

Product datasheet for **MR231281**

Inpp4b (NM_001297593) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Inpp4b (NM_001297593) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Inpp4b
Synonyms:	E130107117Rik
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>MR231281 representing NM_001297593
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACCCTGAGGACATTCAGTTTACCAGCATCCAGAAGATTCCGAACGAGCCACAGTTGGAATTCATTCT
 CGGGAACAAAAGACCCACTGTTCTTAACGGGTGTACATTCCACCGGACTACCCCATCTATGAAGAGAC
 AAGAATAAAACTGACAGTCTACGATGTCAAGGATAAGTCTCATGATACTATTGAAACAGTGCCTTCCG
 GAACACAAGGATCCCCTGCCAGAAGTTGCGAGAAGCTTCTGGGCTGTGCCAGTTTTAAAGTTGGGGAGC
 TGCTGAAGTCCAAGGAGCAGCTGCTGTCCCTGAGCCTGAGAACCTCAGATGGTGGCAAAGTGGTCGGCAC
 CATAGAAGTCAGCCTCGTGAAGATGGGAGAGATTGAGGATGGGGACCCGACCACATCACAAACAGATGTG
 CAGGGACAAAAGTGTGACTAATGTATGAATCCACAGCACCAGAAAGTCTGAGCGGGAAGGAAAACCTTAC
 CTTTTATGAATGCAGTCTTAAGGAATCCTGTGTGAAGCTGTATAGATCCCCACATCTGACAATAAGTG
 GATGCGAATCCGTGAGCAGATGTGAGAAAGCATCTTTCTTTTCATATTCCTAAGGAATTGATTTCCCTT
 CACATAAAGAAGACTTATGTAGAAACAGGAGTTAAAAGAAGTGGTGACCTTTCCCCACACTGGGACA
 ACCTACGGAATAATGTCCTTTCTCACTGTGATCAATGGTACTATGTACCAAGACATTCTGACAGAAT
 TTCCAAAGAAACAGGGTCTCTTTCAAATCCAGCAGCAGCAAAGGAGAGAAAACATTAGAATTTGTTCCA
 GTAATCTACACTTGCAACGGATGCAGGTGCACAGCCCTCACCTGAAAGATGCTCTCTATGATGTATCA
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 TGAGACAGAGAGAAGAACACCGGCTACCAGTTTATTTACTATTCACCTGAGAACACAGCGAAGGCAAAG
 GAAGTTCTCAGCAGCATCAATCAGCTACAACCTCATAGCAACTCATGCAGACCTGCTGCTAACCTCTG
 CCATGCCTTCAAGGACCAGCTGGTCAAGGAGTCTTTTAAAGCTGCTTTTCAAGAAAACAGCTTTTGT
 CTTAAGAAGCCACCTCTCCTAATGTGACGACAGAGGAGAAAAGTACTCAGCATGATACCCACAGCTTA
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 GGTGCTGGAGGCAGCAGTAGCAAGGATGGAGAGGCAGACCATACCCTGGAAGATTCCATCACATCTCACC
 CACGTGAGGACTGGTATGAACAGCTGCACCCACTCATCTTACCTGAAGGAGTGCATGGGAGAAGTGGT
 GAACCGAGCAAAGCAATCCCTGACATTTGTACTGCTTCAGGAAGTGGCCTACAGTCTGCCCCAGTGTG
 ATGCTGACTCTGAGAAGAGACATTGTCTTCAGTCAGGCGCTTGGTGGATTGGTTTGTGGTTTATCATCA
 AATTACATACAAGTTTGCATGACCTGGCTTCTACAGCAGCTTCATACAGTGGGCTTGATAGTACAATA
 CGAAGGACTGCTAAGTACTTACAGTGTGAAATGGAAATGCTGGAGGACATGGCAGTCCGCATTTAGAT
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 ACGATTTGTGCGAAACTCAATGGCATTCTTTTACCTGCTGTAAGAAAGTCCAAAGACAGGACATCGATGT
 CCGTGACACTGGAACAGTCTCCATCCTGAGAGACGAGCATCAACTGCACAAAGACTTTTTTCATCAGAGC
 TTTAGATTGCATGAGAAGAGAAGGATGCCGCATAGAGAATGACTGAAGAATATCAAATGCAGGAGGTAT
 GCTTTCAACATGCTACAGCTGATGGCTTTCCCAAGTGTACAGACCTCCAGAAGGCACTTATGGAAGAG
 CTGACACC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR231281 representing NM_001297593
 Red=Cloning site Green=Tags(s)

MTLRTFSLPASRRFRTSHSWNSFSGTKDPLFLTGVTFPDPYIYEETRIKLTVYDVKDKSHDTIRTSVLP
 EHKDPLPEVARSFLGCASFVKGELLKSKEQLLSLSLRSDGGKVVGTIEVSLVKMGEIEDGTDHITTDV
 QGQKCALMYESTAPESLSGKENLPMNAVLRNPVCKLYRFPTSDNKWMRIREQMSESILSFHIPKELISL
 HIKEDLCRNQELKELGDLSPHWDNLRKNVLSHCDQMVTMYQDIL TEL SKETGSSFKSSSSKGEKLEFVP
 VNLHLQRMQVHSPHLKDALYDVI TVGAPAAHFQGFKNGLRKL LHRFETERRNTGYQFIYYSPENTAKAK
 EVLSSINQLQPLIATHADLLLSASQRSPLSLKSSLLKLLSEKTELFVHAFKQDLVRSALLALYTARPGGI
 LKKPPSPNVSTEEKSTQHDTPLRRQDSIPHSDYDEEEWDRVWVAVGKSLNCIIAKVDKLIERSHNEE
 GAGSSSKDGEADHTLEDSITSHPREDWYQLHPLILTLKCEMGEVVRKQSLTFVLLQELAYSLPQCL
 MLTLRRDIVFSQALAGLVCGFIKLTSLHDPGFLQQLHTVGLIVQYEGLLSTYSDEIGMLEMVAVGISD
 LRKVAFKITEATSDVLPVLTGRREHYVVEKLPATVFESLPLQIKEGQLLHVYPVLFVNGINEQQTAE
 RFGDVSQESINQENFELVQYYSIFMEKMPDYISHFQEOTDLKGLLDNLHQNIAKRRKNVEIMWLA
 TICRKLNGIRFTCKSAKDRTSMVTLQCSILRDEHQLHKDFIRALDCMRREGCRIENVLKNIKCRRY
 AFNMLQLMAFPKCYRPEPTYGKADT

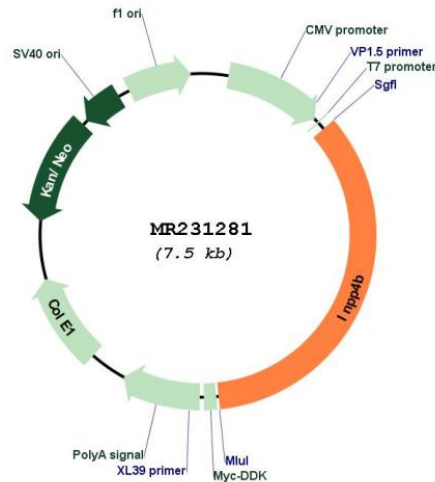
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001297593

ORF Size: 2598 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_001297593.1](#), [NP_001284522.1](#)

RefSeq Size: 8248 bp

RefSeq ORF: 2601 bp

Locus ID: 234515

Cytogenetics: 8 39.02 cM

MW: 98.9 kDa

Gene Summary:

Catalyzes the hydrolysis of the 4-position phosphate of phosphatidylinositol 3,4-bisphosphate, inositol 1,3,4-trisphosphate and inositol 3,4-bisphosphate (By similarity). Plays a role in the late stages of macropinocytosis by dephosphorylating phosphatidylinositol 3,4-bisphosphate in membrane ruffles (By similarity). Antagonizes the PI3K-AKT/PKB signaling pathway by dephosphorylating phosphoinositides and thereby modulating cell cycle progression and cell survival (By similarity).[UniProtKB/Swiss-Prot Function]