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Product datasheet for RC222624

PON2 (NM_000305) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PON2 (NM_000305) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PON2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC222624 representing NM_000305
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGGCGGCTGGTGGCTGTGGGCTTGCTGGGGATCGCGCTGGCGCTCCTGGGCGAGAGGCTTCTGGCAC
TCAGAAATCGACTTAAAGCCTCCAGAGAAGTAGAATCTGTAGACCTTCCACACTGCCACCTGATTAAAGG
AATTGAAGCTGGCTCTGAAGATATTGACATACTTCCCAATGGTCTGGCTTTTTTTAGTGTGGGTCTAAAA
TTCCCAGGACTCCACAGCTTTGCACCAGATAAGCCTGGAGGAATACTAATGATGGATCTAAAAGAAGAAA
AACCAAGGGCACGGGAATTAAGAATCAGTCGTGGGTTTGATTTGGCCTCATTCAATCCACATGGCATCAG
CACTTTCATAGACAACGATGACACAGTTTATCTCTTTGTTGTAAACCACCCAGAATTCAAGAATACAGTG
GAAATTTTTAAATTTGAAGAAGCAGAAAATTCTCTGTTGCATCTGAAAACAGTCAAACATGAGCTTCTTC
CAAGTGTGAATGACATCACAGCTGTTGGACCGGCACATTTCTATGCCACAAATGACCACTACTTCTCTGA
TCCTTTCTTAAAGTATTTAGAAACATACTTGAACTTACACTGGGCAAATGTTGTTTACTACAGTCCAAAT
GAAGTTAAAGTGGTAGCAGAAGGATTTGATTCAGCAAATGGGATCAATATTTCACCTGATGATAAGTATA
TCTATGTTGCTGACATATTGGCTCATGAAATTCATGTTTTGGAAAAACACACTAATATGAATTTAACTCA
GTTGAAGGTACTTGAGCTGGATACACTGGTGGATAATTTATCTATTGATCCTTCCTCGGGGGACATCTGG
GTAGGCTGTCATCCTAATGGCCAGAAGCTCTTCGTGTATGACCCGAACAATCCTCCCTCGTCAGAGGTTC
TCCGCATCCAGAACATTCTATCTGAGAAGCCTACAGTGACTACAGTTTATGCCAACAATGGGTCTGTTCT
CCAAGGAAGTTCTGTAGCCTCAGTGTATGATGGGAAGCTGCTCATAGGCACTTTATACCACAGAGCCTTG
TATTGTGAACTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC222624 representing NM_000305
Red=Cloning site Green=Tags(s)

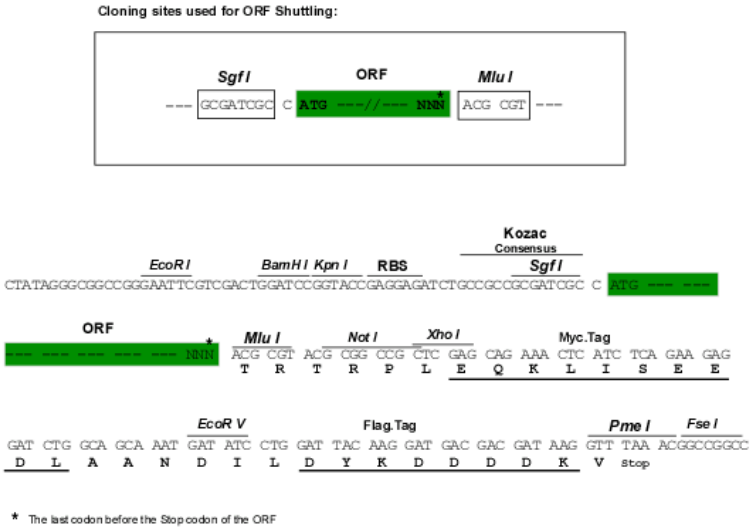
MGRLVAVGLLGIALALLGERLLALRNRLKASREVESVDLPHCHLIKGIEAGSEDIDILPNGLAFFSVGLK
FPGLHSFAPDKPGGILMMDLKEEKPRARELRISRGFDLASFNPHGISTFIDNDDTVYLFVVNHPEFKNTV
EIFKFEEAENSLLHLKTVKHELLPSVNDITAVGPAHFYATNDHYFSDPFLKYLETYLNLHWANVVYYSPN
EVKVVAEGFDSANGINISPDDKYIYVADILAHEIHVLEKHTNMNLTQLKVLELDTLVDNLSIDPSSGDIW
VGCHPNGQKLFVYDPNNPPSSEVLRIQNILSEKPTVTTVYANNGSVLQGSSVASVYDGKLLIGTLYHRAL
YCEL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6179_a08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000305

ORF Size: 1062 bp

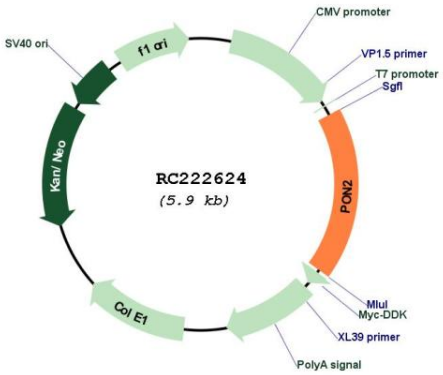
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

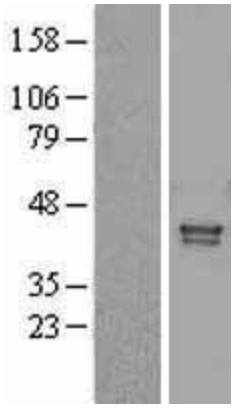
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_000305.3
RefSeq Size:	1669 bp
RefSeq ORF:	1065 bp
Locus ID:	5445
UniProt ID:	Q15165
Cytogenetics:	7q21.3
Domains:	Arylesterase
Protein Families:	Druggable Genome
Protein Pathways:	Metabolic pathways
MW:	39.2 kDa
Gene Summary:	This gene encodes a member of the paraoxonase gene family, which includes three known members located adjacent to each other on the long arm of chromosome 7. The encoded protein 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 the encoded protein may also play a role in defense responses to pathogenic bacteria. Mutations in this gene may be associated with vascular disease and a number of quantitative phenotypes related to diabetes. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Jul 2008]

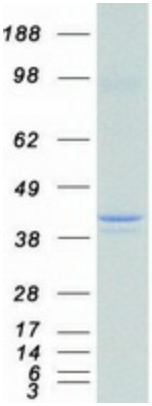
Product images:



Circular map for RC222624



Western blot validation of overexpression lysate (Cat# [LY400116]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222624 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PON2 protein (Cat# [TP322624]). The protein was produced from HEK293T cells transfected with PON2 cDNA clone (Cat# RC222624) using MegaTran 2.0 (Cat# [TT210002]).