

Specifications:

Gene:	hGPR20
Accession:	NP_005284
Insert size:	1090bp
Concentration:	10µg at 0.2µg/µL

hGPR20 cDNA Plasmid

GPR20 G protein-coupled receptor 20 [*Homo sapiens*]

Summary:

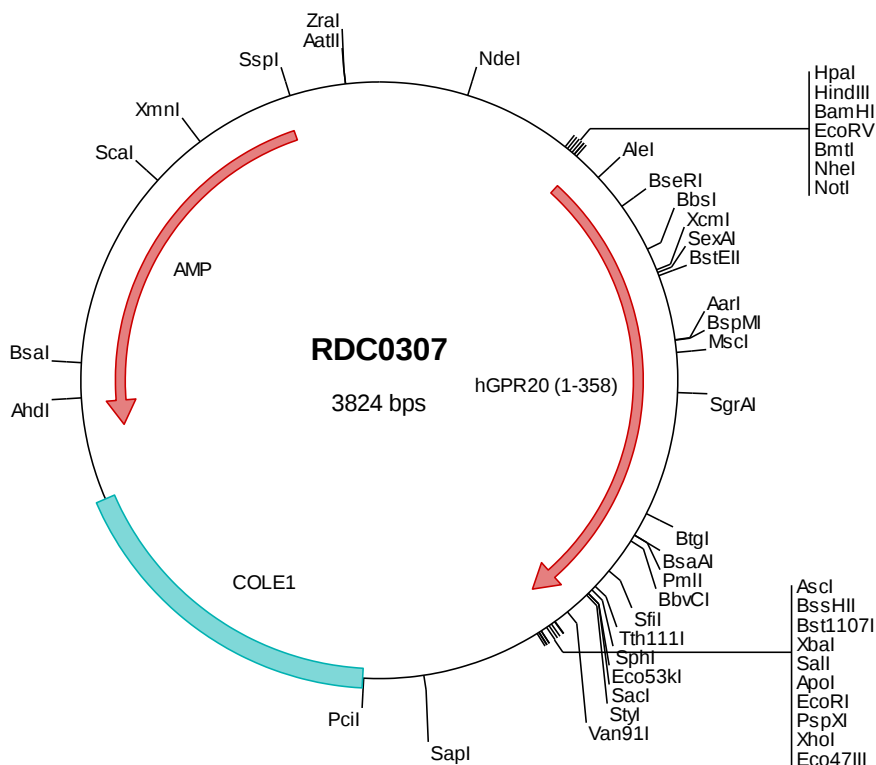
GPR20 is constitutively active in the absence of ligand, leading to continuous activation of its coupled G proteins. When GPR20 was exogenously expressed in HEK293 cells, both the basal level and the prostaglandin E(2)-induced production of cAMP were significantly decreased. Knockdown of GPR20 in PC12h cells resulted in an elevation of the basal cAMP level, suggesting that the endogenous GPR20 achieves a constitutively or spontaneously active conformation. GPR20 may be involved in cellular processes, including control of intracellular cAMP levels and mitogenic signaling.

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.





> RDC0307 Plasmid DNA Sequence

```
1   tcgcgcggttt cggatgatgac ggtgaaaacc tctgacacat gcagctcccg gagacggtca cagcttgtct gtaagcggat gccgggagca gacaagcccg
101  tcaggggcgcg tcagcgggtg ttggcgggtg tcgggggctgg cttactatg cggcatcaga gcagattgta ctgagagtgc accatatgcg gtgtgaaata
201  ccgcacacgat gcgttaaggag aaaataccgc atcaggcgcc attcgccatt caggctgcgc aactgttggg aaggcgcatc ggtgcgggcc tcttcgctat
301  tacgccagctt ggcgaagggt ggaatgtctg caaggcgatt aagtgggta acgccagggt tttcccagtc acgacgttgt aaaacgacgg ccagtgaatt
401  ggagacgtgt taacaagctt ggatccgata tcgctagcgc ggccgcacac atgccctctg tgtctccagc ggggcccctg gcaggggcag tccccaatgc
501  caccgcagtg acaacagtcg ggaccaatgc cagcgggctg gaggtgcccc tgttccacct gtttgcccgg ctggacgagg agctgcatgg caccttccca
601  ggcctgtggc tggcgctgat ggcgggtgac ggagccatct tcttggcagg gctggtgtct aacgggctgg cgtgtacgt cttctgtctg cgcaccgggg
701  ccaagacacc ctcagtcacg tacaccatca acctggtggt gaccgatcta ctggtagggc tgtccctgco cagcgcttc gctgtgtact acggcgccag
801  gggctgcttg cgtgtgctct tcccgacgt cctcggttac ttcctcaaca tgcactgtct catctcttcc ctaacctgca tctgcgtgga ccgctacctg
901  gccatcgtgc ggcctgaagg ctcccgccgc tgcgcgcagc ctgctgtgct caggggccgtg tgtgcctctg tgtggctggc cgcgggtgcc gtaccctgt
1001 cgggtgctggg cgtgacaggc agcgggccct gctgcgctgt ctttgcgctg actgtcctgg agttcctgct gcctctgctg gtcacacagg tgtttaccgg
1101 cgcgcatcag tgtgcaactg cgcggccggg tctgtctcac cagggtcgcc agcgcccgct gcggggccatg cagctcctgc tcacgggtgct catctctt
1201 ctcgtctgct tcaacgcctt ccaacggccg caagtggcgg tggcgctgtg gcccgacatg ccacaccaca cgagcctcgt ggtctaccac gtggccgtga
1301 ccctcagcag cctcaacagc tgcattggac ccatcgtcta ctgcttctgc accagtggct tccaggccac cgtccgaggg cttcttggcc agcacggaga
1401 gcgtgagccc agcagcgggt acgtggtcag catgcacagg agctccagg gctcaggccg tcatcacatc ctcagtgcgg gccctcacgc cctcaccag
1501 gccctggcta atggggccga ggcctaaagg cgcgccagta tactctagag tcgacacccg gggaattcct cgagcgctcg tctctagctt gccgtaatca
1601 tggctcatagc tgtttctctg gtgaaattgt tatccgctca caattccaca caacatacga gccggaagca taaagtgtaa agcctgggggt gcctaattag
1701 tgagctaact cacattaatt gcgttgccgt cactgcccgc tttccagtcg ggaacacctgt cgtgccagct gcattaatga atcggccaac gcgcggggag
1801 aggcgggtttg cgtattgggc gctcttccgc ttcctcgtct actgactcgc tgcgctcgtt cgttcgctcg cggcgagcgg tatcagctca ctcaaaaggcg
1901 gtaatacggg tatccacaga atcaggggat aacgcaggaa agaactgtg agcaaaaggc cagcaaaagg ccaggaaccg taaaaaggcc gcgttgcctg
2001 cggtttttcca taggctccgc cccctgacg agcatcacaa aaatcgacgc tcaagtcaga ggtggcgaaa cccgacagga ctataaagat accaggcggt
2101 tccccctgga agctccctcg tgcgtctctc tgttccgacc ctgcccgtta cccgataacct gtccccttt ctcccttcgg gaagcgtggc gctttctcat
2201 agctcacgct gtaggtatct cagttcgggt taggtcgctt gctccaagct gggctgtgtg cacgaacccc ccgttcagcc cgaccgctgc gccttatccg
2301 gtaactatcg tcttgagtcc aaccgggtaa gacacgactt atcgccactg gcagcagcca ctggtaacag gattagcaga gcgaggtatg taggcgggtc
2401 tacagagttc ttgaagtggg ggcctaacta cggctacact agaagaacag tatttggtat ctgctcctcg ctgaagccag ttaccttcgg aaaaagagtt
2501 ggtagctctt gatccggcaa acaaacacc cgtggtagcg tgggttttt tgtttgcaag cagcagatta cgcgcagaaa aaaaggatct caagaagatc
2601 ctttgatctt ttctacgggg tctgacgctc agtggaacga aaactcacgt taagggattt tggctatgag attatcaaaa aggatcttca cctagatcct
2701 tttaaatata aaatgaagtt ttaaatcaat ctaaagtata tatgagtaaa cttggctcga cagttaccaa tgcttaatca gtgaggcacc tatctcagcg
2801 atctgtctat ttctgttctc catagttgcc tgactcccc tctgttagat aactacgata cgggagggct taccatctgg ccccgatgct gcaatgatac
2901 cgcgagacc acgctcacc gctccagatt tatcagcaat aaaccagcca gccggaaggg ccgagcgcgag aagtggtcct gcaactttat ccgctccat
3001 ccagctctatt aattgttgcc gggaaagctag agtaagtagt tcgccagtta atagtttgcg caacgttgtt gccattgcta caggcatcgt ggtgtcacgc
3101 tcgtcgtttg gtatggcttc attcagctcc ggttcccaac gatcaaggcg agttacatga tcccccattg tgtgcaaaaa agcggttagc tcttctcggtc
3201 ctccgatcgt tgtcagaagt aagttggccg cagtgttctc actcatggtt atggcgacac tgcataatto tcttactgtc atgccatccg taagatgctt
3301 ttctgtgact ggtgagtact caaccaagtc attctgagaa tagtgtagtc ggcgacggcg ttgctcttgc ccggcgctcaa tacgggataa tacgcgcga
3401 catagcagaa ctttaaaagt gctcatcatt ggaaaacgtt cttcggggcg aaaactctca aggatcttac cgctgttgag atccagttcg atgtaacca
3501 ctcgtgcacc caactgatct tcagactctt ttactttcac cagcgtttct ggggtagcaa aaacaggaag gcaaaaatgcc gcaaaaaagg gaataaggcg
3601 gacacggaaa tgttgaatac tcatactctt cctttttcaa tattattgaa gcatttatca gggttattgt ctcatgagcg gatacatatt tgaatgtatt
3701 tagaaaaata acaaaatagg ggttcgcgc acatttcccc gaaaagtgc acctgacgtc taagaacca ttattatcat gacattaacc tataaaaaa
3801 ggcgatatcac gaggcccttt cgtc
```

> RDC0307 Translated Insert Sequence

```
1   mpsvspagps agavpnatav ttvrtnasgl evplfhlfar ldeelhgtfp glwllalmavh gaiflaglgl nglalyvfcc rtraktpsvi ytinlvvtdl
101  lvglslptrf avyygargcl rcafpvhlgy flnmhcsilf ltcicvdrly aivrpegsrr crqpacarav cafvwlaaga vtlslvgvtg srpccrvfal
201  tvlefilpll visvftgrim calsrpdlh qgrqrrvram qliltvliif lvcftpfhar qvavalwpdm phhtslvvvh vavtlsslns cmdpivycfv
301  tsqfqtavrg lfgqhgeres ssgdvsmhr ssksgsrhhi lsagphaltq alangpea
```