OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MC223419

Pik3cb (NM_029094) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pik3cb (NM_029094) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Pik3cb
Synonyms:	1110001J02Rik; AI447572; p110beta
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>MC223419 representing NM_029094 Red=Cloning site Blue=ORF Orange=Stop codon TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGCCTCCTGCTATGGCAGACAACCTTGACATCTGGGCAGTGGACTCACAGATTGCATCCGATGGCGCCA TATCCGTCGATTTCCTTCTGCCCACCGGGATTTATATCCAGTTGGAAGTACCTCGGGAAGCTACCATTTC TTATATTAAACAGATGTTATGGAAGCAAGTTCACAACTACCCGATGTTTAACCTCCTCATGGACATTGAC TCGTATATGTTTGCATGTGTGAATCAAACTGCTGTATATGAGGAACTGGAAGACGAAACACGAAGACTTT GTGATGTCAGACCTTTTCTTCCAGTTCTCAAACTAGTGACTAGAAGCTGTGACCCCGCAGAAAAATTGGA CTCAAAAATTGGGGTTCTTATAGGAAAAGGTCTTCATGAGTTTGATGCCTTGAAGGATCCCGAAGTGAAT GAATTTAGAAGAAAAATGCGCAAATTCAGTGAGGCCAAGATTCAGTCTCTGGTAGGGTTGTCTTGGATCG ACTGGCTAAAGCACACGTATCCGCCTGAGCACGAGCCGTCCGTCCTGGAGAACTTGGAAGATAAACTTTA TGGAGGAAAGCTGGTTGTGGCTGTGCACTTTGAAAATAGCCAGGATGTATTTAGTTTTCAAGTGTCTCCC AATTTGAATCCTATAAAAATAAATGAATTGGCAATCCAGAAACGCCTCACTATTCGTGGAAAGGAAGATG AAGCTAGCCCCTGTGACTATGTGTTACAGGTCAGTGGGAGAGTGGAGTATGTGTTTGGCGATCATCCACT AATTCAGTTCCAGTACATCCGGAATTGTGTGATGAATAGAACCCTGCCCCACTTCATCCTTGTGGAATGT TGTAAGATCAAGAAAATGTATGAACAAGAAATGATTGCCATAGAGGCTGCCATCAACCGAAACTCATCCA ACCTTCCTCTCCCTTTACCACCAAAGAAAACGCGAGTTATTTCTCATATCTGGGACAACAACAACCCTTT CCAAATTACCTTGGTTAAAGGAAATAAGCTTAATACAGAAGAAACTGTGAAAGTTCATGTCCGAGCTGGG CTTTTTCACGGAACCGAGCTCCTGTGTAAAACCGTCGTAAGCTCAGAGATATCAGGAAAGAACGACCATA TTTGGAATGAACAACTGGAATTTGATATTAATATTTGTGACTTACCAAGAATGGCTCGATTATGTTTTGC TGTTTATGCAGTTTTGGATAAAGTAAAAACGAAGAAATCAACAAAGACTATTAATCCCTCTAAGTATCAG ACCATCAGGAAAGCCGGGAAAGTGCATTATCCTGTCGCATGGGTAAATACCATGGTTTTTGACTTCAAAG GACAGCTGAGGTCTGGAGACGTCATATTGCATAGCTGGTCTTCGTTTCCTGATGAGCTGGAAGAAATGCT GAATCCCATGGGGACTGTGCAGACGAACCCATATGCTGAGAACGCCACCGCCTTGCACATTACGTTCCCA GAGAATAAGAAGCAGCCGTGTTATTATCCCCCCTTCGATAAGATCATTGAGAAGGCAGCTGAGCTTGCCA

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GCGGAGACAGTGCTAATGTGTCAAGTCGTGGTGGAAAAAAATTTCTTGCTGTGCTGAAAGAAATCTTGGA
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_029094

Insert Size: 3195 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: NM_029094.3, NP_083370.2

RefSeq Size: 4854 bp

RefSeq ORF:	3195 bp
Locus ID:	74769
UniProt ID:	Q8BTI9
Cytogenetics:	9 E3.3
Gene Summary:	Phosphoinositide-3-kinase (PI3K) that phosphorylates PtdIns (Phosphatidylinositol), PtdIns4P (Phosphatidylinositol 4-phosphate) and 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 PDPK1, activating signaling cascades involved in cell growth, survival, proliferation, motility and morphology. Involved in the activation of AKT1 upon stimulation by G-protein coupled receptors (GPCRs) ligands such as CXCL12, sphingosine 1-phosphate, and lysophosphatidic acid. May also act downstream receptor tyrosine kinases. Required in different signaling pathways for stable platelet adhesion and aggregation. Plays a role in platelet activation signaling triggered by GPCRs, alpha-IIb/beta-3 integrins (ITGA2B/ ITGB3) and ITAM (immunoreceptor tyrosine-based activation motif)-bearing receptors such as GP6. Regulates the strength of adhesion of ITGA2B/ ITGB3 activated receptors necessary for the cellular transmission of contractile forces. Required for platelet aggregation induced by F2 (thrombin) and thromboxane A2 (TXA2). Has a role in cell survival. May have a role in cell migration. Involved in the early stage of autophagosome formation. Modulates the intracellular level of PtdIns3P (Phosphatidylinositol 3-phosphate) and activates PIK3C3 kinase activity. May act as a scaffold, independently of its lipid kinase activity to positively regulate autophagy. May have a role in insulin signaling as scaffolding protein in which the lipid kinase activity is not required. May have a kinase-independent function in regulating cell proliferation and in clathrin-mediated endocytosis. Mediator of oncogenic signal in cell lines lacking PTEN. The lipid kinase activity is necessary for its role in oncogenic transformation. Required for the growth of ERBB2 and RAS driven tumors.[UniProtKB/Swiss-Prot Function]