

Specifications:

Gene:	mNphs2
Accession:	NP_569723.1
Insert size:	1171bp
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.

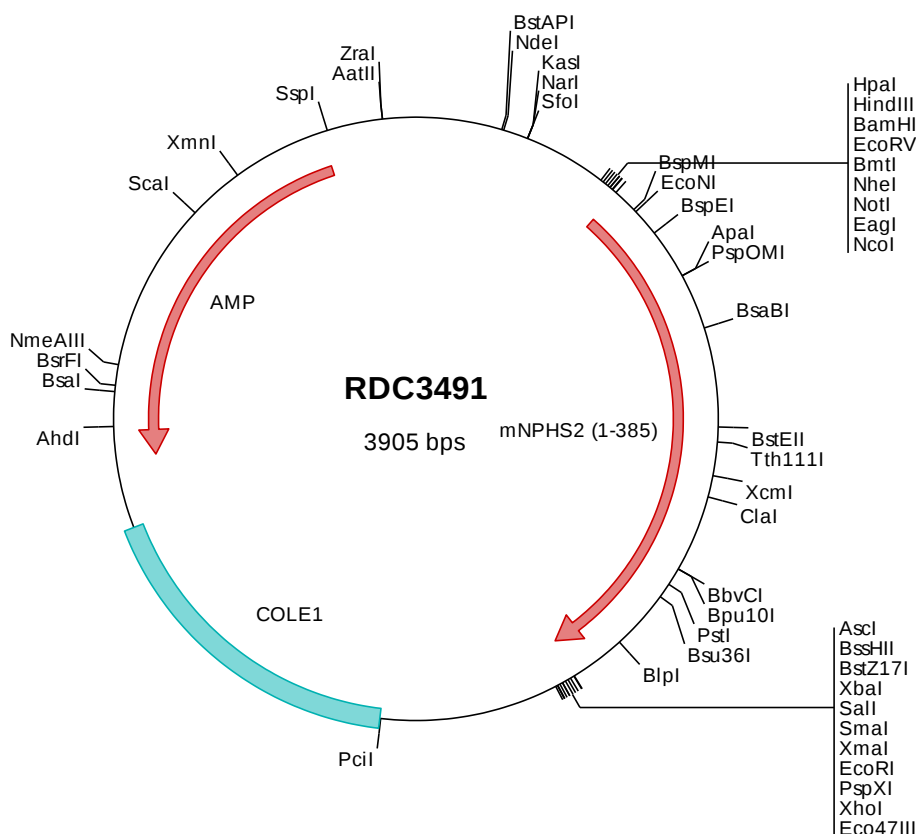
mPodocin/NPHS2 cDNA Plasmid

Nphs2 nephrosis 2, podocin
[*Mus musculus* (house mouse)]

Also known as: PDCN; SRN1

Summary:

Podocin plays an important role in podocyte function in the kidney. Loss of podocin function results in albuminuria, hypercholesterolemia, hypertension, and renal failure. Podocin localizes to areas of cell-cell contact between podocytes in the renal glomerulus. It associates into oligomers and forms complexes with Nephrin, CAR, ZO-1, and the cation ion channel TRPC6. It contributes to podocyte function by regulating the activation of TRPC6 and Nephrin mediated signaling.



> RDC3491 Plasmid DNA Sequence

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1   tcgcgcgctt cggatgatgac ggtgaaaacc tctgacacat gcagctcccc gagacggtca cagcttgtct gtaagcggat gccgggagca gacaagcccg
101  tcaggcgccg tcacgggggtg ttggcgggtg tcggggctgg ctttaactatg cggcatcaga gcagattgta ctgagagtgc accatatgcg gttgtgaaata
201  ccgcacacgat gcgtaaggag aaaataccgc atcaggcgcc attcgccatt caggctgcgc aactgttggg aagggcgatc ggtgcgggcc tcttcctat
301  tacgccagct ggcgaaaggg ggaatgtctg caaggcgatt aagttgggta acgccagggt tttcccagtc acgacgttgt aaaacgacgg ccagtgatt
401  ggagacgtgt taacaagctt ggaatccgata tcgctagcgc ggccgcccacc atggacagca gggcgcgagg ctcttcccg gagggccacg ggagaagtag
501  caggttccctc tctagggatg acaagaaggc aaagggccgg aggggcagca gagggccgcg acgtccggat gctggagcag agcggcagag caccggcgcg
601  acagcgaccc gaggggagcc cagagctccc gctgccaccg ccaccgtagt ggacgtggac gaggttcggg gccctgttga ggagggcacg gaagtgggtg
701  cgctgctgga gagcgagcga ccagaggaag gcatcaagcc ctctggatta ggggcctgcg agtggttctt tgtcctcgcc tccctgatct tcatcatcat
801  gacgttccct ttttccatct ggttctgcat aaaggttgtg caagagtagt aaagagtaat tatattccga ctgggacatc tgccttctgg aagagccaaa
901  ggtcctggcc tgttcttttt tttaccctgt ctggacacct atcacaaggt tgatctccgt ctccagacct tggaaatacc tttccatgag gtggtaaaca
1001 aagatatggt tataatggag atagacgtct tctgctaata ccgcatggaa aatgcctctc ttcttctaag cagtctagcc catgtgtoca aagccatcca
1101 gttctctgtg caaaccacca tgaagcgctt cttggcacat cgatccctca ctgaaattct cctggaaaag aagagcattg cccaagatgt aaaggttgcc
1201 ttagatgcag tgacctgtat ttggggcacc aaagtggaga gaaactgaaat taaggaagtgt aggtgcccag ctgggcttca gcaactctct gcggtggaag
1301 ctgagtcaca aagacagggc aaagtgcggg tgattgtctg agaaggggaa aaggtctcct cagagtccct gaggatggcg gctgagatcc tgtcgggcac
1401 cccagcgctt gtcacagctc gatacttgca cactcttcag tgcgtgtcca cagagaagcc agccactgtg gttttgcctt tgcatttga catgtctaac
1501 cttttgcct ctcccgccaa cagagcacaa gggagcatca actaccacag ttcctccaaa ccagttgaac cactaaatcc caaaaagaag gactctccta
1601 tggtataaag gcgcgcag atactctaga gtgcacaccc ggggaattcc tcgagcgctc gtctctagct tggcgtaatc atggtcatag ctgtttcctg
1701  tgtgaaattg ttatccgctc acaattccac acaacatacg agccggaagc ataaagtgt aagcctgggg tgcctaatag gtgagctaac tcacattaat
1801  tgcgttgccg tcactgcccg ctttccagtc gggaaacctg tcgtgcccag tgcattaatg aatcgcccaa cgcgcgggga gaggcggttt gcgtattggg
1901  cgctcttcgc cttcctcgct cactgactcg ctgcgctcgg tcgtctcgct ggcgcgagcg gtatcagctc actcaaaagg ggtaatacgg ttatccacag
2001  aatcaggggga taacgcagga aagaacatgt gagcaaaaag ccagcaaaaag gccaggaacc gtaaaaaggc cgcgttgcgt gcgtttttcc ataggctccg
2101  ccccctgac gagcatcaca aaaatcgacg ctcaagtcag aggtggcgaa acccgacagg actataaaga taccaggcgt tccccctgg aagctccctc
2201  gtgcgctctc ctgttccgac ctgcgcgctt accggatacc ttgcgcgctt tctcccttcg ggaagcggtg gactttctca atgtctcagc tgtaggtatc
2301  tcagttcggt gtatgtcggt cgctccaagc tgggctgtgt gcaacgaacc cccgttcagc ccgacctgtg cgccttatcc ggtaactatc gtccttgagtc
2401  caaccgggta agacacgact tatcgccact ggcagcagcc actggttaaca ggattagcag gttaccttgc gaaaaagagt tggtagctct tgatccggga
2501  tggcctaact acggctacac tagaaggaca gtatttgta tctgcgctct cgtgaagcca gttaccttgc gaaaaagagt tcaagaagat cctttgatct tttctacggg
2601  aacaaaccac cgtggttagc ggtggttttt ttgtttgcaa gcagcagatt acgcgcagaa aaaaaggatc accatagatc ttttaatta aaaatgaagt
2701  ttttgaatcaa tctaaagtat atatgagtaa acttggtctg acagttacca atgcttaatc agtgaggcac ctatctcagc gatctgtcta tttcgttcat
2801  ccatagttgc ctgactcccc gtcgtgtaga taactacgat acgggagggc ttaccatctg gcccagtgcc tgcaatgata ccgcgagacc cagctcacc
2901  ggctccagat ttatccagca taaaccagcc agccggaagg gccgagcgca gaagtggctc tgcaacttta tccgcctcca tccagctcat taattgttgc
3001  cgggaagcta gagtaagtag ttgccagtt aatagtttgc gcaacgttgt tgccattgct acaggcatcg tgggtgacg ctcgtcgctt ggtatggctt
3101  cattcagctc cggttcccaa cgatcaaggc gagttacatg atcccccatg ttgtgcaaaa aagcggttag ctccttcggt cctccgatcg ttgtcagaag
3201  taagttagcc gcagtgttat cactcatggt tatggcagca ctgcataatt ctcttactgt catgcatcc gtaagatgct tttctgtgac tggtagtagc
3301  tcaaccaagt cattctgaga atagtgtatg cggcgaccga gttgctctgt cccggcgctc atacgggata ataccgcgcc acatagcaga actttaaaag
3401  tgctcatcat tggaaaacgt tcttcggggc gaaaactctc aaggtatcta ccgctgttga gatccagttc gatgtaaccc actcgtgcac ccaactgatc
3501  ttcagcatct tttacttttc ccagcgtttc tgggtgagca aaaacaggaa ggcataaatgc gcaaaaaaag ggaataaggg cgacacggaa atgttgaata
3601  ctcatactct tccttttttc atattattga agcatttatc aggggttatg tctcatgagc ggatacatat ttgaatgtat ttagaaaaat aaacaaatag
3701  gggttccgcg cacatttccc cgaagaagtc cactgacgt ctaagaaacc attattatca tgacattaac ctataaaaaat aggcgtatca cgaggccctt
3801
3901  tcgtc

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> RDC3491 Translated Insert Sequence

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1   mdsrarsssr eahgrssrss srddkkakag rgsrgrarpd agaerqstgr tatrgprap aatatvvdvd evrgpgeegt evvalleser peegikpsgl
101  gacewllvla slifiimtfp fsiwfcikvv qeyerviifr lghllpgrak gpplffflpc ldyhkvdlr lqtleipfhe vvtkdmfime idavcyyrme
201  naslllssla hvskaiqflv qttmkrllah rslteiller ksiagdvkva ldavtciwgi kverteikdv rlpaglqhs1 aveaeaqrqa kvrviaaege
301  kaaseslrma aeilsgtpaa vqlrylhtlq slstekpatv vlplpfmdls llsspgnraq gsinyppssk pveplnpkkk dspml

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