

Specifications:

Gene:	<i>hSPR</i>
Accession:	NP_003115
Insert size:	799bp
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.

hSPR cDNA Plasmid

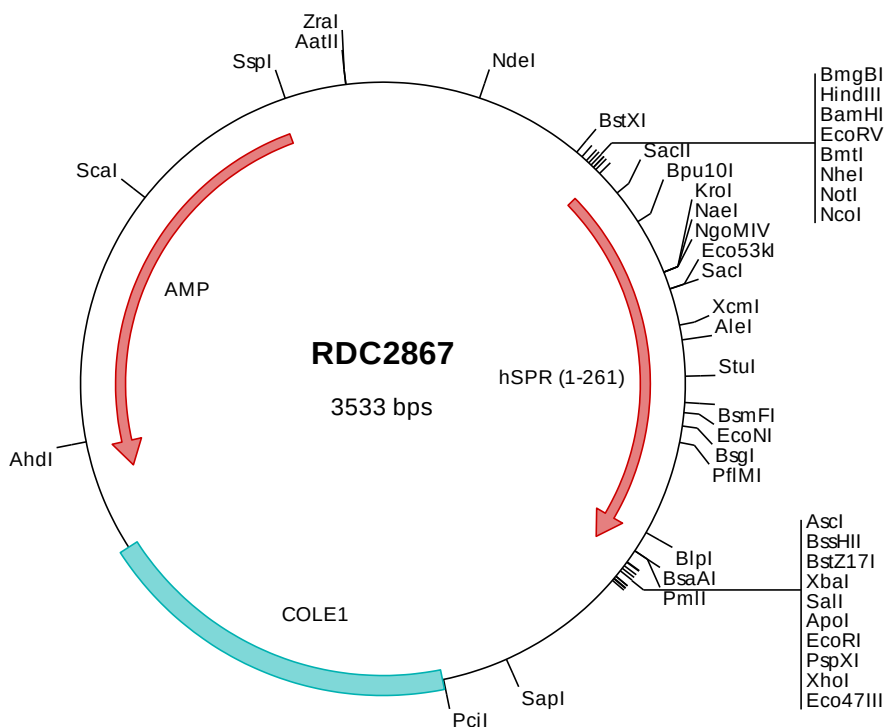
SPR sepiapterin reductase

[*Homo sapiens* (human)]

Also known as: SDR38C1

Summary:

SPR is an aldo-keto reductase that catalyzes the NADPH-dependent reduction of pteridine derivatives and is important in the biosynthesis of tetrahydrobiopterin (BH4). Mutations in SPR result in DOPA-responsive dystonia due to sepiapterin reductase deficiency.



> RDC2867 Plasmid DNA Sequence

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1   tcgcgcgctt cggatgatgac ggtgaaaacc tctgacacat gcagctcccc gagacggtca cagcttgtct gtaagcggat gccgggagca gacaagcccg
101  tcagggcgcg tcagcgggtg ttggcgggtg tcggggctgg ctttaactatg cggcatcaga gcagattgta ctgagagtgc accatatgcg gtgtgaaata
201  ccgcacacgat gcgtaaggag aaaataccgc atcaggcgcc attcgccatt caggctgcgc aactgttggg aagggcgatc ggtgcgggcc tcttcgctat
301  tacgccagct ggcgaaaagg ggatgtgctg caaggcgatt aagttgggta acgccagggt tttcccagtc acgacgttgt aaaacgacgg ccagtgatatt
401  ggagacgtgt taacaagctt ggtccgata tcgctagcgc ggccgccacc atggaaggag gtctgggtcg tgctgtttgc ttgtgaccc gggcctcccg
501  cggtctcggc cggacgctgg ccccgctcct ggccctcgctg ctgtcgcccg gctccgtgct tgctcttagc gcccgcaacg acgaggcaact ggcgcagctg
601  gaggcgcgagc tgggcgcgga cgggtctggc ctgcgcgtgg tgccgggtgc cgcgcacctg ggccgcgagg ccggttgcga gcagctgctc ggcgccttgc
701  gcgagctccc ccggcccaag gggctgcagc gactgctgct tatcaacaac gcgggtctct ttggggatgt gtccaaaagg ttcgtggacc tgagtactc
801  cactcaagtg aacaactact gggcactgaa cttgacctcc atgtcttgc tgacttcagg cgtcttgaag gccttcccg acagtcttg cctcaacaga
901  accgtgttta acatctctgc cctctgtgac ctgcaacctt tcaaaggctg ggcgctgtac tgtgcaggaa aggtctctcg tgatatgtg ttccaggtcc
1001  ttggcctcga ggaaacctaa gtgaggtgac cccaggtcct ctggacacag acatgcagca gttggcccg gagacctccg tggacctaga
1101  catgcgaaaa gggctgcagg agctgaaggc aaaggggaag ctggtggatt gcaaggtgtc agcccagaaa ctgctgagct tactgaaaa ggacgagttc
1201  aagctcggag cccaogtga cttctatgac aataaaggc ggccagctat actctagagt cgacaccgg ggaattctc gagcgtcgt ccttagcttg
1301  gcgtaatcat ggtcatagct gtttctgtg tgaattgtt atccgctcac aattccacac aacatacag ccggaagcat aaagtgtaaa gcctgggggtg
1401  cctaatagag gagctaactc acattaattg cgttgcgctc actgcccgcct tccagtcgg gaaacctgtc gtgccagctg cattaatgaa tcggccaacg
1501  cgccggggaga ggcggtttgc gttattggcg ctcttccgct tctctgctca ctgactcgct gcgctcggtc gttcggctgc ggcgagcggt atcagctcac
1601  tcaaaggcgg taatacgggt atccacagaa tcaggggata acgcaggaaa gaacatgtga gcaaaaaggc agcaaaaggc caggaaccgt aaaaaaggcg
1701  cggttgcgtg gtttttccat aggtcccgcc ccctgacga gcatcacaaa aatcgacgct caagtcagag gtggcgaaac ccgacaggac tataaagata
1801  caggcgcttt cccctcggaa gctccctcgt gcgctctctc gttccgacct ttccgcttac tccgctttc cctcttcggg aagcgtggcg
1901  ctttctcaat gctcacgctg tagtatctc agttcgggtt aggtcgttgc accaagctg cgcctgtgtg acgaaccccc gcctcagccc gaccgtctcg
2001  cttatcccg taactatcgt cttgagttca acccgtaag acacgactta tcgccactg cagcagccac tggtaacagg attagcagag cgaggtatgt
2101  aggcggtgct acagagttct tgaagtgtg gcctaactac ggctacacta gaaggacagt atttggtatc tgcgctctgc tgaagccagt taccttcgga
2201  aaaagagttg tagctctctt atccggcaaa caaaccaccg ctggtagcgg ttgttttttt gtttgcaagc agcagattac gcgcagaaaa aaaggatctc
2301  aagaagatcc tttgatcttt tctacggggt ctgacgctca gtggaacgaa aactcacggt aagggatttt ggtcatgaga ttatcaaaaa ggatcttcac
2401  ctatgctcct ttaaatataa aatgaagttt taaatcaatc taaagtatat atgagtaaac ttggtctgac agttaccaat gcttaacag tgaggcaact
2501  atctcagcga tctgtctatt tcgttcatcc atagttgcct gactccccgt cgtgtagata actacgatac gggagggctt accatctggc cccagtgctg
2601  caatgatacc gcgagacca cgtccaccgg ctccagattt atcagcaata aaccagccag ccggaaggcg cgagcgagc agtggtcctg caactttatc
2701  cgcctccatc cagtctatta attgttgccg ggaagctaga gtaagttagt cggcagttaa tagtttgcc aacgtttgtt ccattgctac aggcctctg
2801  gtgtcacgct cgtcgttttg tatggcttca ttcagctccg gttcccaacg atcaaggcga gttacatgat ccccatgtt gtgcaaaaaa gcggttagct
2901  ccttcggctc tccgatcgtt gtcagaagta agttggccgc agtggtatca ctcatggtta tggcagcact gcataattct cttactgtca tgcctccgt
3001  aagatgcttt tctgtgactg gtgagtactc aaccaagtca tctcgagaat agtgtatgcy gcgaccgagt cgtctctgcc cggcgtaat acgggataat
3101  accgcgccac atagcagaac tttaaaagt ctcactcattg gaaaacgttc ttcggggcga aaactctcaa ggatcttacc gctgttgaga tccagttcga
3201  tgtaaccac tcgtgcaccc aactgatctt cagcatcttt tactttcacc agcgtttctg ggtgagcaaa aacaggaagg caaaatgccg caaaaaagg
3301  aataaggcgc acacggaaat gttgaatact catactcttc ctttttcaat attattgaag catttatcag ggttattgtc tcatgagcgg atacatattt
3401  gaattgtatt agaaaaataa acaaatagg gttccgcgca catttccccg aaaagtgcc cctgacgtct aagaaccat tattatcatg acattaacct
3501  ataaaaatag gcgtatcacg aggccctttc gtc

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> RDC2867 Translated Insert Sequence

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1   megglgravc lltgasrgfg rtplapllasl lspgsvlvls arndealrql eaelgaersg lrvvrpadl gaeagllqll galrelprpk glqrlilinn
101  agslgdvskg fvdlsdstqv nnywalnlts mlcltssvlk afpdsplnr tvvnisslca lqpfkgwaly cagkaardml fqvlaleepn vrvlnyapgg
201  ldtmdqqilar etsvdpdmrk glqlkakgk lvdckvsaqk llslllekdef ksgahvdfyd k

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