

Product datasheet for **MR210283**

Pik3r2 (NM_008841) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pik3r2 (NM_008841) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pik3r2
Synonyms:	p85beta
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>MR210283 representing NM_008841
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCAGGAGCCGAGGGCTTCCAGTACAGGGCTGTGTACCCATTCGCCGGGAGCGCCCTGAAGACCTGG
AGCTGCTCCCTGGGACCTCCTGGTGGTGAAGCCGGTGGCCCTACAGGCACTTGGTGTGGCTGATGGAGG
AGAGCGCTGCCACACAATGTGGCTGGATGCCTGGCTTCAACGAGCGCACCCGACAGCGAGGGGACTTC
CCCGGGACATACGTGGAGTTCCTAGGACCCGTGGCTCTGGCTCGACCAGGCCCTCGCCACGGGGCCCC
GTCCGTTGCCCGCAGGCCCTTGGATGGATCTTCTGAGTCAGGCCACATACTCCAGACCTGGCAGAGCA
GTTCTCCACCTGACCTGCTCCCCGATTCTGGTGAAGCTGGTGAAGCCATTGAGCAAGCAGAGCTG
GACAGTGAATGCTACAGTAAGCCGGAGCTGCCCGAACACGGACAGACTGGTCCCTGAGTGACTGGAGC
AGTGGGACCGCACCGCTTGTATGATGCTGTTAAGGGCTTCTGTGGCCTTGCCTGCAGCTGTGGTGAC
CCCTGAAGCTGCAGCAGAGGCGTACCGGGCACTTCGAGAGGTTGCAGGCCCGTGGGGCTGGTGCTGGAA
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CTGGTGCAGGAGCATGTGGAGGAGCAAGACGCTGCCCCCAGCGCTACCACCTAAGCCCTTAAGGCAA
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GCATCCAGCAAGATCCAAGGAGAGTACACGCTCACCCCTCAGGAAAGCGGGAACAACAAGTTGATCAAAG
TCTTCCACCGGGATGGTCACTATGGCTTCTCAGAGCCCCTTACCTTCTGCTCCGTGGTGAACATGCTC
CCACTACCGCCACGAATCACTGGCCAGTACAACGCCAAGCTGGACACACGCTTCTACCTGTGTCC
AAGTACCAACAAGACCAGGTGGTGAAGGAGGACAGCATAGAGGCTGTGGGCGCCAGCTCAAGGTCTACC
ACCAGCAGTACCAGGACAAGAGCCGCAATATGACCAGCTGTATGAAGAATACACACGGACCTCCAGGA
GCTGCAGATGAAGCGCACAGCCATAGAGGCCTTCAACGAGACCATCAAGATCTTCGAAGAGCAGGGCCAG
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GGATCCTGCTGAACTCCGAGCGACTCAAGTCTCGCATCGCGGAGATACACGAAAGCCGCACGAAGTTGGA
GCAGGATCTGCGGGCGCAGGCCCTCCGACAACCGTGAGATCGACAAGCGCATGAACAGCCTCAAACCTGAC
CTCATGCACTGCGCAAGATCAGGGACCACTACCTCGTGTGGCTCACCCAGAAAGGTGCCCGACAGAGGA
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CCTCCCCACCACGAGGAGCGCAGTGGTACGTGGGCAAGATCAACCGCACACAGGCGGAGGAGATGCTG
AGTGGCAAACGAGACGGGACCTTCTCATCCGGGAGAGCAGCCAGCGGGGCTGTTACGCATGCTCCGTGG
TGGTGGACGGCGACGAAGCACTGTGTCTATCCGCACAGCCACCGGCTTCGGCTTCGCAGAGCCCTA
TAACCTGTACGGTCCCTGAAGGAGCTGGTGTGCACTACCAGCACGCATCACTCGTGCAGCACAATGAC
GCATTAACCGTACCCCTCGCACACCTGTGCGTGCCCCGGGCCCTGGCCACCGTCTGCAGCACGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR210283 representing NM_008841
Red=Cloning site Green=Tags(s)

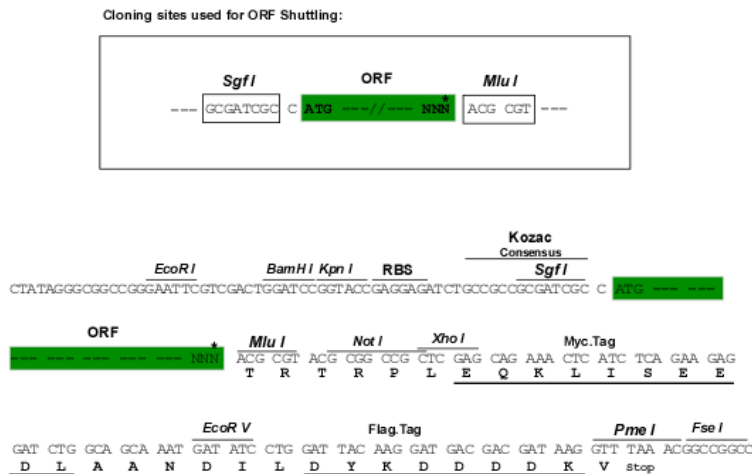
MAGAEGFYRAVYPPFRERPEDELELLPGDLLVVSVALQALGVADGGERCPHNVGWPFGFNERTRQRGDF
 PGTYVEFLGPVALARPGPRPRGPRPLPARPLDGSSSEGHILPDLAEQFSPPDPAPPILVKLVEAIEQAE
 DSECYSKPELPATRTDWSLSDLEQWDRALYDAVKGFLALPAAVVTPEAAAAEYRALREVAGPVGLVLE
 PPTLPLHQALTLRFLQLHLGRVARRAPSPDTAVHALASAFGPLLLRIPPSGGEGDSEPVDFPVLLE
 LVQEHVVEQDAAPPALPPKPSKAKPAPTALANGGSPSLQDAEWYWDI SREEVNERLRDTPDGTFLVRD
 ASSKIQGEYTLTLRKGGNNKLIKVFHRDGHYGFSEPLTFCSVVELISHYRHESLAQYNAKLDTRLLYPVS
 KYQQDQVVKEDSIEAVGAQLKVYHQYQDKSREYDQLYEEYTRTSQELQMKRTAIEAFNETIKIFEEQGQ
 TQEKCSKEYLERFRREGNEKEMQRILLNSERLKSRIAEIHSRTKLEQDLRAQASDNREIDKRMNSLKPD
 LMQLRKIRDQYL VVL TQKGARQRKINELWGIKNETEDQYSLMEDEDALPHHEERTWYVGKINRTQAEML
 SGKRDGTFLIRESSQRGCYACSVVVDGDTKHCVIYRTATGFGFAEPYNLYGSLKELVLHYQHASLVQHND
 ALTVTLAHPVVRAPGPGPPSAAR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9040_a04.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_008841

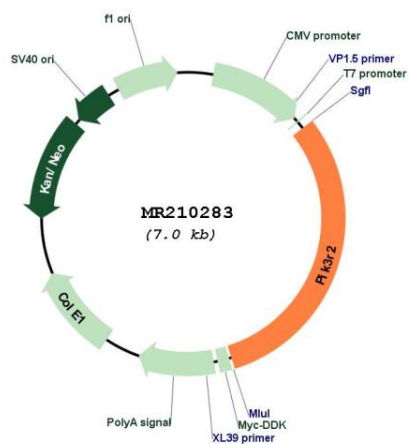
ORF Size: 2166 bp

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:	<ol style="list-style-type: none">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_008841.3
RefSeq Size:	3159 bp
RefSeq ORF:	2169 bp
Locus ID:	18709
UniProt ID:	O08908
Cytogenetics:	8 34.15 cM
MW:	81.7 kDa
Gene Summary:	Regulatory subunit of phosphoinositide-3-kinase (PI3K), a kinase that phosphorylates PtdIns(4,5)P2 (Phosphatidylinositol 4,5-bisphosphate) to generate phosphatidylinositol 3,4,5-trisphosphate (PIP3). PIP3 plays a key role by recruiting PH domain-containing proteins to the membrane, including AKT1 and PDK1, activating signaling cascades involved in cell growth, survival, proliferation, motility and morphology. Binds to activated (phosphorylated) protein-tyrosine kinases, through its SH2 domain, and acts as an adapter, mediating the association of the p110 catalytic unit to the plasma membrane. Indirectly regulates autophagy (By similarity). Promotes nuclear translocation of XBP1 isoform 2 in a ER stress- and/or insulin-dependent manner during metabolic overloading in the liver and hence plays a role in glucose tolerance improvement (PubMed:20348926).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR210283