

**Specifications:**

Gene:	hPON2
Accession:	NP_000296.2
Insert size:	1078bp
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**

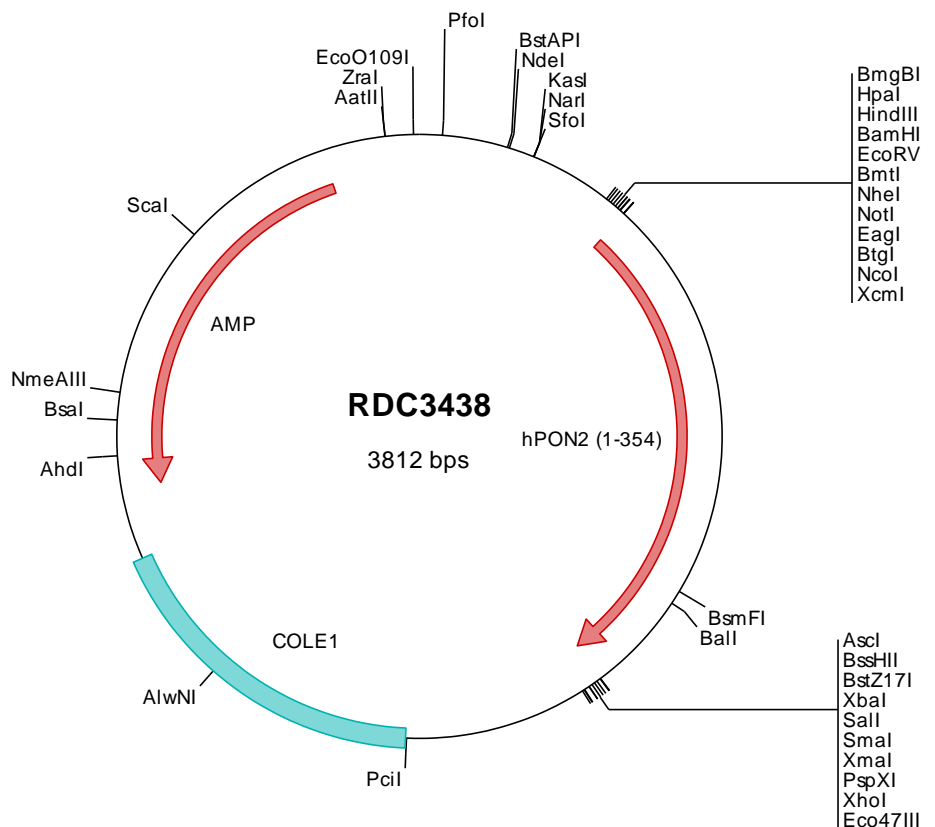
Formulation	cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping	Ships at ambient temperature
Stability	1 year from date of receipt when stored at -20°C to -80°C
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

**hPON2 cDNA Plasmid**

**PON2 paraoxonase 2 [ *Homo sapiens* (human) ]**

**Summary:**

PON2 is a member of the paraoxonase gene family. It is ubiquitously expressed in human tissues, membrane-bound, and may act as a cellular antioxidant, protecting cells from oxidative stress. Hydrolytic activity against acylhomoserine lactones, important bacterial quorum-sensing mediators, suggests PON2 may also play a role in defense responses to pathogenic bacteria. Mutations in PON2 may be associated with vascular disease and a number of quantitative phenotypes related to diabetes. Alternatively spliced transcript variants encoding different proteins have been described.



FOR RESEARCH USE ONLY

NOT FOR USE IN HUMANS

> RDC3438 Plasmid DNA Sequence

```

1 tcgctgctgtt cggatgatgac ggtgaaaacc totgacacat gcagctcccc gagacgggtca cagcttgtct gtaagcggat gccgggagca gacaagcccc
101 tcagggcgcg tcagcggggtg ttggcgggtg tcggggctgg ctttaactatg cggcatcaga gcagattgta ctgagagtgc accatatgcg gtgtgaaata
201 cgcacacagat gcgtaaggag aaaataccgc atcaggcgcc attgccatt caggctcgc aactgttggg aagggcgatc ggtgcgggcc tcttcctat
301 tacgccagct ggcgaaaagg ggatgtgctg caaggcgatt aagttgggta acgccagggt ttcccagtc acgacgttgt aaaacgacgg ccagtgaatt
401 ggagacgtgt taacaagctt ggatccgata tcgctagcgc ggccgcccacc atgggtcggc tggtagctgt aggccttctg gggatcgcgc tggcgtcct
501 gggcgagagg cttctggcac tcagaaatcg acttaaagcc tccagagaag tagaattctgt agaccttcca cactgccacc tgattaaagg aattgaagct
601 ggctctgaag atattgacat acttcccact ggtctggctt ttttttagtgt ggggtctaaa ttcccaggac tccacagett tgcaccagat aagcctggag
701 gaatacctaat gatggatccta aaagaagaaa aaccaagggc acgggaatta agaatcagtc gtgggtttga ttggcctca tcaatccac atggcatcag
801 cactttcata gacaacgatg acacagttta tctctttgtt gtaaaccacc cagaattcoa gaatacagtg gaaattttta aattgaaga agcagaaaat
901 tctctgttgc atctgaaaac agtcaaacat gagcttcttc caagtgtgaa tgacatcaca getgttggac cggcacattt ctatgccaca aatgaccact
1001 acttctctga tcttttctta aagtatttag aaacatactt gaacttaac tgggcaaatg ttgttacta cagtccaaat gaagttaaag tggtagcaga
1101 aggatttgat tcagcaaatg ggatcaatat ttoactgat gataagtata tctatgttgc tgacatattg gctcatgaaa ttcattgttt gaaaaaacac
1201 actaatatga atttaactca gttgaaggta cttgagctgg atacactggt ggataatttt tctattgato cttcctcggg ggacatctgg ttaggtctgc
1301 atcctaagtg ccagaagctc ttctgtatg acccgaaaca tctcctctcg tcagaggttc tccgcatcca gaacattcta tctgagaagc ctacagtgac
1401 tacagtttat gccacaatg ggtctgttct ccaaggaagt tctgtagcct cagtgatga tgggaagctg ctcataggca ctttatacca cagagccttg
1501 tattgtgaac tctaaaggcg cgcagatata ctctagatgc gacaccggg gaattcctcg agcctctgc tctagcttgg cgtaatcatg gtcatagtctg
1601 tttctctgtg gaaattgtta tccgctcaca attccacaca acatacagc cggaaagcata aagtgtaaag cctggggtgc ctaatgagtg agctaactca
1701 cattaattgc gttgocgca ctgcccgtt tccagtcggg aaacctgtcg tgcagctgc attaatgaat cggccaacgc gcggggagag gcggtttgcg
1801 tattggcgc tcttccgctt cctcgtccac tgactcgtg cgtcgttgcg ttcggctgcg gcgagcggta tcagctcact caaaggcggg aatacggta
1901 tccacagaat caggggataa cgcagtaaac aacatgtgag caaaaagcca gcaaaaagcc aggaaccgta aaaagggccg gttgtgccc tttttcata
2001 ggctccgccc ccttgacgag catcacaanaa atocagcgtc aagtcagagg tggcgaaaacc cgacaggact ataaagatac caggcgtttc ccctgggag
2101 ctccctcctg cgtctcctg ttcogacct cgcgcttacc ggatacctgt ccgcttctt cctctcggga agcgtggcgc tttctcaatg ctacgctgt
2201 aggtatctca gttcgggtga ggtcgttctgc tccaaagctg gctgtgtgca cgaaccccc gttcagcccg accgctgcgc tttatccggt aactatctgc
2301 ttgagtccaa cccggtaaga cacgacttat cgcactggc agcagccact ggtaaacagga ttagcagagc gaggtatgta ggcggtgcta cagagttctt
2401 gaagtgttgg ctaactacg gctacactag aaggacagta tttggtatct gcgctctgt gaagccagtt accttcgga aaagagttgg tagctcttga
2501 tccggcaaac aaaccaccgc tggtagcggg ggtttttttg tttgcaagca gcagattacg cgcagaaaaa aaggatctca agaagatcct ttgatctttt
2601 ctacggggtc tgacgctcag tggaacgaaa actcagctta agggattttg gtcatgagat tatcaaaaag gatcttcacc tagatccttt taaattaaaa
2701 atgaagtttt aaatcaatct aaagtatata tgagttaaact tggctctgaca gttaccaatg cttaatcagt gaggcaccta tctcagcagat ctgtctattt
2801 cgttcatcca tagttgctg actccccgtc gtgtagataa ctacgatacg ggagggctta ccatctggcc ccagtgtctc aatgataacc cgagaccac
2901 gctcaccggc tccagattta tcagcaataa accagccagc cggaaaggcc gagcgcagaa gtggctctgc aactttatcc gcctccatcc agtctattaa
3001 ttgttgcggg gaagctagag taagtgttcc gccagttaat agtttgcgca acgttgttgc cattgctaca ggcacgctg tgcacgctc gtcgtttggt
3101 atggcttcat tcagctccgg tccccaacga tcaaggcgag ttacatgac ccccatgttg tgcaaaaaag cgggttagctc cttcggctct ccgatcgttg
3201 tcagaagtaa gttggccgca gtgttatcac tcatggttat ggcagcactg cataattctc ttactgtcat gccatccgta agatgctttt ctgtgactgg
3301 tgagtactca accaagtcac tctgagaata gtgtatgcgg cgaaccagtt gctcttgccc ggcgtcaata cgggataata cccgccaaca tagcagaact
3401 ttaaaagtgc tcatcattgg aaaacgttct tcggggcgaa aactctcaag gatcttaccg ctgttgagat ccagttcgat gtaaccact cgtgcacca
3501 actgatcttc agcatctttt actttcacca cgttttctgg gtgagcaaaa acaggaaggg aaaaatgccg aaaaagggga ataagggcga cacggaaatg
3601 ttgaatactc atactcttcc tttttcaata ttattgaagc atttatcagg gttattgtct catgagcggg tacatatttg aatgtattta gaaaaataa
3701 caaatagggg ttccgcgcac atttccccga aaagtgccac ctgacgtcta agaaccatt attatcatga cattaaccta taaaaatagg cgtatcacga
3801 ggccttttcg tc

```

> RDC3438 Translated Insert Sequence

```

1 mgrlvavgl1 g1alallger llalrnrlka srevesvdlp hchlikgiea gsedidilpn glaffsvglk fpglhsfapd kpggilmmld keekprarel
101 risrgfdlas fnphgistfi dnddtvylfv vnhpefkntv eifkfeeaen slh1k1kvk ellpsvndit avgpahfyat ndhyfsdpfl kyletylnlh
201 wanvvyvspn evkvaegfd sanginispd dkyiyvadil aheihvlekh tnmnl1qlkv leldtlvdnl sidpssgdw vgchpngqkl fvydpnppps
301 sevlriqnil sekptvtvvy annsvlqgs svasvydglk l1gtlyhral ycel

```