

Specifications:

Gene:	hPTGER4
Accession:	NP_000949
Insert size:	1480bp
Concentration:	10µg at 0.2µg/µL

hPTGER4 cDNA Plasmid

**PTGER4 prostaglandin E receptor
4 (subtype EP4) [*Homo sapiens*]**

Also known as: EP4; EP4R

Summary:

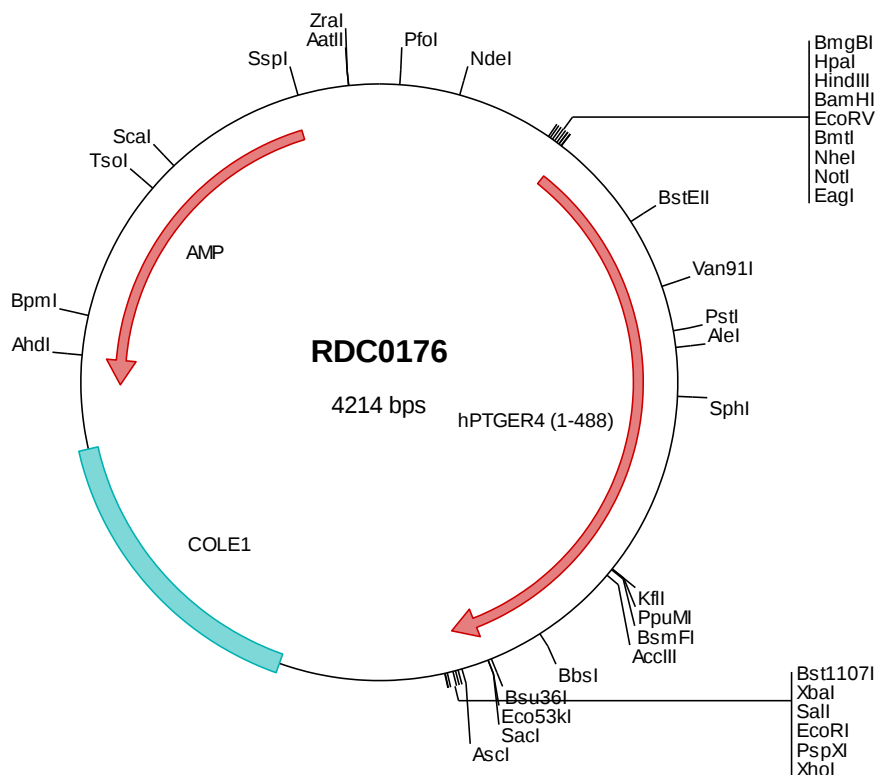
PTGER4 is a member of the G protein-coupled receptor family. This protein is one of four receptors identified for prostaglandin E2 (PGE2) and is highly expressed in intestine and in peripheral blood mononuclear cells. PTGER4 can activate T-cell factor signaling. It has been shown to mediate PGE2 induced expression of early growth response 1 (EGR1), regulate the level and stability of cyclooxygenase-2 mRNA, and lead to the phosphorylation of glycogen synthase kinase-3. Knockout studies in mice suggest that this receptor may be involved in the neonatal adaptation of circulatory system, osteoporosis, as well as initiation of skin immune responses.

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.





> RDC0176 Plasmid DNA Sequence

```
1   tcgcgcggttt  cggatgatgac  ggtgaaaacc  tctgacacat  gcagctcccg  gagacggtca  cagcttgtct  gtaagcggat  gccgggagca  gacaagcccg
101  tcaggggcgcg  tcagcgggtg  ttggcgggtg  tcggggctgg  cttactatg  cggcatcaga  gcagattgta  ctgagagtgc  accatatgcg  gtgtgaaata
201  ccgcacagat  gcgtaaggag  aaaataccgc  atcaggcgcc  attcgccatt  caggctgcgc  aactgttggg  aaggcgcatc  ggtgcgggcc  tcttcgctat
301  tacgccagct  ggcgaaggg  ggatgtgctg  caaggcgatt  aagtgggta  acgccagggt  tttcccgatc  acgacgttgt  aaaacgacgg  ccagtgaatt
401  ggagacgtgt  taacaagctt  ggatccgata  tcgctagcgc  gggcgccacc  atgagcactc  cgggggtcaa  ttctgtccgc  tccttgagcc  ccgaccggct
501  gaacagccca  gtgaccatcc  cggcggtgat  gttcatcttc  ggggtgggtg  gcaacctggt  ggccatogtg  gtgctgtgca  agtcgcgcaa  ggagcagaag
601  gagaacacct  tctaacgcct  ggtatgtggg  ctggtgtgca  ccgacctgtt  gggcaacttg  ttggtgagcc  cggtgaccat  cgccacgtac  atgaagggcc
701  aatggcccg  gggccagccg  ctgtgcgagt  acagcacctt  cattctgtct  ttcttcagcc  tgtccggcct  cagcatcctc  tggcccatga  gtgtcgagcg
801  ctacctggcc  atcaaccatg  cctatttcta  cagccactac  gtggacaagc  gattggcggg  cctcacgctc  ttgtagctct  atgcgtccaa  cgtgtctctt
901  tgcgcgctgc  ccaacatggg  tctcggtagc  tcgcggctgc  agtaccocga  cactcggtgc  ttcactgact  ggaccacca  cgtgacggcg  cagcccgctt
1001  actctacat  gtacgcgggc  ttcagctcct  tctctattct  cgccaccgct  ctctgcaacg  tgtttgtgtg  cggcgcgctg  ctccgcagtc  accgccagtt
1101  catgcgcgcg  acctcgctgg  gcaccgagca  gcaccacgca  gccgctgcgc  cctcggttgc  ctcccggggc  caccgcgctg  cctccccagc  cttgcgcgcg
1201  ctcagcgact  ttcggcgccg  ccggagcttc  cgccgcacgc  cggcgccgca  gatccagatg  gtcactttac  tcaattgccac  ctccctggtg  gtgtctcatc
1301  gctccatccc  gctcgtgggt  cgagtattcg  tcaaccagtt  atatcagcca  agtttgagc  gagaagttag  taaaaatcca  gatttgagg  ccatccgaat
1401  tgctctgtg  aacccatccc  tagaccctg  gatataatc  ctctgagaa  agcagtgct  cagtaaaagca  atagagaaga  tcaaatgcct  cttctccgcg
1501  attggcggt  cccgcaggga  gcgtccggga  cagcactgct  cagacagcca  aaggacatct  tctgccatgt  caggccactc  tcgtctcttc  atctccggg
1601  agctgaagga  gatcagcagt  acatctcaga  cctctctgcc  agacctctca  ctgccaatgc  tcagtgaaga  tgggtcttga  ggcagggaat  tggctccagg
1701  tgtgcctggc  atgggcctgg  cccagggaaga  caccacctca  ctgaggactt  tgcgaatctc  agagacctca  gactcttcac  agggtcagg  ctcagagagt
1801  gtcttactgg  tggatgaggg  tgggtggagc  ggcagggtcg  ggctgcccc  taaggggagc  tccttgcaag  tcacatttcc  cagtgaaca  ctgaacttat
1901  cagagaagtg  tatataaagg  cgcgcacgta  tactctagag  tcgacacccg  gggaaattct  cgagcgctcg  tctctagctt  ggcgtaatca  tggctatagc
2001  tgtttctgt  gtgaaattgt  tatccgctca  caattccaca  caacatacga  gccggaagca  taaagtgtaa  agcctggggg  gcctaattag  tgagctaact
2101  cacattaatt  gcgttgctgc  cactgcccgc  tttccagtcg  ggaacctgtg  cgtgccagct  gcattaatga  atcgcccaac  gcgcggggag  aggcggtttg
2201  cgtattgggc  gctcttccgc  ttctctgctc  actgactcgc  tgcgctcggt  cgttcggctg  cggcgagcgg  tatcagctca  ctcaaaaggc  gtaatacggg
2301  tatccacaga  atcaggggat  aacgcaggaa  agaactgtg  agcaaaaagg  cagcaaaaag  ccaggaaccg  taataaaggc  gcgttgctgg  cgtttttcca
2401  taggtctcgc  cccctcgacg  agcatcaca  aaatcgacgc  tcaagtcaga  ggtggcgaaa  cccgacagga  ctataaagat  accaggcgtt  tccccctgga
2501  agctccctcg  tgcgctctcc  tgtttccgac  ctgcgcgtta  cgggatacct  gtcgcctttt  ctcccttcgg  gaagcgtggc  gctttctcaa  tgctcacgct
2601  gtaggatct  cagttcgggt  taggtcggtc  gctccaagct  gggctgtgtg  cagcaacccc  ccgttcagcc  cgaccgctgc  gccttatccg  gtaactatcg
2701  tcttgagtc  aaccgcgtaa  gacacgactt  atcgccactg  gcagcagcca  ctggtaacag  gattagcaga  gcgaggtatg  taggcggtgc  tacagagttc
2801  ttgaagtgt  ggcctaacta  cggctacact  agaaggacag  tatttggtat  ctgctgctct  ctgaagccag  ttaccttcgg  aaaaagagtt  ggtagctctt
2901  gatccggcaa  acaaacacc  gctggtagcg  gtggtttttt  tggttgcaag  cagcagatta  cccgcagaaa  aaaaagatct  caagaagatc  ctttgatctt
3001  ttctacgggg  tctgacgctc  agtggaacga  aaactcacgt  taagggattt  tggctcatgag  attatcaaaa  aggatcttca  cctagatcct  tttaaattaa
3101  aaatgaagtt  ttaaatcaat  ctaaagtata  tatgagtaaa  cttggctcga  cagttaccaa  tgcttaatca  gtgaggcacc  tatctcagcg  atctgtctat
3201  ttcgttctac  catagttgcc  tgactccccg  tcgtgtagat  aactacgata  cgggagggct  taccatctgg  cccagtgct  gcaatgatac  cgcgagacc
3301  acgctcaccg  gctccagatt  tatcagcaat  aaaccagcca  gccggaagg  ccgagcgag  aagtgttct  gcaactttat  ccgcctccat  ccagctctat
3401  aattgttgcc  ggggaagtag  agtaagtagt  tcgccagtta  atagtttgcg  caactgtgtt  gccattgcta  caggcatcgt  ggtgtcacgc  tcgtcgtttg
3501  gtatggcttc  attcagctcc  ggttcccaac  gatcaaggcg  agttacatga  tccccattgt  tgtgcaaaaa  agcggttagc  tccttcggtc  ctccgatcgt
3601  tgtcagaagt  aatgtggcgc  cagtgtttat  actcatggtt  atggcagcac  tgcataatgt  tcttactgtc  atgccatccg  taagatgctt  ctctgtgact
3701  ggtgagtact  caaccaagtc  tagtgtagaa  tagtgtatgc  ggcgaccgcg  ttgctcttgc  ccggcgtaaa  tacgggataa  tacgcgcaa  ctagtcagaa
3801  ctttaaaagt  gctcatcatt  ggaatacggt  cttcggggg  aaaactctca  aggatcttac  cgctgttgag  atccagttcg  atgtaaccca  ctcggtcacc
3901  caactgatct  tcagcatctt  ttactttcac  cagcgtttct  ggggtgagca  aaacagggaag  gcaaaatgcc  gcaaaaaagg  gaataaggcg  cagacggaaa
4001  tggtaataac  tcatactctt  cctttttcaa  tattattgaa  cacttttaga  ggggttatgt  ctcatgagcg  gatacatatt  tgaatgtatt  tagaaaaata
4101  aacaaatagg  ggttccgcgc  acatttcccc  gaaaagtggc  acctgacgtc  taagaaacca  ttattatcat  gacattaacc  tataaaaaata  ggcgtatcac
4201  gaggcccttt  cgtc
```

> RDC0176 Translated Insert Sequence

```
1   mstpgvnssa  slspdrlnsp  vtvpavmfif  gvgnlvaiv  vlcksrkeqk  ettftytlvcg  lavtdllgtl  lvspvvtiaty  mkgqwpqggp  lceystfill
101  ffsllsglsii  camsvryla  inhayfshy  vdkrlagltl  favyasnlvf  calpnmglgs  srlqypdtwc  fidwtntvta  haaysymyag  fssflilatv
201  lcnvlvcgal  lrmhrqfmr  tslgteqhha  aaasvasrg  hpaaspalpr  lsdfrrrrsf  rriagaeiqm  villiatslv  vlicsiplvv  rvfvnqlygp
301  slerevsknp  dlqairiasv  npildpwiyi  llrktvlska  iekikclfor  iggsrrersg  qhcsdsqrts  samsghrsrf  isrelkeiss  tsqtlldpls
401  lpdlsenglg  grnllpgvpg  mglagedtts  lrtlrisset  dssqgqdses  vllvdeaggs  gragpapkgs  slqvtfpset  lnlsckci
```