGAGCCTG
AGAAGCCAGGCGCCCCGCTTCTGCCCCCACCTCCCCAGAACAGCGTCCCCCATTATGCCGAGGCTGACAT
TGTTACCCTGCAGGGCGTCACCGGGGGCAACACCTATGCTGTGCCTGCACTGCCCCCAGGGGCAGTCGGG
GATGGGCCCCCCAGAGTGGATTTCCCTCGATCTCGACTCCGCTTCAAGGAGAAGCTTGGCGAGGGCCAGT
TTGGGGAGGTGCACCTGTGTGAGGTCGACAGCCCTCAAGATCTGGTTAGTCTTGATTTCCCCCTTAATGT
GCGTAAGGGACACCCTTTGCTGGTAGCTGTCAAGATCTTACGGCCAGATGCCACCAAGAATGCCAGGAAT
GATTTCCTGAAAGAGGTGAAGATCATGTCGAGGCTCAAGGACCCAAACATCATTCGGCTGCTGGGCGTGT
GTGTGCAGGACGACCCCCTCTGCATGATTACTGACTACATGGAGAACGGCGACCTCAACCAGTTCCTCAG
TGCCCACCAGCTGGAGGACAAGGCAGCCGAGGGGGCCCCTGGGGACGGGCAGGCTGCGCAGGGGCCCACC
ATCAGCTACCCAATGCTGCTGCATGTGGCAGCCCAGATCGCCTCCGGCATGCGCTATCTGGCCACACTCA
ACTTTGTACATCGGGACCTGGCCACGCGGAACTGCCTAGTTGGGGAAAATTTCACCATCAAAATCGCAGA
CTTTGGCATGAGCCGGAACCTCTATGCTGGGGACTATTACCGTGTGCAGGGCCGGGCAGTGCTGCCCATC
CGCTGGATGGCCTGGGAGTGCATCCTCATGGGGAAGTTCACGACTGCGAGTGACGTGTGGGCCTTTGGTG
TGACCCTGTGGGAGGTGCTGATGCTCTGTAGGGCCCAGCCCTTTGGGCAGCTCACCGACGAGCAGGTCAT
CGAGAACGCGGGGGAGTTCTTCCGGGACCAGGGCCGGCAGGTGTACCTGTCCCGGCCGCCTGCCTGCCCG
CAGGGCCTATATGAGCTGATGCTTCGGTGCTGGAGCCGGGAGTCTGAGCAGCGACCACCCTTTTCCCAGC
TGCATCGGTTCCTGGCAGAGGATGCACTCAACACGGTGTGA

5' Read Nucleotide Sequence:

>OriGene 5' read for mutant NM_001954 unedited
CCGCCCGTCCAGCAAAGGGCGGTAGGCGTGTACGGTGGGAGGTTCTATATAAGCAGAGCTCGTTTAGTTG
AACCGTCAGAATCTTTGTAATACGACTCACTATAGGGCGGCCGCGAATACGGCACGAGGGCCCGAGGGAT
TCAGGAGCTATGGGACCAGAGGCCCTGTCATCTTTACTGCTGCTGCTCTTGGTGGCAAGCGGAGATGCTG
ACATGAAGGGACATTTTGATCCTGCCAAGTGCCGCTATGCCCTGGGCATGCAGGACCGGACCATCCCAGA
CAGTGACATCTCTGCTTCCAGCTCCTGGTCAGATTCCACTGCCGCCCGCCACAGCAGTTGGAGAGCAGTG
ACGGGGGATGGGGGCCTGGTGCCCCCGCAGGTCCCGTGGTTTTCCCAAGGAAGGAAGGAGTAACTTTGCA
GGTTGGATTCTTACAACGACTCCACCCGGGTTGCCTCCTGGTGGGGCACCCAAGGGGAACGGCATGGCCG
GGGGGCCGGGCCAAGGATTTTTTCCCGAAACTACCCGCCTGCTTTACTCCCCGGAAATGTCCCCCCCTTG
AATGGCCTGGAAAGACCCCCTTGGGTTAAGGAAGGTGATTTCTAAGGCAAGAGGGAAACCTAAAGAAATT
TTTTTCAAAAAACACTTGGGCCCCCCCAGGGTTTCCCCACAGGGTTTCCTTTTTACCCCCGGGTCAAACC
GGGCTTGAGTGTTTTTTTTCCCGGGTAAAGCCCTCTTGGGGTCCCCTTGGGGGGGTTGAGGATTTTGTTT
TTAAAAGGGGCTTTGGGGGGGAAAAAAAGGTTTTTTTTTCAGGGCGCGGTTCCCCCACCAACACCCCCCC
TATTACAGAGAAACATCCGGTGGGGGACACCTTTATTTAGGGGTTTCGGGGGACACTCTCGAAAAGGGGT
TGTGTGGGCTCTGTAACTATTTTGAAAGAATACCGACACCCGGGCTCTTGCGCGCGCCTCTATTCATATT
TGGGAAGAAGAACCACACCACTCTCCTCCTCGGCCGACTACTGTCTAGATAGTATGTAGTTATTTACCGC
ACGTAGAGCCGCTCATGCAGTTTATGCGGTCCTCTATGTGATGACATAACTTTCACGACGATC

Kinase Domain Sequence:

>SC323555 kinase domain raw sequence. By performing BLASTX analysis with this sequence against NCBI refernce protein database, you can confirm the presence of the kinase-deficient mutation
ARCMRATTGGGGAGKGCACCTGTGTGAGGTCGACAGCCCTCAAGATCTGGTCAGTCTTGATTTCCCCCTT
AATGTGCGTAAGGGACACCCTTTGCTGGTAGCTGTCATGATCTTACGGCCAGATGCCACCAAGAATGCCA
GGAATGATTTCCTGAAAGAGGTGAAGATCATGTCGAGGCTCAAGGACCCAAACATCATTCGGCTGCTGGG
CGTGTGTGTGCAGGACGACCCCCTCTGCATGATTACTGACTACAT

Restriction Sites: Please inquire

ACCN: NM_001954

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." Cell. 2008 May p536-548.

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_001954.4, NP_001945.3

RefSeq Size:	3840 bp
RefSeq ORF:	2631 bp
Locus ID:	780
UniProt ID:	Q08345
Cytogenetics:	6p21.33
Protein Families:	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 (1) represents the predominant transcript, and encodes isoform 1 (also known as DDR1a). Variants 1, 7, and 8 encode the same isoform (1).