

Product datasheet for **RC222143**

P2RX7 (NM_002562) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	P2RX7 (NM_002562) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	P2RX7
Synonyms:	P2X7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC222143 representing NM_002562
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCCGCCTGCTGCAGCTGCAGTGATGTTTTCCAGTATGAGACGAACAAAGTCACTCGGATCCAGAGCA
 TGAATTATGGCACCATTAAAGTGGTCTTCCACGTGATCATCTTTTCTAGGTTTGCCTTGCCTGGTGAG
 TGACAAGCTGTACCAGCGGAAAGAGCCTGTCATCAGTTCTGTGCACACCAAGGTGAAGGGGATAGCAGAG
 GTGAAAGAGGAGATCGTGGAGAATGGAGTGAAGAAGTTGGTGCACAGTGTCTTTGACACCGCAGACTACA
 CCTTCCCTTTCAGGGGAACTCTTCTTCGTGATGACAACTTTCTCAAAACAGAAGGCCAAGAGCAGCG
 GTTGTGTCCCGAGTATCCACCCGAGGACGCTGTTCCTCTGACCGAGGTTGAAAAAGGGATGGATG
 GACCCGCAGAGCAAAGGAATTCAGACCGGAAGGTGTAGTGTATGAAGGGAACCAAGACCTGTGAAG
 TCTCTGCCTGGTCCCATCGAGGCAGTGAAGAGGCCCGCCGCTGCTCTTTGAACAGTGCCGAAAA
 CTTCACTGTGCTCATCAAGAACAATATCGACTTCCCGGCCACAACCTACACCACGAGAAACATCCTGCCA
 GGTTTAAACATCACTTGTACCTCCACAAGACTCAGAATCCACAGTGTCCCATTTTCCGACTAGGAGACA
 TCTTCCGAGAAACAGGCGATAATTTTTCCAGATGTGGCAATTCAGGGCGGAATAATGGGCATTGAGATCTA
 CTGGGACTGCAACCTAGACCGTTGGTCCATCACTGCCGTCCCAATACAGTTTCCGTCGCCTTGACGAC
 AAGACCACCAACGTGTCTTGTACCCTGGCTACAACCTCAGATACGCCAAGTACTACAAGGAAAACAATG
 TTGAGAAACGGACTCTGATAAAAGTCTTCGGGATCCGTTTTGACATCCTGGTTTTTGGCACCGGAGGAAA
 ATTTGACATTATCCAGCTGGTTGTACATCGGCTCAACCCTCTCCTACTCGGTCTGGCCGCTGTGTTCT
 ATCGACTTCTCATCGACTTACTCCAGTAACTGCTGTCGCTCCCATATTTATCCCTGGTCAAGTGTCT
 GTCAGCCCTGTGGTCAACGAATACTACTACAGGAAGAAGTGGGAGTCCATTGTGGAGCCAAAGCCGAC
 ATTAAGATATGTCTCTTGTGGATGAATCCACATTAGGATGGTGAACCAAGCAGCTACTAGGGAGAAGT
 CTGCAAGATGTCAAGGGCCAAGAAGTCCCAAGACCTGCGATGGACTTACAGATTTGTCAGGCTGCCCC
 TGGCCCTCCATGACACACCCCGATTCTGGACAACCAGAGGAGATACAGCTGCTTAGAAAGGAGGCGAC
 TCCTAGATCCAGGGATAGCCCCGCTGGTGCAGTGTGGAAGCTGCCTCCCATCTCAACTCCCTGAGAGC
 CACAGGTGCTGGAGGCGCTGTGCTGCCGAAAAAGCCGGGGCCTGCATCACCACCTCAGAGCTGTTCA
 GGAAGCTGGTCTGTCCAGACACGCTCTGCAGTCTCTCCTGCTCTACCAGGAGCCCTTGTGGCGCTGGA
 TGTGGATTCCACCAACAGCCGGCTGCGGCACTGTGCTACAGGTGCTACGCCACCTGGCGCTTCGGCTCC
 CAGGACATGGCTGACTTTGCCATCCTGCCAGCTGCTGCCGCTGGAGGATCCGGAAGAGTTCCGAAGA
 GTGAAGGCAGTACAGTGCTTCAAGAGTCCTTAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC222143 representing NM_002562
 Red=Cloning site Green=Tags(s)

MPACSCSDVFQYETNKVTRIQSMNYGTIKWFFHVIIIFSYYVCFALVSDKLYQRKEPVISSVHTKVKGIAE
 VKEEIVENGVKLVHSVFDADYTFPLQNSFFVMTNFKTEGQEQRLCPEYPTRRRLCSSDRGCKKGWM
 DPQSKGIQTGRVVYEGNQKTCEVSAWCPTEAVEEAPRPALLNSAENFTVLKNNIDFPGHNYTTRNLP
 GLNITCTFHKTQNPQCPIFRLGDI FRETGDNFSDVAIQGGIMGIEIYWDCNLDLRFHHCPRKYSFRRLDD
 KTTNVSLYPGYNFRYAKYYKENVKRTLKVFGRFDILVFGTGGKFDIIQLVVYIGSTLSYFGLAAVF
 IDFLIDTYSSNCCRSHIYPWCKCCQPCVVNEYYYRKKCESIVEPKPTLKYVSFVDESHIRMVNQQLGRS
 LQDVKGQEVPRPAMDFTDLSRLPLALHDTPIPGQPEEIQLLRKEATPRSRDSPVWCQCGSCLPSQLPES
 HRCLEALCCRKPGACITTSSELFRKLVLSRHLVQLLLYQEPALLALDVDSTNSRLRHCAYRCYATWRFGS
 QDMADFAILPSCCRWRIRKEFPKSEGQYSGFKSPY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6160_h04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002562

ORF Size: 1785 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_002562.6](#)

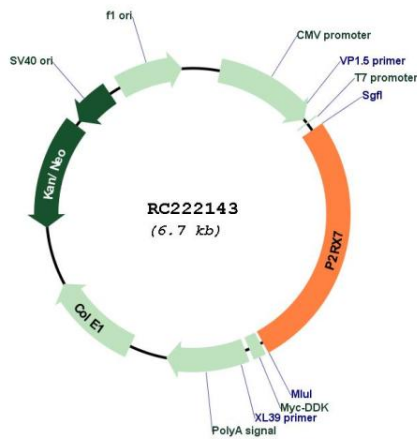
RefSeq Size: 3155 bp

RefSeq ORF: 1788 bp

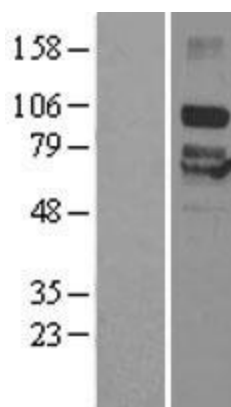
Locus ID: 5027
UniProt ID: [Q99572](#)
Cytogenetics: 12q24.31
Domains: P2X_receptor
Protein Families: Druggable Genome, Ion Channels: ATP Receptors, Transmembrane
Protein Pathways: Calcium signaling pathway, Neuroactive ligand-receptor interaction
MW: 68.4 kDa

Gene Summary: The product of this gene belongs to the family of purinoceptors for ATP. This receptor functions as a ligand-gated ion channel and is responsible for ATP-dependent lysis of macrophages through the formation of membrane pores permeable to large molecules. Activation of this nuclear receptor by ATP in the cytoplasm may be a mechanism by which cellular activity can be coupled to changes in gene expression. Multiple alternatively spliced variants have been identified, most of which fit nonsense-mediated decay (NMD) criteria. [provided by RefSeq, Jul 2010]

Product images:



Circular map for RC222143



Western blot validation of overexpression lysate (Cat# [LY400907]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222143 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).