

Product datasheet for **MG207674**

Pi4k2a (BC022127) Mouse Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | Pi4k2a (BC022127) 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) |



[View online »](#)

ORF Nucleotide Sequence:

>MG207674 representing BC022127
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGACGAGACGAGCCCGTAGTGTCCCCGAGCGGGCCCAACCCCGGAGTACACCTTCCCGTCGGGCT
 CCGGAGCTCACTTCCGCAAGTACCGGGGGCGCGGTCCGCGTGGCGGCGCGGCCGCTCCGGCCCGTC
 ACCGCCGTGCTCGCCCGCCACGACCGGGAGCGGCAGCCCTGCTGGACCGGGCCCGGGCGCGGGCG
 CAGGGCCAGACCCACACGGTGGCGGTGCAGGCCAGGCCCTGGCCGCCAGGCGGCCGTGGCGGCGCAG
 CCGTTCAGACCCACCGCAGCGGAACGACTTCCCGGAGGACCCCGAGTTCGAGGTGGTGGTGCAGGCG
 CGAGGTTGCCATCGAGTGCAGCATCTATCCCGAGCGCATCTACCAGGGCTCCAGTGAAGCTACTTCGTC
 AAGGACTCTCAGGGGAGAATCGTTGCTGTCTTCAAACCAAGAATGAAGAGCCATATGGGCACCTTAACC
 CTAAGTGGACCAAGTGGCTGCAGAAGCTATGCTGCCCTGCTGCTTCGGCCGAGACTGCCTTGTCTCAA
 CCAGGGCTATCTCTCAGAGGCAGGGGCTAGCCTGGTGGACAAAACTGGAAGTCAACATTGTACCAGT
 ACAAAGGTAGTATACCTGGCCAGTGAAACCTTCAACTACAGTGCCATTGACCGAGTAAAGTCCAGGGGCA
 AGCGGCTTGCACTAGAGAAAGTGCCAAAAGTTGGGCAGCGGTTTAAACGAATCGGCCTGCCACAAAGGT
 CGGGTCATTCCAGCTTTTCGTTGAAGGCTACAAAGATGCAGACTATTGGCTGCGGCGTTTTGAAGCAGAA
 CCTCTCCCTGAGAACACGAACCGACAGCTGCTATTGCAGTTTGAGCGGTTGGTGGTCTGGACTACATCA
 TCCGCAACACTGACCGAGGCAATGACAAGTGGTTGATCAAATATGACTGTCCGATGGATAATTCTAGCTG
 TCGGGACACAGATTGGGTGATGGTGAGGGAGCCTGTTATCAAGGTGGCTGCCATAGACAACGGGCTAGCT
 TTCCCCTGAAGCATCTGACTCCTGGAGGGCATACTTTTACTGGGCTGGCTGCCTCAGGCGAAAG
 TCCCGTTCTCTCAGGAGATCAAAGATTTGATTCTTCAAAGATTTCAGACCCTAACTTCATCAAGGACTT
 GGAGGAGACCTATATGAACTTTCAAGAGAGATCCTGGCTTCGACAGGGGCCAGTTCATTAAGCAGATT
 GCTGTCTGAGAGGCCAGATCCTAAATTTGACCCAGGCCCTGAAAGACAATAAGAGCCCCCTGCACCTCG
 TCCAGATGCCACCTGTGATTGTGAGACGGCCGCTCTCATCAGCGGTCTGCAAGCGAATCCTACACACA
 GAGCTTTCAGAGTCGGAAGCCCTCTTTTCATGGTGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG207674 representing BC022127
 Red=Cloning site Green=Tags(s)

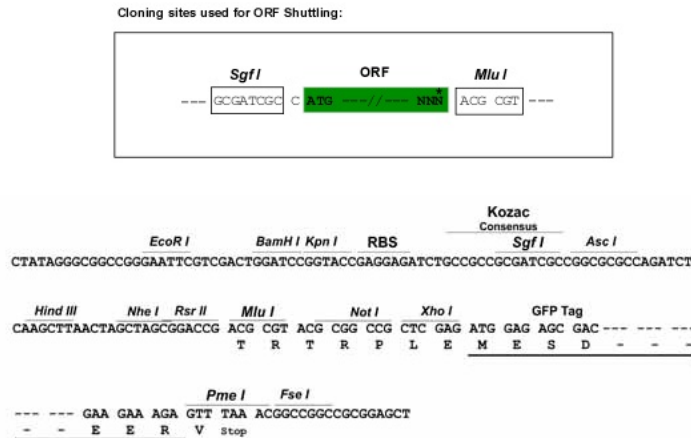
MDETSPLVSPERAQPPEYTFPSGSAHFPQVPGGAVRVAAGSGSPPCSPGHRERQPLLDLRARGAAA
 QGQHTVAVQAQALAAQAAVAHAHQTHRENRDFPEDPEFEVVRQAQAEVAIECSIYPERIYQGSSGSYFV
 KDSQGRIVAVFKPKNEEPYGHLPKWKWLQKLCPCCFGRDCLVLNQYLSEAGASLVDQKLELNIVPR
 TKVVYLASETFNYSIDRVKSRGKRLALEKVPKVGQRFNRIGLPPKVGFSFQLFVEGYKDADYWLRRFEAE
 PLPENTNRQLLLQFERLVLDYIIRNTDRGNDNWLKIDYDCPMDNSSCRDWDWVMVREPVIKVAIDNGLA
 FPLKHPDSWRAYPFYWAWLPQAKVPFSQEIKDILPKISDPNFIKDLLEEDLYELFKRDPGDFRGQFHKQI
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TRTRPLE - GFP Tag - V

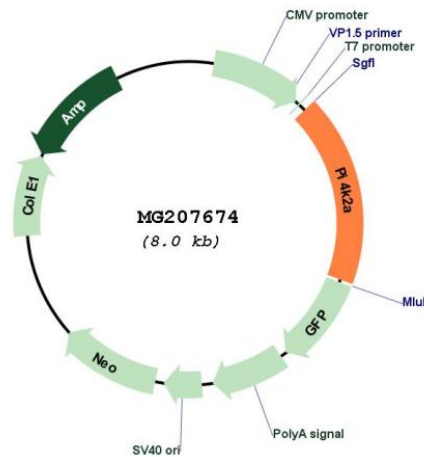
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: BC022127

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: [BC022127](#)

RefSeq Size: 1960 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]