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Product datasheet for MR226181

Pik3r1 (NM_001077495) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pik3r1 (NM_001077495) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pik3r1
Synonyms:	p50alpha; p55alpha; p85alpha; PI3K
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>MR226181 representing NM_001077495
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGTGCAGAGGGCTACCAGTACAGAGCACTGTACGACTACAAGAAGGAGCGAGAGGAAGACATTGACC
TACACCTGGGGGACATACTGACTGTGAATAAAGGCTCCTTAGTGGCACTTGGATTCAGTGATGGCCAGGA
AGCCCGGCCTGAAGATATTGGCTGGTTAAATGGCTACAATGAAACCACTGGGGAGAGGGGAGACTTTCCA
GGAACTTACGTTGAATACATTGGAAGGAAAAGAATTTCACCCCCTACTCCCAAGCCTCGGCCCCCTCGAC
CGCTTCCTGTTGCTCCGGGTTCTTCAAAAACTGAAGCTGACACGGAGCAGCAAGCGTTGCCCCTTCCTGA
CCTGGCCGAGCAGTTTGCCCCTCCTGATGTTGCCCCGCCTCTCCTTATAAAGCTCCTGGAAGCCATTGAG
AAGAAAGGACTGGAATGTTCGACTCTATACAGAACACAAAGCTCCAGCAACCCTGCAGAATTACGACAGC
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CAAGAACTACAGAGCCCTGAAGACTGCATCCAGCTGTTGAAGAAGCTCATTAGATTGCCTAATATACCTC
ATCAGTGTTGGCTTACGCTTCAGTATTTGCTCAAGCATTTTTTCAAGCTCTCTCAAGCCTCCAGCAAAAA
CCTTTTGAATGCAAGAGTCCTCTCTGAGATTTTCAGCCCCGTGCTTTTCAGATTTCCAGCCGCCAGCTCT
GATAATACTGAACACCTCATAAAAGCGATAGAGATTTTAATCTCAACGGAATGGAATGAGAGACAGCCAG
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CTTGCAGGATGCTGAATGGTACTGGGGAGACATCTCAAGGGAAGAAGTGAATGAAAAACTCCGAGACACT
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CTTCAACTCTGTGGTTGAGTTAATAAACCACTACCGGAATGAGTCTTTAGCTCAGTACAACCCCAAGCTG
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GCGAAGGCAACGAGAAAGAAATTCAAAGGATTATGCATAACCATGATAAGCTGAAGTCGCGTATCAGTGA
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CGAAACAAAGCGGAGAACCTATTGCGAGGGAAGCGAGACGGCACTTTCCTTGTCCGGGAGAGCAGTAAGC
AGGGCTGCTATGCCTGCTCCGTAGTGGTAGACGGCGAAGTCAAGCATTGCGTCATTAACAAGACTGCCAC
CGGCTATGGCTTTGCCGAGCCCTACAACCTGTACAGCTCCCTGAAGGAGCTGGTGCTACATTATCAACAC
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GA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR226181 representing NM_001077495
Red=Cloning site Green=Tags(s)

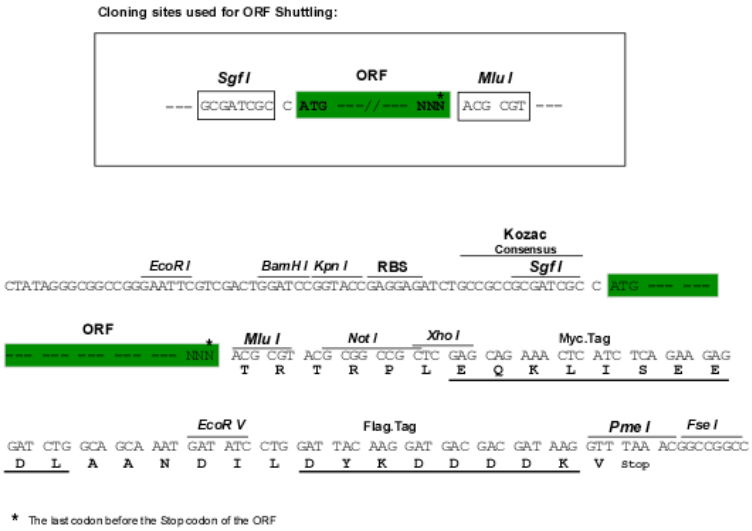
MSAEGYQYRALYDYKKEREEDIDLHLGDILTVNKGSLVALGFSDGQEARPEDIGWLNGYNETTGERGDFP
GTYVEYIGRKRISPPTPKPRPPRPLPVAPGSSKTEADTEQQALPLPDLAEQFAPPDVAPPLLIKLLEAIE
KKGLECSTLYRTQSSSNPAELRQLLDCDAASVDLEMIDVHVLADAFKRYLADLPNPVIPVAVYNEMMSLA
QELQSPEDCIQLLKKLIRLPNIPHQCWLTLQYLLKHFFKLSQASSKNLLNARVLSEIFSPVLFRFPAASS
DNTEHLIKAIEILISTEWNERQPAPALPPKPPKPTTVANNSMNNNMSLQDAEWYWGDISREEVNEKLRDT
ADGTFLVRDASTKMHGDYTLTLRKGGNNKLIKIFHRDGKYGFSDPLTFNSVVELINHYRNESLAQYNPKL
DVKLLYPVSKYQQDQVVKEDNIEAVGKKLHEYNTQFQEKSREYDRLYEEYTRTSQEIQMKRTAIEAFNET
IKIFEEQCQTQERYSKEYIEKFKREGNEKEIQRIMHNHDKLKSRISEIIDSRRRLEEDLKKQAAEYREID
KRMNSIKPDLIQLRKTRDQYLMWLTQKGVRQKKLNEWLGNENTEDQYSLVEDDEDLPHHDEKTWNVGSSN
RNKAENLLRGKRDGTFLVRESSKQGCYACSVVVDGEVKHCVINKTATGYGFAEPYNLYSSLKELVLHYQH
TSLVQHNDSLNVTLAYPVYAQQRR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9089_c04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001077495

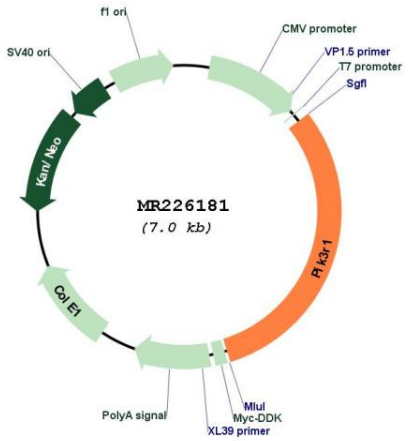
ORF Size: 2172 bp

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_001077495.2, NP_001070963.1
RefSeq Size:	6928 bp
RefSeq ORF:	2175 bp
Locus ID:	18708
UniProt ID:	P26450
Cytogenetics:	13 53.92 cM
MW:	83.5 kDa
Gene Summary:	Binds to activated (phosphorylated) protein-Tyr kinases, through its SH2 domain, and acts as an adapter, mediating the association of the p110 catalytic unit to the plasma membrane. Necessary for the insulin-stimulated increase in glucose uptake and glycogen synthesis in insulin-sensitive tissues. Plays an important role in signaling in response to FGFR1, FGFR2, FGFR3, FGFR4, KITLG/SCF, KIT, PDGFRA and PDGFRB. Likewise, plays a role in ITGB2 signaling (By similarity). Modulates the cellular response to ER stress by promoting 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 MR226181