

Product datasheet for **MR231395**

Inpp4b (NM_001297596) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Inpp4b (NM_001297596) 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:

>MR231395 representing NM_001297596
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAATCAAAGAGGAAGGAACATCAGAAGAAGCCAGCATTTTCTTCCTGCAGCTCAGGCAAATGACC
 CTGAGGACATTCAGTTTACCAGCATCCAGAAGATTCCGAACGAGCCACAGTTGGAATTCATTCTCGCCTG
 CAGGGATCTTGTGGCTCCTGTCACTGATCGGAACTGAATACAGTAGTCCAGATCTCAGTAATCCACCCG
 GTGGAGCAGACCCTGACGAGTACTCCAGCACAGAAATTTGGAGGGAACAAAAGACCCACTGTTCTTAA
 CGGGTGTACATTTCCACCGACTACCCCATCTATGAAGAGACAAGAATAAACTGACAGTCTACGATGT
 CAAGGATAAGTCTCATGATACTATTGAAACAGTGTCTTCCGGAACACAAGGATCCCCTGCCAGAAGTT
 GCGAGAAGCTTCTGGGCTGTGCCAGTTTAAAGTTGGGAGCTGCTGAAGTCCAAGGAGCAGCTGCTGT
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 GAATCCACAGCACCAGAAAGTCTGAGCGGGAAGGAAAACCTACCTTTTATGAATGCAAGTCTTAAGGAATC
 CTGTGTGTAAGCTGTATAGATTCACCATCTGACAATAAGTGGATGCGAATCCGTGAGCAGATGTCAGA
 AAGCATCCTTTCTTTTATATTCTAAGGAATTGATTTCCCTTACATAAAAAGAAGACTTATGTAGAAAAC
 CAGGAGTTAAAAGAACTTGGTGACCTTTCCACACTGGGACAACCTACGGAAAAATGTCCTTTTCTCACT
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 ACCCACTCATCCTTACCTTGAAGGAGTGCATGGGAGAAGTGGTGAACCGAGCAAAGCAATCCCTGACATT
 TGTACTGCTTCAGGAACTGGCCTACAGTCTGCCCAAGTGTGATGCTGACTCTGAGAAGAGACATTGTC
 TTCAGTCAGGCGCTTGTGGATTGGTTTGTGGTTTATCATCAAATTACATACAAGTTTGCATGACCCTG
 GCTTCTACAGCAGCTTCATACAGTGGGCTTGTAGTACAATACGAAGGACTGCTAAGTACTTACAGTGA
 TGAAATTTGAAATGCTGGAGGACATGGCAGTCGGCATTTCAGATTTGAGGAAAAGTTGCATTTAAAATACT
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 TGAGAGACGAGCATCACTGCACAAGACTTTTTATCAGAGCTTTAGATTGCATGAGAAGAGAAGGATG
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGAT AAGGTTTAA

Protein Sequence: >MR231395 representing NM_001297596
 Red=Cloning site Green=Tags(s)

MEIKEEGTSEEGQHFLPAAQANDPEDIQFTSIQKIPNEPQLEFILACRDLVAPVSDRKLNTVVQISVIHP
 VEQTLTRYSSTEIVEGTDPLFLTGVTFFPDYPIYEETRIKLTVDVKDKSHDTRTSVLPEHKDPLPEV
 ARSFLGCASFVKGELLKSKEQLLSLRLTSDGGKVVGTIEVSLVKMGEIEDGTDHITTDVQGQKCALMY
 ESTAPESLSGKENLPFMNAVLRNPVCKLYRFPSTDNKWMRIREQMSEILSFHHPKELISLHIKEDLCRN
 QELKELGDLSPHWDNLRKNVLSHCDQMVTMYQDILTEL SKETGSSFKSSSKGEKTFVFPVNLHLQRMQ
 VHSPHLKDALYDVITVGAAPAAHFQGFKNGLRKLHLRFETERRNTGYQFIYSPENTAKAKEVLSINQL
 QPLIATHADLLLTSASQRSPDSLKSSLKLLSEKTELFVHAFKDQLVRSALLALYARPGGILKKPPSPNV
 STEEKSTQHDTPQLRRQDSIPHSDYDEEEWDRVWANGKSLNCIIAKVDKLIERDSHNEEGAGGSSSKD
 GEADHTLEDSITSHPREDWYEQHLPLILTLKECMGEVNRKQSLTFVLLQELAYSPLQCLMLTLRRDIV
 FSQALAGLVCGFIKLTSLHDPGFLQLHTVGLIVQYEGLLSTYSDEIGMLEDMAVGISDLRKVAFKIT
 EATSNDVLPVLTGRREHYVVEVKLPATVFESLPLQIKEGQLLHVYPVLFNVGINEQQTLAERFGDVSLE
 SINQENFELVQYYSIFMEKMPPDYISHFQEQTDLKGLLDNLHQNIQAKKRKNVEIMWLAATICRKLNGI
 RFTCCSAKDRTSMSVTLEQCSILRDEHQLHKDFFIRALDCMRREGCRIENVLKNIKRRYAFNMLQLMA
 FPKCYRPEPTYGKADT

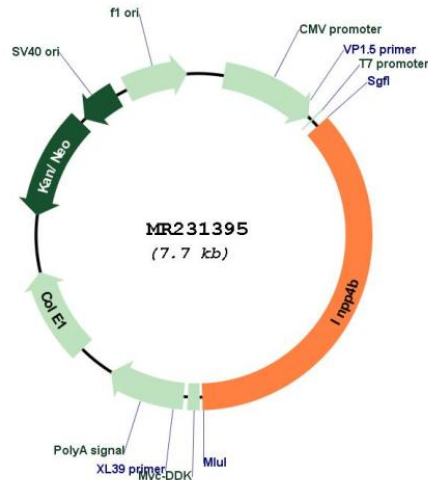
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001297596

ORF Size: 2781 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_001297596.1](#), [NP_001284525.1](#)

RefSeq Size: 8367 bp

RefSeq ORF: 2784 bp

Locus ID: 234515

Cytogenetics: 8 39.02 cM

MW: 105.6 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]