*h*PIK3CB VersaClone cDNA

Catalog Number: RDC3233

Specifications:

Gene:	*h*PIK3CB
Accession:	NP_006210.1
Insert size:	3226bp
Concentration:	10µg at 0.2µg/µL

Description

This shuttle vector contains the complete ORF for the gene of interest, along with a Kozak consensus sequence for optimal translation initiation. It is inserted NotI to AscI. The gene insert is flanked with convenient multiple cloning sites which can be used to easily cut and transfer the gene cassette into your desired expression vector.

Preparation and Storage

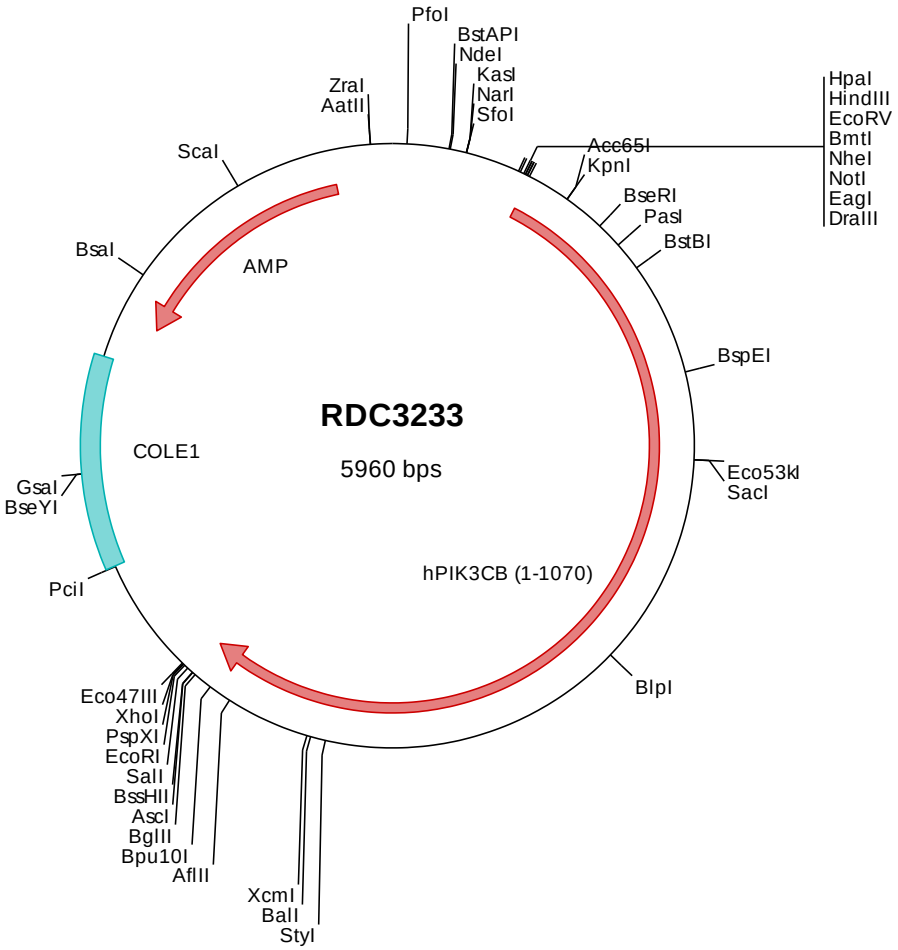
Formulation	cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping	Ships at ambient temperature
Stability	1 year from date of receipt when stored at -20°C to -80°C
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

*h*PIK3CB cDNA Plasmid

PIK3CB phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta [*Homo sapiens* (human)]

Also known as: PI3K; PIK3C1; P110BETA; PI3KBETA

Summary:
Phosphatidylinositol 3-kinase (PI3K) is composed of a regulatory subunit and a catalytic subunit. These kinases are important in signaling pathways involving receptors on the outer membrane of eukaryotic cells. PIK3CB is the catalytic subunit for PI3Kbeta (PI3KB). PI3KB has been shown to be part of the activation pathway in neutrophils which have bound immune complexes at sites of injury or infection. Alternatively spliced transcripts encoding different proteins have been described.



FOR RESEARCH USE ONLY

NOT FOR USE IN HUMANS

R&D SYSTEMS
a bio-techne brand

> RDC3233 Plasmid DNA Sequence

```
   1  tcgcgcgttt cggtgatgac ggtgaaaacc tctgacacat gcagctcccg gagacggtca cagcttgtct gtaagcggat gccgggagca gacaagcccg
 101  tcagggcgcg tcagcgggtg ttggcgggtg tcggggctgg cttaactatg cggcatcaga gcagattgta ctgagagtgc accatatgcg gtgtgaaata
 201  ccgcacagat gcgtaaggag aaaataccgc atcaggcgcc attcgccatt caggctgcgc aactgttggg aagggcgatc ggtgcgggcc tcttcgctat
 301  tacgccagct ggcgaaaggg ggatgtgctg caaggcgatt aagttgggta acgccagggt tttcccagtc acgacgttgt aaaacgacgg ccagtgaatt
 401  ggagacgtgt taacaagctt ggatccgata tcgctagcgc ggccgccacc atgtgcttca gtttcataat gcctcctgct atggcagaca tccttgacat
 501  ctgggcggtg gattcacaga tagcatctga tggctccata cctgtggatt tccttttgcc cactgggatt tatatccagt tggaggtacc tcgggaagct
 601  accatttctt atattaagca gatgttatgg aagcaagttc acaattaccc aatgttcaac ctccttatgg atattgactc ctatatgttt gcatgtgtga
 701  atcagactgc tgtatatgag gagcttgaag atgaaacacg aagactctgt gatgtcagac cttttcttcc agttctcaaa ttagtgacaa gaagttgtga
 801  cccaggggaa aaattagact caaaaattgg agtccttata ggaaaaggtc tgcatgaatt tgattccttg aaggatcctg aagtaaatga atttcgaaga
 901  aaaatgcgca aattcagcga ggaaaaaatc ctgtcacttg tgggattgtc ttggatggac tggctaaaac aaacatatac ccagagcgat gaaccatcca
1001  tccctgaaaa cttagaagat aaactttatg ggggaaagct catcgtagct gttcattttg aaaactgcca ggacgtgttt agctttcaag tgtctcctaa
1101  tatgaatcct atcaaagtaa atgaattggc aatccaaaaa cgtttgacta ttcatgggaa ggaagatgaa gttagcccct atgattatgt gttgcaagtc
1201  agcgggagag tagaatatgt ttttggtgat catccactaa ttcagttcca gtatatccgg aactgtgtga tgaacagagc cctgccccat tttatacttg
1301  tggaatgctg caagatcaag aaaatgtatg aacaagaaat gattgccata gaggctgcca taaatcgaaa ttcatctaat cttcctcttc cattaccacc
1401  aaagaaaaca cgaattattt ctcatgtttg ggaaaataac aacccttccc aaattgtctt ggttaaggga aataaactta acacagagga aactgtaaaa
1501  gttcatgtca gggctggtct ttttcatggt actgagctcc tgtgtaaaac catcgtaagc tcagaggtat cagggaaaaa tgatcatatt tggaatgaac
1601  cactggaatt tgatattaat atttgtgact taccaagaat ggctcgatta tgttttgctg tttatgcagt tttggataaa gtaaaaacga agaaatcaac
1701  gaaaactatt aatccctcta aatatcagac catcaggaaa gctggaaaag tgcattatcc tgtagcgtgg gtaatacgta tggttttga ctttaaagga
1801  caattgagaa ctggagacat aatattacac agctggtctt catttcctga tgaactcgaa gaaatgttga atccaatggg aactgttcaa acaaatccat
1901  atactgaaaa tgcaacagct ttgcatgtta aatttccaga gaataaaaaa caaccttatt attaccctcc cttcgataag attattgaaa aggcagctga
2001  gattgcaagc agtgatagtg ctaatgtgtc aagtcgaggt ggaaaaaagt ttcttcctgt attgaaagaa atcttggaca gggatccctt gtctcaactg
2101  tgtgaaaatg aaatggatct tatttggact ttgcgacaag actgccgaga gattttccca caatcactgc caaaattact gctgtcaatc aagtggaata
2201  aacttgagga tgttgctcag cttcaggcgc tgcttcagat ttggcctaaa ctgccccccc gggaggccct agagcttctg gatttcaact atccagacca
2301  gtacgttcga gaatatgctg taggctgcct gcgacagatg agtgatgaag aactttctca atatctttta caactggtgc aagtgttaaa atatgagcct
2401  tttcttgatt gtgccctctc tagattccta ttagaaagag cacttggtaa tcggaggata gggcagtttc tattttggca tcttaggtca gaagtgcaca
2501  ttcctgctgt ctcagtacaa tttggtgtca tccttgaagc atactgccgg ggaagtgtgg ggcacatgaa agtgctttct aagcaggttg aagcactcaa
2601  taagttaaaa actttaaata gtttaatcaa actgaatgcc gtgaagttaa acagagccaa agggaaggag gccatgcata cctgtttaaa acagagtgct
2701  taccgggaag ccctctctga cctgcagtca cccctgaacc catgtgttat cctctcagaa ctctatgttg aaaagtgcaa atacatggat tccaaaatga
2801  agcctttgtg gctggtatac aataacaagg tatttggtga ggattcagtt ggagtgattt ttaaaaatgg tgatgattta cgacaggata tgttgacact
2901  ccaaatgttg cgcttgatgg atttactctg gaaagaagct ggtttggatc ttcggatgtt gccttatggc tgtttagcaa caggagatcg ctctggcctc
3001  attgaagttg tgagcacctc tgaaacaatt gctgacattc agctgaacag tagcaatgtg gctgctgcag cagccttcaa caaagatgcc cttctgaact
3101  ggcttaaaga atacaactct ggggatgacc tggaccgagc cattgaggaa tttacactgt cctgtgctgg ctactgtgta gcttcttatg tccttgggat
3201  tggtgacaga catagtgaca acatcatggt caaaaaaact ggccagctct tccacattga ctttggacat attcttggaa atttcaaatc taagtttggc
3301  attaaaaggg agcgagtgcc ttttattctt acctatgatt tcatccatgt cattcaacaa ggaaaaacag gaaatacaga aaagtttggc cggttccgcc
3401  agtgttgtga ggatgcatat ctgatttcac gacggcatgg gaatctcttc atcactctct ttgcgctgat gttgactgca gggcttcctg aactcacatc
3501  agtcaaagat atacagtatc ttaaggactc tcttgcatta gggaagagtg aagaagaagc actcaaacag tttaagcaaa aatttgatga ggcgctcagg
3601  gaaagctgga ctactaaagt gaactggatg gcccacacag ttcggaaaga ctacagatct taaaggcgcg ccagtatact ctagagtcga cacccgggga
3701  attcctcgag cgctcgtctc tagcttggcg taatcatggt catagctgtt tcctgtgtga aattgttatc cgctcacaat tccacacaac atacgagccg
3801  gaagcataaa gtgtaaagcc tggggtgcct aatgagtgag ctaactcaca ttaattgcgt tgcgctcact gcccgctttc cagtcgggaa acctgtcgtg
3901  ccagctgcat taatgaatcg gccaacgcgc ggggagaggc ggtttgcgta ttgggcgctc ttccgcttcc tcgctcactg actcgctgcg ctcggtcgtt
4001  cggctgcggc gagcggtatc agctcactca aaggcggtaa tacggttatc cacagaatca ggggataacg caggaaagaa catgtgagca aaaggccagc
4101  aaaaggccag gaaccgtaaa aaggccgcgt tgctggcgtt tttccatagg ctccgccccc ctgacgagca tcacaaaaat cgacgctcaa gtcagaggtg
4201  gcgaaacccg acaggactat aaagatacca ggcgtttccc cctggaagct ccctcgtgcg ctctcctgtt ccgaccctgc cgcttaccgg atacctgtcc
4301  gcctttctcc cttcgggaag cgtggcgctt tctcaatgct cacgctgtag gtatctcagt tcggtgtagg tcgttcgctc caagctgggc tgtgtgcacg
4401  aacccccccgt tcagcccgac cgctgcgcct tatccggtaa ctatcgtctt gagtccaacc cggtaagaca cgacttatcg ccactggcag cagccactgg
4501  taacaggatt agcagagcga ggtatgtagg cggtgctaca gagttcttga agtggtggcc taactacggc tacactagaa ggacagtatt tggtatctgc
4601  gctctgctga agccagttac cttcggaaaa agagttggta gctcttgatc cggcaaacaa accaccgctg gtagcggtgg ttttttgttt tgcaagcagc
4701  agattacgcg cagaaaaaaa ggatctcaag aagatccttt gatcttttct acggggtctg acgctcagtg gaacgaaaac tcacgttaag ggattttggt
4801  catgagatta tcaaaaagga tcttcaccta gatccttttа aattaaaaat gaagttttaa atcaatctaa agtatatatg agtaaacttg gtctgacagt
4901  taccaatgct taatcagtga ggcacctatc tcagcgatct gtctatttcg ttcatccata gttgcctgac tccccgtcgt gtagataact acgatacggg
5001  agggcttacc atctggcccc agtgctgcaa tgataccgcg agacccacgc tcaccggctc cagatttatc agcaataaac cagccagccg gaagggccga
5101  gcgcagaagt ggtcctgcaa ctttatccgc ctccatccag tctattaatt gttgccggga agctagagta agtagttcgc cagttaatag tttgcgcaac
5201  gttgttgcca ttgctacagg catcgtggtg tcacgctcgt cgtttggtat ggcttcattc agctccggtt cccaacgatc aaggcgagtt acatgatccc
5301  ccatgttgtg caaaaaagcg gttagctcct tcggtcctcc gatcgttgtc agaagtaagt tggccgcagt gttatcactc atggttatgg cagcactgca
5401  taattctctt actgtcatgc catccgtaag atgcttttct gtgactggtg agtactcaac caagtcattc tgagaatagt gtatgcggcg accgagttgc
5501  tcttgcccgg cgtcaatacg ggataatacc gcgccacata gcagaacttt aaaagtgctc atcattggaa aacgttcttc ggggcgaaaa ctctcaagga
5601  tcttaccgct gttgagatcc agttcgatgt aacccactcg tgcacccaac tgatcttcag catcttttac tttcaccagc gtttctgggt gagcaaaaac
5701  aggaaggcaa aatgccgcaa aaaagggaat aagggcgaca cggaaatgtt gaatactcat actcttcctt tttcaatatt attgaagcat ttatcagggt
5801  tattgtctca tgagcggata catatttgaa tgtatttaga aaaataaaca aatagggggtt ccgcgcacat ttccccgaaa agtgccacct gacgtctaag
5901  aaaccattat tatcatgaca ttaacctata aaaataggcg tatcacgagg ccctttcgtc
```

> RDC3233 Translated Insert Sequence

```
   1  mcfsfimppa madildiwav dsqiasdgsi pvdfllptgi yiqlevprea tisyikqmlw kqvhnypmfn llmdidsymf acvnqtavye eledetrrlc
 101  dvrpflpvlk lvtrscdpge kldskigvli gkglhefdsl kdpevnefrr kmrkfseeki lslvglswmd wlkqtyppeh epsipenled klyggkliva
 201  vhfencqdvf sfqvspnmnp ikvnelaiqk rltihgkede vspydyvlqv sgrveyvfgd hpliqfqyir ncvmnralph filvecckik kmyeqemiai
 301  eaainrnssn lplplppkkt riishvwenn npfqivlvkg nklnteetvk vhvraglfhg tellcktivs sevsgkndhi wneplefdin icdlprmarl
 401  cfavyavldk vktkkstkti npskyqtirk agkvhypvaw vntmvfdfkg qlrtgdiilh swssfpdele emlnpmgtvq tnpytenata lhvkfpenkk
 501  qpyyyppfdk iiekaaeias sdsanvssrg gkkflpvlke ildrdplsql cenemdliwt lrqdcreifp qslpklllsi kwnkledvaq lqallqiwpk
 601  lpprealell dfnypdqyvr eyavgclrqm sdeelsqyll qlvqvlkyep fldcalsrfl leralgnrri gqflfwhlrs evhipavsvq fgvileaycr
 701  gsvghmkvls kqvealnklk tlnsliklna vklnrakgke amhtclkqsa yrealsdlqs plnpcvilse lyvekckymd skmkplwlvy nnkvfgedsv
 801  gvifkngddl rqdmltlqml rlmdllwkea gldlrmlpyg clatgdrsgl ievvstseti adiqlnssnv aaaaafnkda llnwlkeyns gddldraiee
 901  ftlscagycv asyvlgigdr hsdnimvkkt gqlfhidfgh ilgnfkskfg ikrervpfil tydfihviqq gktgntekfg rfrqcceday lilrrhgnlf
1001  itlfalmlta glpeltsvkd iqylkdslal gkseeealkq fkqkfdealr eswttkvnwm ahtvrkdyrs
```