*h*Erythropoietin R VersaClone cDNA

Catalog Number: RDC1158

Specifications:

Gene:	*h*EPOR
Accession:	NP_000112
Insert size:	1540bp
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

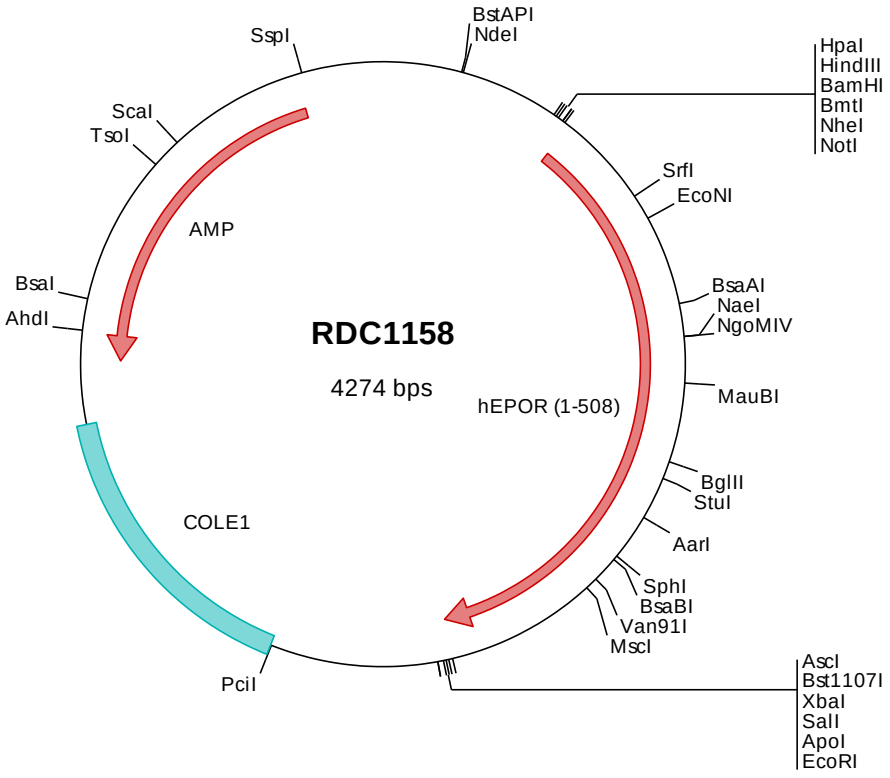
Formulation	cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping	Ships at ambient temperature
Stability	1 year from date of receipt when stored at -20°C to -80°C
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

*h*Erythropoietin R cDNA Plasmid

EPOR erythropoietin receptor
[*Homo sapiens* (human)]

Also known as: EPO-R

Summary:
EPOR is the erythropoietin receptor and is a member of the cytokine receptor family. Erythropoietin, a glycoprotein produced primarily by the kidney, is the principal factor that regulates erythropoiesis by stimulating the proliferation and differentiation of erythroid progenitor cells. Upon erythropoietin binding, EPOR activates Jak2 tyrosine kinase which activates different intracellular pathways including: Ras/MAP kinase, phosphatidylinositol 3-kinase and STAT transcription factors. Defects in EPOR may produce erythroleukemia and familial erythrocytosis. Alternatively spliced transcripts encoding different proteins have been described.



FOR RESEARCH USE ONLY

NOT FOR USE IN HUMANS

> RDC1158 Plasmid DNA Sequence

```
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 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 atggaccacc tcggcgcgtc cctctggccc caggtcggct ccctttgtct
 501  cctgctcgct ggggccgcct gggcgccccc gcctaacctc ccggacccca agttcgagag caaagcggcc ttgctggcgg cccgggggcc cgaagagctt
 601  ctgtgcttca ccgagcggtt ggaggacttg gtgtgtttct gggaggaagc ggcgagcgct ggggtgggcc cgggcaacta cagcttctcc taccagctcg
 701  aggatgagcc atggaagctg tgtcgcctgc acccaggctcc cacggctcgt ggtgcggtgc gcttctggtg ttcgctgcct acagccgaca cgtcgagctt
 801  cgtgccccta gagttgcgcg tcacagcagc ctccggcgct ccgcgatatc accgtgtcat ccacatcaat gaagtagtgc tcctagacgc ccccgtgggg
 901  ctggtggcgc ggttggctga cgagagcggc cacgtagtgt tgcgctggct cccgccgcct gagacaccca tgacgtctca catccgctac gaggtggacg
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1101  cttcgccgtc cgcgcgcgta tggctgagcc gagcttcggc ggcttctgga gcgcctggtc ggagcctgtg tcgctgctga cgcctagcga cctggacccc
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2001  tcgacacccg gggaattcct cgagcgctcg tctctagctt ggcgtaatca tggtcatagc tgtttcctgt gtgaaattgt tatccgctca caattccaca
2101  caacatacga gccggaagca taaagtgtaa agcctggggt gcctaatgag tgagctaact cacattaatt gcgttgcgct cactgcccgc tttccagtcg
2201  ggaaacctgt cgtgccagct gcattaatga atcggccaac gcgcggggag aggcggtttg cgtattgggc gctcttccgc ttcctcgctc actgactcgc
2301  tgcgctcggt cgttcggctg cggcgagcgg tatcagctca ctcaaaggcg gtaatacggt tatccacaga atcaggggat aacgcaggaa agaacatgtg
2401  agcaaaaggc cagcaaaagg ccaggaaccg taaaaaggcc gcgttgctgg cgtttttcca taggctccgc cccctgacg agcatcacaa aaatcgacgc
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> RDC1158 Translated Insert Sequence

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 301  kgnfqlwlyq ndgclwwspc tpftedppas levlsercwg tmqavepgtd degpllepvg sehaqdtylv ldkwllprnp psedlpgpgg svdivamdeg
 401  seasscssal askpspegas aasfeytild pssqllrpwt lcpelpptpp hlkylylvvs dsgistdyss gdsqgaqggl sdgpysnpye nslipaaepl
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