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Product datasheet for MR210017

Prkch (NM_008856) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Prkch (NM_008856) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Prkch
Synonyms:	Pkc; Pkch
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR210017 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCGTCCGGCACGATGAAGTTCAATGGCTATCTGAGGGTCCGCATCGGAGAGGCTGTAGGGCTGCAGC
CCACCCGCTGGTCCCTGCGGCACTCGCTCTTCAAAAAGGGCCACCAGCTGCTGGACCCCTACCTGACGGT
GAGCGTAGACCAGGTACGCGTGGGCCAGACCAGCACAAAGCAGAAGACCAACAAACCCACCTACAACGAG
GAGTTCTGCGCCAATGTCACCGACGGCGGCCACCTGGAGCTAGCCGTCTTCCACGAGACGCCCCTGGGTT
ATGACCACTTTGTGGCCAACTGCACGCTGCAGTTCCAGGAGCTGTTGCGCACGGCTGGTACCTCGGACAC
CTTCGAGGGCTGGGTGGATCTGGAGCCTGAGGGGAAAGTGTTTGTGGTAATAACCCTAACAGGGAGTTTC
ACTGAAGCCACTCTCCAGAGAGACCGCATCTTCAAGCATTTTACCAGGAAGCGCCAAAGGGCTATGCGAA
GACGAGTCCATCAAGTGAACGGACATAAGTTCATGGCCACGTACCTGAGGCAGCCCACCTACTGCTCTCA
TTGCCGAGAGTTCATCTGGGGAGTATTTGGGAAACAGGGTTATCAATGCCAAGTGTGCACCTGCGTCGTC
CATAAACGCTGCCATCATCTAATTGTTACAGCCTGCACTTGCCAAAACAATATTAACAAAGTGGATGCCA
AGATTGCAGAACAGCGGTTTGGCATCAACATCCCACACAAGTTCAACGTTCACAATTACAAGGTGCCCAC
GTTCTGTGACCACTGTGGCTCCCTGCTCTGGGGGATAATGCGACAAGGACTTCAGTGTAAAATATGTAAG
ATGAATGTACATATTCGGTGTCAGGCGAACGTGGCCCCAAACTGCGGGGTGAATGCCGTGGAGCTTGCCA
AGACCCTGGCAGGGATGGGTCTCCAACCCGGAAATATTTCTCCAACCTCGAAACTCATTTCCAGGTCGAC
ACTAAGACGGCAGGGAAAGGAGGGCTCCAAAGAAGGAAATGGGATCGGTGTTAACTCTTCCAGCAGATTC
GGCATCGACAACTTTGAGTTCATCCGGGTGTTGGGGAAGGGGAGCTTCGGGAAGGTGATGCTTGCCAGGA
TAAAGGAGACAGGAGAACTGTACGCCGTGAAGGTGCTGAAGAAGGACGTGATTCTGCAGGATGATGATGT
AGAGTGCACCATGACTGAGAAGAGGATCCTGTCCTTGGCTCGCAACCACCCCTTCCTCACCCAGCTCTTC
TGCTGCTTTCAGACTCCAGACCGTCTGTTCTTTGTCATGGAGTTTGTGAACGGAGGCGACCTGATGTTCC
ACATCCAAAAGTCCCGTCGTTTCGATGAAGCCCGTGCTCGTTTCTACGCCGCGGAGATCATTTCTGCACT
CATGTTCCTACATGAGAAAGGTATCATCTATAGAGACTTGAAACTGGACAATGTGCTATTGGACCACGAA
GGTCACTGTAAACTGGCCGATTTTGGAATGTGCAAGGAGGGGATTTGTAATGGGGTCACCACAGCCACCT
TCTGCGGTACACCTGACTACATTGCCCCAGAGATCCTTCAGGAGATGCTGTATGGACCTGCAGTAGACTG
GTGGGCCATGGGCGTGTTGCTTTATGAGATGCTGTGCGGACATGCGCCCTTTGAGGCTGAAAATGAAGAT
GACCTTTTTGAGGCCATACTGAATGATGAAGTCGTCTACCCCACCTGGCTCCATGAAGATGCCACAGGGA
TCCTCAAGTCTTTCATGACCAAGAACCCCACCATGCGCTTGGGCAGCCTGACTCAGGGAGGAGAGCATGA
GATCCTGAGACACCCTTTCTTTAAGGAAATCGACTGGGCCCAGTTGAACCATCGCCAGTTAGAGCCGCCT
TTCCGACCTAGAATCAAATCCCGAGAAGATGTCAGCAATTTTGACCCAGACTTTATAAAAGAAGAGCCCG
TCTTAACTCCGATTGATGAGGGACATCTTCCTATGATTAACCAGGATGAGTTTAGAAACTTTTCCTATGT
GTCACCGGAATTGCAACTG

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

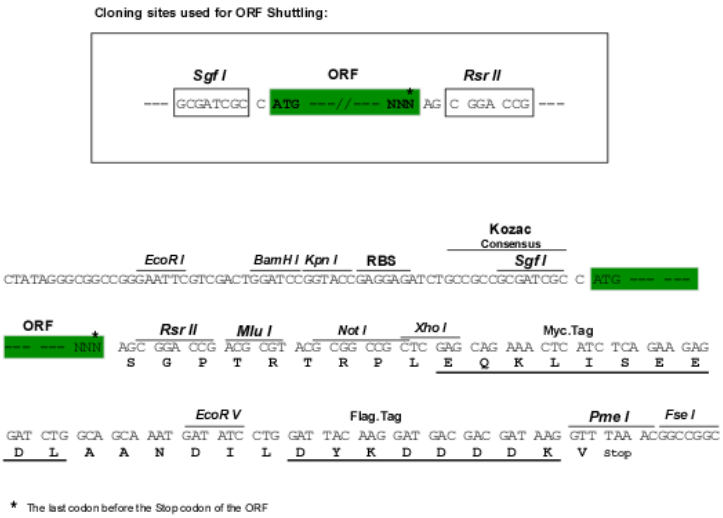
>MR210017 protein sequence
Red=Cloning site Green=Tags(s)

MSSGTMKFNGYLRVRIGEAVGLQPTRWSLRHSLFKKGHQLLDPYLTVSVDQVRVGQTSTKQKTNKPTYNE
EFCANVTDGGHLELAVFHETPLGYDHFVANCTLQFQELLRTAGTSDTFEGWVDLEPEGKVFVVITLTGSF
TEATLQRDRIFKHFTRKRQRAMRRRVHQVNGHKFMATYLRQPTYCSHCREFIWGVFGKQGYQCQVCTCVV
HKRCHHLIVTACTCQNNINKVDAKIAEQRFGINIPHKFNVHNYKVPTFCDHCGSLLWGIMRQGLQCKICK
MNVHIRCQANVAPNCGVNAVELAKTLAGMGLQPGNISPTSKLISRSTLRRQGKEGSKEGNGIGVNSSSRF
GIDNFEFIRVLGKGSFGKVMLARIKETGELYAVKVLKKDVILQDDDVECTMTEKRILSLARNHPFLTQLF
CCFQTPDRLFFVMEFVNGGDLMFHIQKSRRFDEARARFYAAEIISALMFLHEKGIIYRDLKLDNVLLDHE
GHCKLADFGMCKEGICNGVTTATFCGTPDYIAPEILQEMLYGPAVDWWAMGVLLYEMLCGHAPFEAENED
DLFEAILNDEVVYPTWLHEDATGILKSFMTKNPTMRLGSLTQGGEHEILRHPFFKEIDWAQLNHRQLEPP
FRPRIKSREDVSNFDPDFIKEEPVLTPIDEGHLPMINQDEFRNFSYVSPELQL

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_008856

ORF Size: 2052 bp

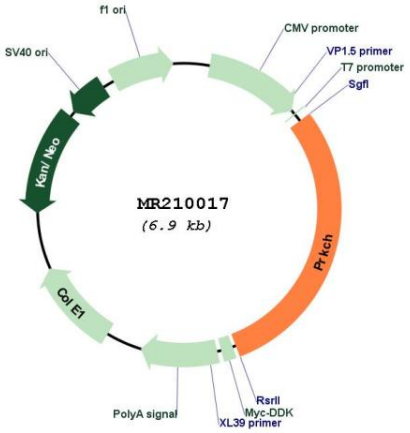
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	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_008856.2
RefSeq Size:	3301 bp
RefSeq ORF:	2052 bp
Locus ID:	18755
UniProt ID:	P23298
Cytogenetics:	12 C3
MW:	77.9 kDa
Gene Summary:	Protein kinase C (PKC) is a family of serine- and threonine-specific protein kinases that can be activated by calcium and the second messenger diacylglycerol. PKC family members phosphorylate a wide variety of protein targets and are known to be involved in diverse cellular signaling pathways. PKC family members also serve as major receptors for phorbol esters, a class of tumor promoters. Each member of the PKC family has a specific expression profile and is believed to play a distinct role in cells. The protein encoded by this gene is one of the PKC family members. It is a calcium-independent and phospholipids-dependent protein kinase. It is predominantly expressed in epithelial tissues and has been shown to reside specifically in the cell nucleus. This protein kinase can regulate keratinocyte differentiation by activating the MAP kinase MAPK13 (p38delta)-activated protein kinase cascade that targets CCAAT/enhancer-binding protein alpha (CEBPA). It is also found to mediate the transcription activation of the transglutaminase 1 (TGM1) gene. Mutations in the human gene are associated with susceptibility to cerebral infarction. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Sep 2015]

Product images:



Circular map for MR210017