

## Product datasheet for **MC216127**

### **Pik3r1 (NM\_001024955) Mouse Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Pik3r1 (NM_001024955) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Pik3r1
Synonyms:	p50alpha; p55alpha; p85alpha; PI3K
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**Fully Sequenced ORF:** >MC216127 representing NM\_001024955  
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGTACACCACGTTTGGACTATGGAAGACCTGGACTTAGAGTGTCCAAGACAGATATAAACTGTGGCA  
CAGACTTGGTGTTTTATATAGAAATGGATCCACCAGCACTGCCCCCAAACCACCAAGCCCACTACTGT  
AGCCAACAACAGCATGAACAACAATATGTCCTTGAGGATGCTGAATGGTACTGGGGAGACATCTCAAGG  
GAAGAAGTGAATGAAAACTCCGAGACACTGCTGATGGGACCTTTTGGTACGAGACGCATCTACTAAAA  
TGCACGGCGATTACACTTTACACTAAGGAAAGGAGAAATAACAAATTAATCAAATCTTTACCGTGA  
TGGAAAAATATGGCTTCTCTGATCCATTAACTTCAACTCTGTGGTTGAGTTAATAAACCACTACCGGAAT  
GAGTCTTAGCTCAGTACAACCCCAAGCTGGATGTGAAGTTGCTCTACCCAGTGTCCAAATACCAGCAGG  
ATCAAGTTGTCAAAGAAGATAATTGAAGCTGTAGGGAAAAAATACATGAATATAATACTCAATTTCA  
AGAAAAAAGTCGGGAATATGATAGATTATATGAGGAGTACACCCGACTTCCCAGGAAATCCAAATGAAA  
AGAACGGCTATCGAAGCATTTAATGAAACCATAAAAATATTTGAAGAACAATGCCAAACCCAGGAGCGGT  
ACAGCAAAGAATACATAGAGAAGTTTAAACCGCAAGGCAACGAGAAAGAAATTCAAAGGATTATGCATAA  
CCATGATAAGCTGAAGTCGCGTATCAGTGAGATCATTGACAGTAGGAGGAGGTTGGAAGAAGACTTGAAG  
AAGCAGGCAGCTGAGTACCGAGAGATCGACAAACGCATGAACAGTATTAAGCCGGACCTCATCCAGTTGA  
GAAAGACAAGAGACCAATACTTGATGTGGCTGACGCAGAAAGGTGTGCGGCAGAAGAAGCTGAACGAGTG  
GCTGGGGAATGAAAATACCGAAGATCAATACTCCCTGGTAGAAGATGATGAGGATTTGCCCAACATGAC  
GAGAAGACGTGGAATGTCCGGGAGCAGCAACCGAAACAAAGCGGAGAACCTATTGCGAGGGAAGCGAGACG  
GCACCTTTCCTTGTCCGGGAGAGCAGTAAGCAGGGCTGCTATGCCTGCTCCGTAGTGGTAGACGGCGAAGT  
CAAGCATTGCGTCATTAACAAGACTGCCACCGGCTATGGCTTTGCCGAGCCCTACAACCTGTACAGCTCC  
CTGAAGGAGCTGGTGCTACATTATCAACACACCTCCCTCGTGAGCACAATGACTCCCTCAATGTACAC  
TAGCATACCCAGTATATGCACAACAGAGGCGATGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI

**ACCN:** NM\_001024955

**Insert Size:** 1365 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**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:	<u>NM_001024955.2, NP_001020126.1</u>
RefSeq Size:	5839 bp
RefSeq ORF:	1365 bp
Locus ID:	18708
Cytogenetics:	13 53.92 cM
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (1) lacks a portion of the 5' coding region and initiates translation at an alternate start codon, compared to variant 2. The encoded isoform (1) has a shorter and distinct N-terminus, compared to isoform 2.</p>