

Product datasheet for **MR231200**

Pi4kb (NM_001293715) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pi4kb (NM_001293715) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pi4kb
Synonyms:	ESTM41; PI4K-beta; PI4Kbeta; Pik4cb
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide
Sequence:

>MR231200 representing NM_001293715
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGGGAGACATGGTAGTGGAGCCTGCCACCTGAAGCCAATTCTGAGCCTACTCTAGCCATCAGGGA
ATAATGGGGGCTCCCTACTAAGCGTCATCACGGAGGGGTCGGGAACTGTCAGTGATTGACCTGAGGT
GGCCAGAAAGCCTGCCAGGAGTACTGGAGAAAGTCAAGCTTTTGCATGGAGGTGTAGCCATCTTAGC
AAAGGCACCCCGCTGGAGTTGGTTAATGGGGATGGTGTGGACAATGAAATCCGTTGCCTAGATGATCCAC
CTGCCAGATCAGGGAGGAAGAAGATGAGATGGGGCTGGTGTGGCCTCTGGCACAGCCAAAGGAGCAAG
ACGACGACGACAGAACAACCTCAGCCAAACAGTCTTGGCTCCTGAGGCTGTTTGTAGTCAAACTATTTGAC
ATCTCTATGGCTATTTCACTTGTATAACTCCAAGGAGCCTGGAGTGAAGCCTACATTGGCAACCGGC
TCTTCTACTTTGCAATGAGGATGTGGACTTCTATTTGCCCCAGTTGCTTAACATGTATATCCACATGGA
TGAGGATGTGGCGATGCCATTAAGCCCTACATAGTCCACCGCTGTCGCCAGAGCATCAACTTTCCCTC
CAGTGTGCCCTGTTGCTTGGGGCCTACTCTCAGACATGCACATTTCCACTCAGCGACACTCGCGAGGGA
CCAAGTACGGAAGCTAATCCTCTCAGATGAGCTGAAGCCAGCTCACCGAAAGAGGGAGCTGCCGACATT
AAGCCAGCCCTGACACAGGGCTGTCTCCCTCTAAAAGGACTCACCGAGCTTCTAAGTCAGATGCTACG
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AGCTCTCCTCCAGCACCAGAGTATTGATAATTCATTAGTTCCTGTCCGGCTGGCCCTGAGCGAGA
ATTCATCAAGTCTTTGATGGCAATCGGCAACGGCTGGCCACGCTCCCCACTAAAGAGCAAAAAACAA
AGGCTGATCTCAGAGCTTCCCTGCTCAACCATAAGCTCCCTGCCGAGTCTGGCTGCCACGGCTGGCT
TTGACCACCAGTGGTCCGTGTGCCCCACACAAAGCTGTTGTTCTCAATTCCAAGGATAAGGCTCCCTA
CCTGATCTACGTGGAAGTCTCGAATGTGAAAACCTTGACACAACCTAGTGTTCCTGCCCGGATTCTGAA
AACCGAATTCGGAGTACCGGTCTGTAGAGAACCTGCCTGAATGTGGTATCACTCATGAGCAGCGAGCTG
GCAGTTCAGCACTGTGCCCAATTATGACAATGATGATGAAGCCTGGTCACTGGATGATATAGCGAGCT
GCAAGTGGAGCTCCCTGAAGTGCACACCAACAGCTGTGACAACATCTCCAGTTCCTCGGTGGACAGCATC
ACCAGCCAGGAGCAAGGAGCCTGTGTTCAATGCAGCAGGGGACATCCGACGGCGCCTTTCAGAACAGC
TGGCTCATACTCCTACAGCCTTCAAACGAGACCCTGAAGACCCTTCTGCAGTTGCCCTCAAAGAGCCCTG
GCAGGAGAAAGTGCAGGAGTACAGAGAAGTTCCTCGATGGCCATCTTCCCAATTGGCGACTCCTTTCA
GTCATTGTCAAGTGTGGAGATGACCTTCGCCAGGAGCTGCTGGCTTCCAGGTGTTGAAACAACCTGCAGT
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TGGCATGATTGAACAGTGTCAACGCTGTGTCCATCCACCAGGTGAAGAAACAGTCACAGCTCTCCTTG
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GGTACAGATTGTGGAGATCATGCAGCAAGTTCCTCAGCTTCTTCCATGGCTCCAGCACCATTTCGC
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ACGGCAGCATGAGGTCCATCACCACTACGATGGCTTCCAGTACCTACCAATGGCATCATG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR231200 representing NM_001293715
 Red=Cloning site Green=Tags(s)

MGDMVVEPATLKPTSEPTSPSGNNGSLLSVITEGVGELSVIDPEVAQKACQEVLEKVKLLHGGVAISS
 KGTPLELVNGDGDVNEIRCLDDPPAQIREEEDEMGAGVASGTAKGARRRRQNNSAKQSWLLRLEFESKLF
 ISMAISYLYNSKEPGVQAYIGNRLFYFRNEDVDFYLPQLLNMYYIHMDDEDVGAIAKPYIVHRCRQSFSL
 QCALLLGAYSSDMHISTQRHSRGTKLRKLLSDELKPAHRKRELPTLSPAPDTGLSPSKRTHQRSKSDAT
 ASISLSSNLKRTASNPKVENEDEELSSSTESIDNSFSSPVRLAPEREFIKSLMAIGKRLATLPTKEQKTQ
 RLISELSLLNHKLPARVWLPAGFDHVVVRPHTQAVVLNSKDKAPYLIYVEVLECFDFTTSVPAIPE
 NRIRSTRSVENLPECGITHEQRAGSFSTVPNYDNDDEAWSVDDIGELQVELPEVHTNSCDNISQFSVDSI
 TSQESKEPVFIAAGDIRRRLSEQLAHTPTAFKRDPEPSAVALKEPWQEKVRRIREGSPYGHLPNWRLLS
 VIVKCGDDLQELLAFQVLKQLQSIWEQERVPLWIKPKYILVISADSGMIEPVVNAVSIHQVKKQSQLSL
 LDYFLQEHGSYTTAFLSAQRNFVQSCAGYCLVCYLLQVKDRHNGNILLDAEGHIIHIDFGFILSSSPRN
 LGFETSAFKLTTEFVDVMGGLNGDMFNYYKMLMLQGLIAARKHMDKVVQIVEIMQGSQQLPCFHGSSTIR
 NLKERFHMSMTEEQLQLLVEQMV DGSMSITTKLYDGFQYLTNGIM

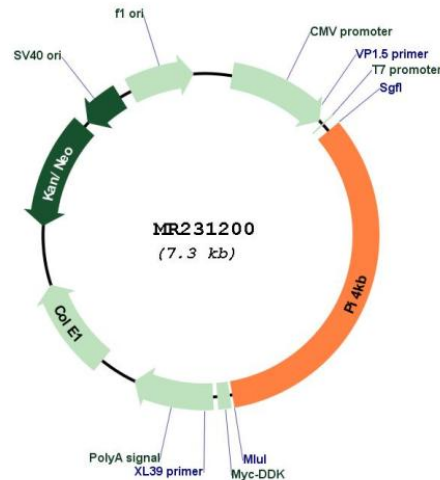
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfi-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001293715

ORF Size: 2448 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_001293715.1](#), [NP_001280644.1](#)

RefSeq Size: 3831 bp

RefSeq ORF: 2451 bp

Locus ID: 107650

UniProt ID: [Q8BKC8](#)

Cytogenetics: 3 F2.1

MW: 92 kDa

Gene Summary: Phosphorylates phosphatidylinositol (PI) in the first committed step in the production of the second messenger inositol-1,4,5,-trisphosphate (PIP). May regulate Golgi disintegration/reorganization during mitosis, possibly via its phosphorylation (By similarity). Involved in Golgi-to-plasma membrane trafficking (By similarity).[UniProtKB/Swiss-Prot Function]