

Product datasheet for **MG226192**

Pik3r1 (NM_001024955) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pik3r1 (NM_001024955) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Pik3r1
Synonyms:	p50alpha; p55alpha; p85alpha; PI3K
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG226192 representing NM_001024955
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTACACCACGTTTGGACTATGGAAGACCTGGACTTAGAGTGTCCAAGACAGATATAAACTGTGGCA
 CAGACTTGGTGTTTTATATAGAAATGGATCCACCAGCACTGCCCCCAAACCACCAAGCCCACTACTGT
 AGCCAACAACAGCATGAACAACAATATGTCCTTGCAAGGATGCTGAATGGTACTGGGGAGACATCTCAAGG
 GAAGAAGTGAATGAAAACTCCGAGACACTGCTGATGGGACCTTTTTGGTACGAGACGCATCTACTAAAA
 TGCACGGCGATTACACTTTACACTAAGGAAAGGAGGAAATAACAAATTAATCAAATCTTTACCGTGA
 TGGAAAAATATGGCTTCTCTGATCCATTAACTTCAACTCTGTGGTTGAGTTAATAAACCCTACCGGAAT
 GAGTCTTTAGCTCAGTACAACCCCAAGCTGGATGTGAAGTTGCTCTACCCAGTGTCCAAATACCAGCAGG
 ATCAAGTTGTCAAAGAAGATAATATTGAAGCTGTAGGAAAAAATACATGAATATAATACTCAATTTCA
 AGAAAAAGTCGGAATATGATAGATTATATGAGGAGTACACCCGACTTCCCAGGAAATCCAAATGAAA
 AGAACGGCTATCGAAGCATTTAATGAAACCATAAAAAATTTTGAAGAACAATGCCAAACCAGGAGCGGT
 ACAGCAAAGAATACATAGAGAAGTTTAAACCGCAAGGCAACGAGAAAGAAATTCAAAGGATTATGCATAA
 CCATGATAAGCTGAAGTCGCGTATCAGTGAGATCATTGACAGTAGGAGGAGGTTGGAAGAAGACTTGAAG
 AAGCAGGCAGCTGAGTACCGAGAGATCGACAAACGCATGAACAGTATTAAGCCGGACCTCATCCAGTTGA
 GAAAGACAAGAGACCAATACTTGATGTGGCTGACGCAGAAAGGTGTGCGGCAGAAAGCTGAACGAGTG
 GCTGGGGAATGAAAATACCGAAGATCAATACTCCCTGGTAGAAGATGATGAGGATTTGCCCAACCATGAC
 GAGAAGACGTGGAATGTCGGGAGCAGCAACCGAAACAAAGCGGAGAACCTATTGCGAGGGAAGCGAGACG
 CCACTTTCTTGTCCGGGAGAGCAGTAAGCAGGGCTGCTATGCCTGCTCCGTAGTGGTAGACGGCGAAGT
 CAAGCATTGCGTCATTAACAAGACTGCCACCGGCTATGGCTTTGCCGAGCCCTACAACCTGTACAGCTCC
 CTGAAGGAGCTGGTGCTACATTATCAACACACCTCCCTCGTGCAGCACAATGACTCCCTCAATGTACAC
 TAGCATACCCAGTATATGCACAACAGAGGCGA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG226192 representing NM_001024955
 Red=Cloning site Green=Tags(s)

MYTTVWTMEDLDLECAKTDINCGTDLVFIEMDPPALPPKPPKPTTVANNSMNNMSLQDAEWYWGDISR
 EEVNEKLRDADGTFLVRDASTKMHGDYTLTRKGGNNKLIKIFHRDGKYGFSDPLTFNSVVELINHYRN
 ESLAQYNPKLDVKLLYPVSKYQQDQVVKEDNIEAVGKKLHEYNTQFQEKREYDRLYEEYTRTSQEIQMK
 RTAIEAFNETIKIFEEQCQTQERYKEYIEKFKREGNEKEIQRIMHNDKLSRISEIIDSRRRLEEDLK
 KQAAEYREIDKRMNSIKPDLIQLRKRTRDQYLMWLTQKGVROKKLNEWLGNENTEDQYSLVEDDELPHHD
 EKTWNVGSSNRNKAENLLRGRDGTFLVRESSKQGCYACSVVVDGEVKHCVINKTATGYGFAEPYNLYSS
 LKELVLHYQHTSLVQHNSLNVTLAYPVYAQRR

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_001024955

ORF Size: 1362 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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).

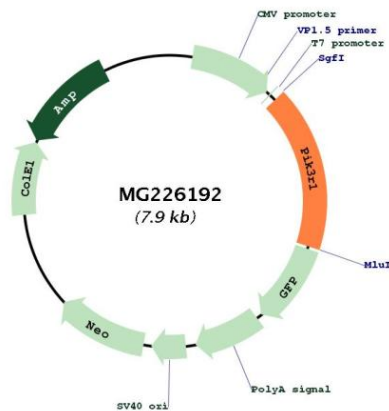
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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_001024955.2](#), [NP_001020126.1](#)

RefSeq Size: 5843 bp
RefSeq ORF: 1365 bp
Locus ID: 18708
Cytogenetics: 13 53.92 cM
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 MG226192