

## Product datasheet for RC207924

### P2X1 (P2RX1) (NM\_002558) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	P2X1 (P2RX1) (NM_002558) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	P2X1
Synonyms:	P2X1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC207924 representing NM_002558 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCACGGCGTTCCAGGAGGAGCTGGCCGCTTCTCTTCGAGTATGACACCCCCGCATGGTGTCTGG  
TGCGTAATAAGAAGGTGGGCGTTATCTCCGACTGATCCAGCTGGTGGTCTGGTCTACGTCATCGGGTG  
GGTGTCTCTATGAGAAGGGCTACCAGACCTCGAGCGGCTCATCAGCAGTGTCTCTGTGAACTCAAG  
GGCCTGGCGTGACCCAGCTCCCTGGCCTCGGCCCCAGGTCTGGGATGTGGCTGACTACGCTTCCAG  
CCCAGGGGACAACCTCCTCGTGGTCATGACCAATTTTCATCGTGACCCCGAAGCAGACTCAAGGCTACTG  
CGCAGAGCACCCAGAAGGGGCATATGCAAGGAAGACAGTGGCTGTACCCCTGGGAAGGCCAAGAGGAAG  
GCCAAGGCATCCGCACGGGCAAGTGTGTGGCCTCAACGACACTGTGAAGACGTGTGAGATCTTTGGCT  
GGTGCCCCGTGGAGGTGGATGACGACATCCCGCGCCCTGCCCTTCTCCGAGAGGCCGAGAAGTTCCTCT  
TTTCATCAAGAACAGCATCAGCTTTCCACGCTTCAAGGTCAACAGGCGCAACCTGGTGGAGGAGGTGAAT  
GCTGCCACATGAAGACCTGCCTCTTTCACAAGACCCTGCACCCCTGTGCCAGTCTTCCAGCTTGGCT  
ACGTGGTGCAAGAGTCAGGCCAGAACTTCAGCACCTGGCTGAGAAGGGTGGAGTGGTGGCATCACCAT  
CGACTGGCACTGTGACCTGGACTGGCACGTACGGCACTGCAGACCCATCTATGAGTCCATGGGCTGTAC  
GAAGAGAAAAATCTCTCCCAGGCTTCAACTTCAGGTTTGCCAGGCACTTGTGGAGAACGGGACCACT  
ACCGTCACCTCTTCAAGGTGTTTGGGATTCGCTTTGACATCCTGGTGGACGGCAAGGCCGGGAAGTTTGA  
CATCATCCCTACAATGACCACCATCGGCTCTGGAATTGGCATCTTTGGGTGGCCACAGTCTCTGTGAC  
CTGCTGCTGCTTACATCCTGCCTAAGAGGCACTACTACAAGCAGAAGAAGTTCAAATACGCTGAGGACA  
TGGGGCCAGGGCGGCTGAGCGTGACCTCGCAGCTACCAGCTCCACCCTGGGCTGCAGGAGAACATGAG  
GACATCC

**ACGGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



**Protein Sequence:** >RC207924 representing NM\_002558  
Red=Cloning site Green=Tags(s)

MARRFQEELA AFLFEYDTPRMVLVRNKKVGVIFRLIQLVVLVYVIGWVFLYEKGYQTSSGLISSVSVKLLK  
 GLAVTQLPGLGPQVWDVADYVFPAQGDNSFVMTNFIVTPKQTQGYCAEHPEGGICKEDSGCTPGKAKRK  
 AQGIRTGKCVAFNDTVKTC EIFGWCPVEVDDIPRPALLREAENFTLF IKNSISFPRFKVNRNLVEEVN  
 AAHMKTCLFHKTLHPLCPV FQLGYVVQESGQNFSTLAEKGGVVGITIDWHCDLDWHVHRHCRPIYEFHGLY  
 EEKNLSPGFNFRFARHFVENGTYRHLFKVFGIRFDILVDGKAGKFDIIPMTTIGSGIGIFGVATVLC D  
 LLLLHILPKRHYYKQKFKYAEDMGPGAERDLAATSSTLGLQENMRTS

TRTRPLEQKLISEEDLAANDILDYKDDDDKVV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8121\\_b02.zip](https://cdn.origene.com/chromatograms/mk8121_b02.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_002558

**ORF Size:** 1197 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\\_002558.4](#)

**RefSeq Size:** 2885 bp

**RefSeq ORF:** 1200 bp

**Locus ID:** 5023

**UniProt ID:** [P51575](#)

**Cytogenetics:** 17p13.2

**Domains:** P2X\_receptor

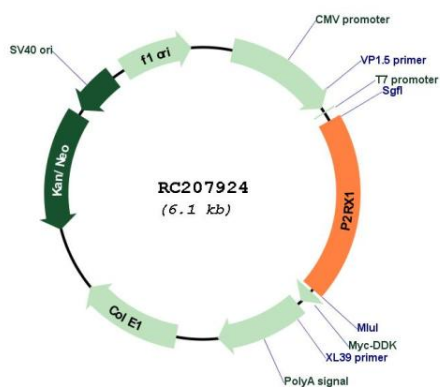
**Protein Families:** Druggable Genome, Ion Channels: ATP Receptors, Transmembrane

**Protein Pathways:** Calcium signaling pathway, Neuroactive ligand-receptor interaction

**MW:** 45.4 kDa

**Gene Summary:** The protein encoded by this gene belongs to the P2X family of G-protein-coupled receptors. These proteins can form homo-and heterotimers and function as ATP-gated ion channels and mediate rapid and selective permeability to cations. This protein is primarily localized to smooth muscle where binds ATP and mediates synaptic transmission between neurons and from neurons to smooth muscle and may being responsible for sympathetic vasoconstriction in small arteries, arterioles and vas deferens. Mouse studies suggest that this receptor is essential for normal male reproductive function. This protein may also be involved in promoting apoptosis. [provided by RefSeq, Jun 2013]

Product images:



Circular map for RC207924