

Product datasheet for **MR210726**

Pi4kb (NM_175356) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pi4kb (NM_175356) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pi4kb
Synonyms:	ESTM41; PI4K-beta; PI4Kbeta; Pik4cb
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>MR210726 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGGGAGACATGGTAGTGGAGCCTGCCACCCTGAAGCCAATTCTGAGCCTACTCTAGCCATCAGGGA
ATAATGGGGGCTCCCTACTAAGCGTCATCACGGAGGGGTCGGGAACTGTCAGTGATTGACCCTGAGGT
GGCCAGAAAGCCTGCCAGGAGTACTGGAGAAAGTCAAGCTTTTGCATGGAGGTGTAGCCATCTTAGC
AAAGGCACCCCGCTGGAGTTGGTTAATGGGGATGGTGTGGACAATGAAATCCGTTGCCTAGATGATCCAC
CTGCCAGATCAGGGAGGAAGAAGATGAGATGGGGCTGGTGTGGCCTCTGGCACAGCCAAAGGAGCAAG
ACGACGACGACAGAACAACCTCAGCCAAACAGTCTTGGCTCCTGAGGCTGTTTGTAGTCAAACTATTTGAC
ATCTCTATGGCTATTTCACTTGTATAACTCCAAGGAGCCTGGAGTGAAGCCTACATTGGCAACCGGC
TCTTCTACTTTGCAATGAGGATGTGGACTTCTATTTGCCCCAGTTGCTTAACATGTATATCCACATGGA
TGAGGATGTGGCGATGCCATTAAGCCCTACATAGTCCACCGCTGTCGCCAGAGCATCAACTTTCCCTC
CAGTGTGCCCTGTTGCTTGGGGCCTACTCTCAGACATGCACATTTCCACTCAGCGACACTCGCGAGGGA
CCAAGTACGGAAGCTAATCCTCTCAGATGAGCTGAAGCCAGCTCACCGAAAGAGGGAGCTGCCGACATT
AAGCCAGCCCTGACACAGGGCTGTCTCCCTCTAAAAGGACTCACACAGCCTTCTAAGTCAGATGCTACG
GCCAGCATAAGTCTCAGCAGCAACCTGAAACGAACAGCCAGCAACCCCTAAAGTGGAGAATGAGGATGAGC
CTGTCCGGCTGGCCCTGAGCGAGAATTCATCAAGTCTTGTAGTGGCAATCGGCAACCGCTGGCCACGCT
CCCCACTAAAGAGCAAAAAACAAAGGCTGATCTCAGAGCTTCCCTGCTCAACCATAAGCTCCCTGCC
CGAGTGGCTGCCACGGCTGGCTTTGACCACCAGTGGTCCGTGTGCCCCACACAAAGCTGTGTGTTTC
TCAATTCAGGATAAGGCTCCCTACCTGATCTACGTGGAAGTTCTGAATGTGAAAACTTTGACACAAC
TAGTGTTCCTGCCCGGATTCTGAAAACCGAATTCGGAGTACACGGTCTGTAGAGAACCTGCCTGAATGT
GGTATCACTCATGAGCAGCGAGCTGGCAGCTTCAGCACTGTGCCAATTATGACAATGATGATGAAGCCT
GGTCAGTGGATGATATAGGCGAGCTGCAAGTGGAGCTCCCTGAAGTGCACACCAACAGCTGTGACAACAT
CTCCCAGTTCTCGGTGGACAGCATCACAGCCAGGAGAGCAAGGAGCCTGTGTTCAATGCAGCAGGGGAC
ATCCGACGGCGCCTTTCAGAACAGCTGGCTCATACTCCTACAGCCTTCAAACGAGACCCTGAAGACCCTT
CTGCAGTTGCCCTCAAAGAGCCCTGGCAGGAGAAAGTCCGGAGGATCAGAGAAGGTTCCCGTATGGCCA
TCTTCCCAATTGGCGACTCCTTTCAGTCATTGTCAAGTGTGGAGATGACCTTCGCCAGGAGCTGCTGGCT
TTCCAGGTGTTGAAACAACCTGCAGTCCATTTGGGAACAGGAGCGAGTGCCTCTTTGGATCAAGCCATATA
AGATTCCTGTGATTTTCAGCTGACAGTGGCATGATTGAACCAAGTAGTCAACGCTGTGTCCATCCACAGGT
GAAGAAACAGTCACAGCTCTCCTTGCTCGATTCTTCTACAGGAACATGGCAGTTATACCACTGAGGCA
TTCTCAGTGGCCAGCGCAATTTTGTGCAAAGCTGTGCTGGCTACTGCTTGGTCTGCTACCTATTGCAAG
TCAAGGACAGGCACAACGGGAACATCCTTCTGGACGCAGAAGGTCACATCATCCACATCGACTTTGGCTT
CATCCTTTCAGCTCACCCGAAACCTGGGCTTCGAGACATCAGCCTTAAAGTGAACACAGAAATTTGTG
GATGTAATGGGTGGCCTGAACGGTGATATGTTCAACTACTACAAGATGCTCATGCTGCAAGGGCTGATTG
CTGCTCGGAAGCAGATGGACAAGGTGGTACAGATTGTGGAGATCATGCAGCAAGGTTCTCAGCTTCTTGT
CTTCCATGGCTCCAGCACCATTTCGAACCTCAAAGAGAGGTTCCACATGAGCATGACTGAGGAGCAGCTG
CAGCTGCTGGTGGAGCAGATGGTGGACGGCAGCATGAGGTCATCACCAACCTCTACGATGGCTTCC
AGTACCTCACCAATGGCATCATG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR210726 protein sequence
Red=Cloning site Green=Tags(s)

MGDMVVEPATLKPTSEPTSPSPGNNGSLLSVITEGVGELSVIDPEVAQKACQEVLEKVKLLHGGVAISS
KGTPLELVNGDGDNEIRCLDDPPAQIREEEDEMGAGVASGTAKGARRRRQNSAKQSWLLRLFESKLF
ISMAISYLYNSKEPGVQAYIGNRLFYFRNEDVDFYLPQLLNMYIHMDDEDVGDAIKPYIVHRCRQSINFS
QCALLLGAYSSDMHISTQRHSRGTCLRKLILSDELKPAHRKRELPTLSPAPDTGLSPSKRTHQRSKSDAT
ASISLSSNLKRTASNPKVENEDEPVRLAPEREFIKSLMAIGKRLATLPTKEQKTQRLISELSLLNHKLP
RVWLPTAGFDHVVVPHTQAVVLNSKDKAPYLIYVEVLECFDFTTSVPIRIPENRIRSTRSVENLPEC
GITHEQRAGSFSTVPNYDNDDEAWSVDDIGELQVELPEVHTNSCDNISQFVSDSITSQESKEPVFIAAGD
IRRRLEQLAHTPTAFKRDPEDPSAVALKEPWQEKVRRIREGSPYGHLPNWRLLSVIVKCGDDLQELLA
FQVLKQLQSIWEQERVPLWIKPYKILVISADSGMIEPVVNAVSIHQVKKQSQLSLLDYFLQEHGYSYTT
EAFLSAQRNFVQSCAGYCLVCYLLQVDRHNGNILLDAEGHIIHIDFGFILLSPPRNLGFETSAFKLTTEFV
DVMGGLNGDMFNYYKMLMLQGLIAARKHMDKVVQIVEIMQQGSQLPCFHGSSTIRNLKERFHMSMTEEQL
QLLVEQMVDGSMRSITTKLYDGFQYLTNGIM

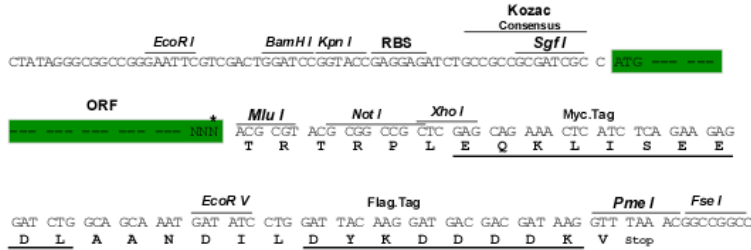
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

- ACCN: NM_175356
- ORF Size: 2406 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_175356.3](#), [NP_780565.2](#)

RefSeq Size: 3786 bp

RefSeq ORF: 2406 bp

Locus ID: 107650

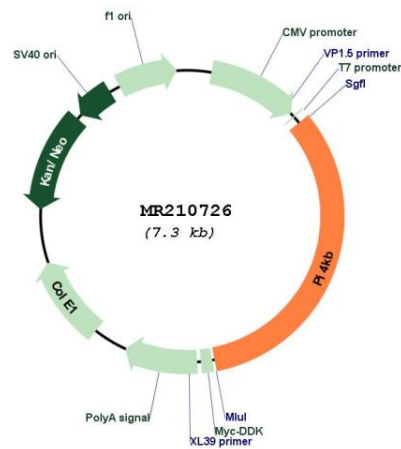
UniProt ID: [Q8BKC8](#)

Cytogenetics: 3 F2.1

MW: 89.9 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]

Product images:



Circular map for MR210726