

Product datasheet for **MG207675**

Pi4k2a (BC110363) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pi4k2a (BC110363) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Pi4k2a
Synonyms:	MGC37783, Pi4k2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG207675 representing BC110363
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGACGAGACGAGCCCGTAGTGTCCCCGAGCGGGCCCAACCCCGGAGTACACCTTCCCGTCGGGCT
 CCGGAGCTCACTTCCGCAAGTACCGGGGGCGCGGTCCGCGTGGCGGCGCGGCCGGCTCCGGCCCGTC
 ACCGCCGTGCTCGCCCGCCACGACCGGGAGCGGCAGCCCTGCTGGACCGGGCCCGGGCGCGGGCGG
 CAGGGCCAGACCCACACGGTGGCGGTGCAGGCCAGGCCCTGGCCGCCAGGCGGCCGTGGCGGCGCACG
 CCGTTCAGACCCACCGCAGCGGAACGACTTCCCGGAGGACCCCGAGTTCGAGGTGGTGGTGCAGGCG
 CGAGGTTGCCATCGAGTGCAGCATCTATCCCGAGCGCATCTACCAGGGCTCCAGTGAAGCTACTTCGTC
 AAGGACTCTCAGGGGAGAATCGTTGCTGTCTTCAAACCAAGAATGAAGAGCCATATGGCACCTTAACC
 CTAAGTGGACCAAGTGGCTGCAGAAGCTATGCTGCCCTGCTGCTTCGGCCGAGACTGCCTTGTCTCAA
 CCAGGGCTATCTCTCAGAGGCAGGGGCTAGCCTGGTGGACAAAACTGGAACCTCAACATTGTACCAGT
 ACAAAGGTAGTATACCTGGCCAGTGAAACCTTCAACTACAGTGCCATTGACCGAGTAAAGTCCAGGGGCA
 AGCGGCTTGCACTAGAGAAAGTGCCAAAAGTTGGGCAGCGGTTTAAACGAATCGGCCTGCCACAAAGGT
 CGGGTCATTCCAGCTTTTCGTTGAAGGCTACAAAGATGCAGACTATTGGCTGCGGCGTTTTGAAGCAGAA
 CCTCTCCCTGAGAACACGAACCGACAGCTGCTATTGCAGTTTGAGCGGTTGGTGGTCTGGACTACATCA
 TCCGCAACACTGACCGAGGCAATGACAACCTGGTTGATCAAATATGACTGTCCGATGGATAATTCTAGCTG
 TCGGGACACAGATTGGGTGATGGTGAGGGAGCCTGTTATCAAGGTGGCTGCCATAGACAACGGGCTAGCT
 TTCCCCTGAAGCATCTGACTCCTGGAGGGCATATCCTTTTTACTGGCCTGGCTGCCTCAGGCGAAAG
 TCCCGTTCTCTCAGGAGATCAAAGATTTGATTCTTCAAAGATTTCAGACCCTAACTTCATCAAGGACTT
 GGAGGAGACCTATATGAACTTTCAAGAGAGATCCTGGCTTCGACAGGGGCCAGTTCATTAAGCAGATT
 GCTGTCTAGAGAGCCAGATCCTAAATTTGACCCAGGCCCTGAAAGACAATAAGAGCCCCCTGCACCTCG
 TCCAGATGCCACCTGTGATTGTGAGACGGCCCGCTCTCATCAGCGGTCTGCAAGCGAATCCTACACACA
 GAGCTTTCAGAGTCGGAAGCCCTCTTTTCATGGTGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG207675 representing BC110363
 Red=Cloning site Green=Tags(s)

MDETSPLVSPERAQPPEYTFPSGSGAHFPQVPGGAVRVAAGSGSPPCSPGHRERQPLLDLRARGAAA
 QGQHTVAVQAQALAAQAAVAHAVQTHRENRNDFPEDPEFEVVRQAEVAIECSIYPERIYQGSSGSYFV
 KDSQGRIVAVFKPKNEEPYGHLPKWKWLQKLCPCCFGRDCLVLNQGYLSEAGASLVDQKLELNIVPR
 TKVVYLASETFNYSIDRVKSRGKRLALEKVPKVGQRFNRIGLPPKVGFSFQLFVEGYKDADYWLRRFEAE
 PLPENTNRQLLLQFERLVLDYIIRNTDRGNDNWLKIDYDCPMDNSSCRDWDWVMVREPVIKVAIDNGLA
 FPLKHPDSWRAYPFYWAWLPQAKVPFSQEIKDLILPKISDPNFIKDLLEEDLYELFKRDPGDFRGGQFHKQI
 AVMRGQILNLTQALKDNKSPLHLVQMPPIVETARSHQRSASESYTQSFQSRKPFPSWW

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: BC110363

ORF Size: 1439 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: [BC110363](#), [AAI10364](#)

RefSeq Size: 3578 bp

RefSeq ORF: 1439 bp

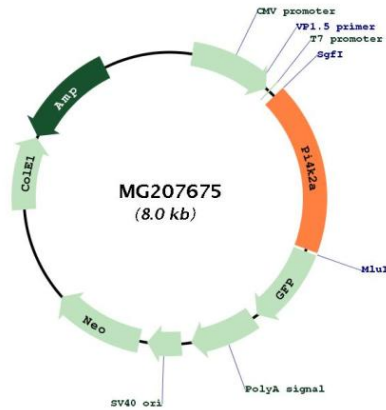
Locus ID: 84095

Cytogenetics: 19 35.74 cM

Gene Summary:

Membrane-bound phosphatidylinositol-4 kinase (PI4-kinase) that catalyzes the phosphorylation of phosphatidylinositol (PI) to phosphatidylinositol 4-phosphate (PI4P), a lipid that plays important roles in endocytosis, Golgi function, protein sorting and membrane trafficking and is required for prolonged survival of neurons. Besides, phosphorylation of phosphatidylinositol (PI) to phosphatidylinositol 4-phosphate (PI4P) is the first committed step in the generation of phosphatidylinositol 4,5-bisphosphate (PIP2), a precursor of the second messenger inositol 1,4,5-trisphosphate (InsP3).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG207675