

Product datasheet for **MR207674**

Pi4k2a (BC022127) Mouse Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | Pi4k2a (BC022127) Mouse Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | Pi4k2a |
| Synonyms: | MGC37783, Pi4k2 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



[View online »](#)

ORF Nucleotide Sequence:

>MR207674 representing BC022127
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGACGAGACGAGCCCGTAGTGTCCCCGAGCGGGCCCAACCCCGGAGTACACCTTCCCGTCGGGCT
 CCGGAGCTCACTTCCGCAAGTACCGGGGGCGCGGTCCGCGTGGCGGCGCGGCCGCTCCGGCCCGTC
 ACCGCCGTGCTCGCCCGCCACGACCGGGAGCGGCAGCCCTGCTGGACCGGGCCCGGGCGCGCGCGC
 CAGGGCCAGACCCACACGGTGGCGGTGCAGGCCAGGCCCTGGCCGCCAGGCGGCCGTGGCGGCGCAGC
 CCGTTCAGACCCACCGCAGCGGAACGACTTCCCGGAGGACCCCGAGTTCGAGGTGGTGGTGCAGGCGC
 CGAGGTTGCCATCGAGTGCAGCATCTATCCCGAGCGCATCTACCAGGGCTCCAGTGAAGCTACTTCGTC
 AAGGACTCTCAGGGGAGAATCGTTGCTGTCTTCAAACCAAGAATGAAGAGCCATATGGGCACCTTAACC
 CTAAGTGGACCAAGTGGCTGCAGAAGCTATGCTGCCCTGCTGCTTCGGCCGAGACTGCCTTGTCTCAA
 CCAGGGCTATCTCTCAGAGGCAGGGGCTAGCCTGGTGGACAAAACTGGAACCTCAACATTGTACCAGT
 ACAAAGGTAGTATACCTGGCCAGTGAAACCTTCAACTACAGTGCATTGACCGAGTAAAGTCCAGGGGCA
 AGCGGCTTGCACTAGAGAAAGTGCCAAAAGTTGGGCAGCGGTTTAAACGAATCGGCCTGCCACAAAGGT
 CGGGTCATTCCAGCTTTTCGTTGAAGGCTACAAAGATGCAGACTATTGGCTGCGGCGTTTTGAAGCAGAA
 CCTCTCCTGAGAACACGAACCGACAGCTGCTATTGCAGTTTGAGCGGTTGGTGGTCTGGACTACATCA
 TCCGCAACACTGACCGAGGCAATGACAACCTGGTTGATCAAATATGACTGTCCGATGGATAATTCTAGCTG
 TCGGGACACAGATTGGGTGATGGTGAGGGAGCCTGTTATCAAGGTGGCTGCCATAGACAACGGGCTAGCT
 TTCCCACTGAAGCATCTGACTCCTGGAGGGCATATCCTTTTTACTGGCCTGGCTGCCTCAGCGGAAAG
 TCCCGTTCTCTCAGGAGATCAAAGATTTGATTCTTCAAAGATTTCAGACCCTAAGTTCATCAAGGACTT
 GGAGGAGGACCTATATGAACTTTCAAGAGAGATCCTGGCTTCGACAGGGGCCAGTTCATTAAGCAGATT
 GCTGTCTGAGAGGCCAGATCCTAAATTTGACCCAGGCCCTGAAAGACAATAAGAGCCCCCTGCACCTCG
 TCCAGATGCCACCTGTGATTGTGAGACGGCCCGCTCTCATCAGCGGTCTGCAAGCGAATCCTACACACA
 GAGCTTTCAGAGTCGGAAGCCCTCTTTTCATGGTGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR207674 representing BC022127
 Red=Cloning site Green=Tags(s)

MDETSPLVSPERAQPPEYTFPSGSAHFPQVPGGAVRVAAGSGPSPPCSPGHRERQPLDRARGAAA
 QGQTHTVAVQAQALAAQAAVAHAHVQTHRERNDPDPEDPEFEVVRQAEVAIECSIYPERIYQSSGSYFV
 KDSQGRIVAVFKPKNEEPYGHLPKWKWLQKLCPCCFGRDCLVLNQYLSEAGASLVDQKLELNIVPR
 TKVVYLASETFNYSALDRVKSRLALEKVPKVGQRFNRIGLPPKVGFSFLFVEGYKDADYWLRRFEAE
 PLPENTNRQLLLQFERLVLDYIIRNTDRGNDNLIKYDCPMDNSSCRDWDWVMREPVIVAAIDNGLA
 FPLKHPDSWRAYPFYWAWLPQAKVPFSQEIKDLILPKISDPNFIKDLEEDLYELFKRDPGFDGQFHKQI
 AVMRGQILNLTQALKDNKSPHLVQMPPIVETARSHQRSASESYTQSFQSRKPFSSWW

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mm9062_e04.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

ACCN: BC022127

ORF Size: 1437 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: [BC022127](#)
RefSeq Size: 1960 bp

RefSeq ORF: 1439 bp

Locus ID: 84095

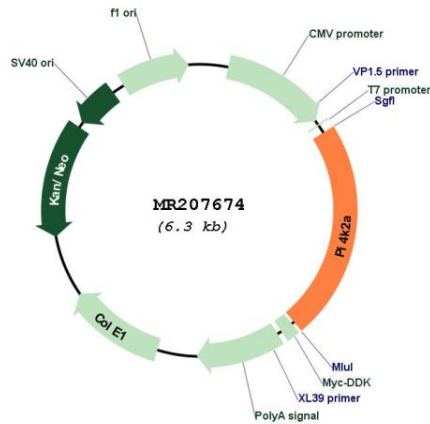
Cytogenetics: 19 35.74 cM

MW: 71.8 kDa

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 MR207674