

Product datasheet for **MG210726**

Pi4kb (NM_175356) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pi4kb (NM_175356) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Pi4kb
Synonyms:	ESTM41; PI4K-beta; PI4Kbeta; Pik4cb
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>MG210726 representing NM_175356
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGAGACATGGTAGTGGAGCCTGCCACCCTGAAGCCAATTCTGAGCCTACTCTAGCCCATCAGGGA
ATAATGGGGGCTCCCTACTAAGCGTCATCACGGAGGGGTCGGGAACTGTCAGTGATTGACCCTGAGGT
GGCCAGAAAGCCTGCCAGGAGTACTGGAGAAAGTCAAGCTTTTGCATGGAGGTGTAGCCATCTTAGC
AAAGGCACCCCGCTGGAGTTGGTTAATGGGGATGGTGTGGACAATGAAATCCGTTGCCTAGATGATCCAC
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ACGACGACGACAGAACAACCTCAGCCAAACAGTCTTGGCTCCTGAGGCTGTTTGTAGTCAAACTATTTGAC
ATCTCTATGGCTATTTCACTTGTATAACTCCAAGGAGCCTGGAGTCAAGCCTACATTGGCAACCGGC
TCTTCTACTTTGCAATGAGGATGTGGACTTCTATTTGCCCCAGTTGCTTAACATGTATATCCACATGGA
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CAGTGTGCCCTGTTGCTTGGGGCCTACTCTCAGACATGCACATTTCCACTCAGCGACACTCGCGAGGGA
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CCCCACTAAAGAGCAAAAAACAAAAGGCTGATCTCAGAGCTTCCCTGCTCAACCATAAGCTCCCTGCC
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CTGCTCGGAAGCAGATGGACAAGGTGGTACAGATTGTGGAGATCATGCAGCAAGGTTCTCAGCTTCTTGT
CTTCCATGGCTCCAGCACCATTGCAACCTCAAAGAGAGGTTCCACATGAGCATGACTGAGGAGCAGCTG
CAGCTGCTGGTGGAGCAGATGGTGGACGGCAGCATGAGGTCCATCACCAACCTCTACGATGGCTTCC
AGTACCTACCAATGGCATCATG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

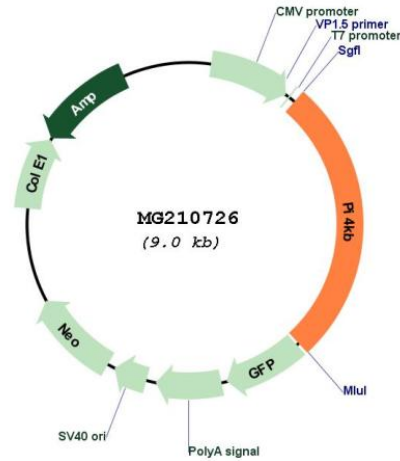
Protein Sequence: >MG210726 representing NM_175356
 Red=Cloning site Green=Tags(s)

MGDMVVEPATLKPTSEPTSPSPGNNGSLLSVITEGVGELSVIDPEVAQKACQEVLEKVKLLHGGVAISS
 KGTPLELVNGDGDVNEIRCLDDPPAQIREEEDEMGAGVASGTAKGARRRRQNSAKQSWLLRLFESKLF
 ISMAISYLYNSKEPGVQAYIGNRLFYFRNEDVDFYLPQLLNMYIHMDDEDVGDAIKPYIVHRCRQSINFS
 QCALLLGAYSSDMHISTQRHSRGTCLRKLILSDELKPAHRKRELPTLSPAPDTGLSPSKRTHQRKSDAT
 ASISLSSNLKRTASNPKVENEDEPVRLAPEREFIKSLMAIGKRLATLPTKEQKTQRLISELSLLNHKLP
 RVWLPTAGFDHVVVPHTQAVVLNSKDKAPYLIYVEVLECFDFTTSVPAIPENRIRSTRSVENLPEC
 GITHEQRAGSFSTVPNYDNDDEAWSVDDIGELQVELPEVHTNSCDNISQFVSDSITSQESKEPVFIAAGD
 IRRRLSEQLAHTPTAFKRDPEDPSAVALKEPWQEKVRRIREGSPYGHLPNWRLLSVIVKCGDDLQELLA
 FQVLKQLQSIWEQERVPLWIKPYKILVISADSGMIEPVVNAVSIHQVKKQSQLSLLDYFLQEHGYSYTT
 EAFLSAQRNFVQSCAGYCLVCYLLQVDRHNGNILLDAEGHIIHIDFGFILLSPPRNLGFETSAFKLTTEFV
 DVMGGLNGDMFNYYKMLMLQGLIAARKHMDKVVQIVEIMQQGSQLPCFHGSSTIRNLKERFHMSMTEEQL
 QLLVEQMVDGSMRSITTKLYDGFQYLTNGIM

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

Plasmid Map:



ACCN: NM_175356

ORF Size: 2403 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: 3692 bp

RefSeq ORF: 2406 bp

Locus ID: 107650

UniProt ID: [Q8BKC8](#)

Cytogenetics: 3 F2.1

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]