

## Product datasheet for RC218626

### P2X3 (P2RX3) (NM\_002559) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	P2X3 (P2RX3) (NM_002559) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	P2X3
Synonyms:	P2X3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC218626 representing NM_002559 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGAAGTGCATATCCGACTTCTTACCTATGAGACCACCAAGTCGGTGGTTGTGAAGAGCTGGACCATCG  
GGATCATCAACCGAGTAGTTCAGCTTCTGATCATCTCCTACTTTGTAGGGTGGTTTTCTTGCACGAGAA  
GGCTTACCAGGTACGGGACACAGCCATTGAGTCTCGGTGGTAACCAAGGTGAAGGGCTCCGGACTCTAC  
GCCAACAGAGTCATGGATGTGTCTGATTACGTGACGCCACCTCAGGGCACCTCGGTCTTTGTCATCATCA  
CCAAGATGATTGTTACTGAAAATCAGATGCAAGGATTCTGCCAGAGAGTGAGGAGAAAATACCGCTGTGT  
ATCAGACAGCCAGTGCAGGCTGAGCGCTTGCCAGGTGGGGGATCCTCACTGGCCGCTGCGTGAACCTAC  
AGCTCTGTGCTCCGGACCTGTGAGATCCAGGGCTGGTGCACCGAGGTGGACACAGTGGAAAACGCCCA  
TCATGATGGAAGCTGAGAAGTCACTATTTTCAATCAAGAACAGCATCCGTTTCCCCCTCTTCAACTTTGA  
GAAGGGAAACCTCCTTCCCAACCTGACAGCCAGGGACATGAAGACCTGCCGCTTCCACCCGGACAAGGAC  
CCTTTCTGCCCATCTTGCAGGTAGGGGACGTGGTCAAGTTTGCAGGGCAGGATTTGCCAACTGGCGC  
GCACGGGGGAGTCTGGGCATTAAGATCGGCTGGGTGTGCGACTTGGACAAGGCTGGGACCAAGTGCAT  
CCCCAAATACTCCTTACCCGGCTGACAGCGTTTCTGAGAAAAGCAGCGTGTCCCAGGCTACAACCTC  
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GCTTCGACGTGCTGGTATACGGGAATGCTGGCAAGTTCAACATCATCCCCACCATCATCAGCTCTGTGGC  
GGCCTTACTTCTGTGGGAGTGGAACTGTTCTCTGTGACATCATCCTGTCAACTTCTCAAGGGGCC  
GACCAAGTACAAGCCAAGAAGTTTGAAGAGGTGAATGAGACTACACTGAAAATCGCGCTTTGACCAACC  
CAGTGTACCCAGCGACCAAGACAGTGGAGAAGCAGTCCACCGATTCCGGGGCCTTCTCCATAGGCCA  
C

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



**Protein Sequence:** >RC218626 representing NM\_002559  
Red=Cloning site Green=Tags(s)

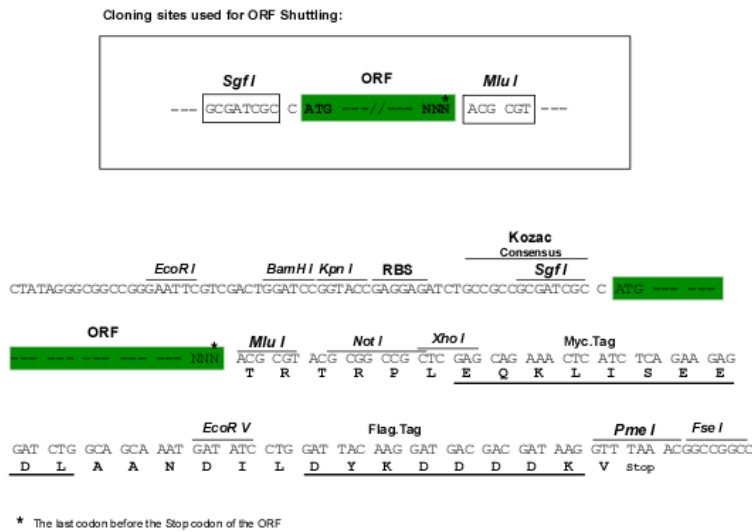
MNCISDFFTYETTKSVVVKSWTIGIINRVVQLLIISYFVGWVFLHEKAYQVRDTAIESSVVTKVKGSGLY  
 ANRVMDVSDYVTPPQGTSVFVIIITKMIVTENQMGGFCPESEEKYRCVSDSQCGPERLPGGGILTGRCVNY  
 SSVLRTCEIQWCPTVEDTVETPIMMEAENFTIFIKNSIRFPLNFEEKGNLLPNLTARDMKTCRFHDPKD  
 PFCPILRVGDVVKFAGQDFAKLARTGGVLGIKIGWVCDLKAWDQCIPKYSFTRLDSVSEKSSVSPGYNF  
 RFACYKYMENGSEYRLLKAFGIRFDVLYYGNAGKFNIIPTIISSVAFTSVGVGTVLCDIILLNFLKGA  
 DQYKAKKFEEVNETTLKIAALTNPVYPSDQTTVEKQSTDSGAFSIGH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6269\\_h08.zip](https://cdn.origene.com/chromatograms/mk6269_h08.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_002559

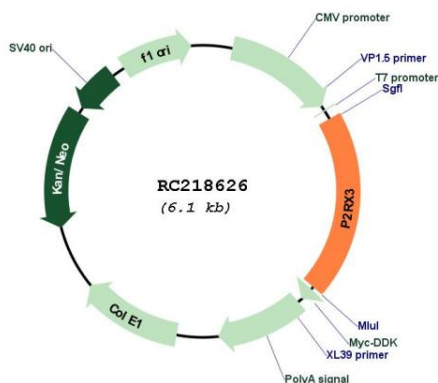
**ORF Size:** 1191 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

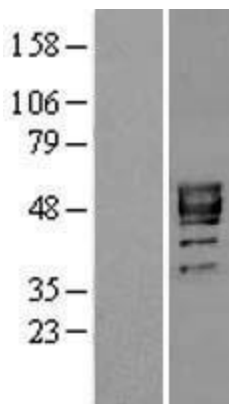
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in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

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_002559.5</a>
<b>RefSeq Size:</b>	1349 bp
<b>RefSeq ORF:</b>	1194 bp
<b>Locus ID:</b>	5024
<b>UniProt ID:</b>	<a href="#">P56373</a>
<b>Cytogenetics:</b>	11q12.1
<b>Protein Families:</b>	Druggable Genome, Ion Channels: ATP Receptors, Transmembrane
<b>Protein Pathways:</b>	Calcium signaling pathway, Neuroactive ligand-receptor interaction
<b>MW:</b>	44.1 kDa
<b>Gene Summary:</b>	This gene encodes a member of the P2X purinergic receptor (purinoceptor) gene family which includes seven members (P2RX1 - P2RX7). P2X purinoceptors are a family of cation-permeable, ligand-gated ion channels that open in response to the binding of extracellular adenosine 5'-triphosphate (ATP). The encoded protein is a subunit of the trimeric P2X3 receptor ion channel which is expressed by sensory or autonomic neurons. A deficiency of the orthologous protein in mice is associated with reduced pain-related behavior and urinary bladder hyporeflexia. [provided by RefSeq, Aug 2017]

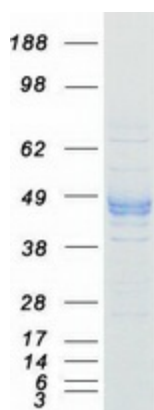
Product images:



Circular map for RC218626



Western blot validation of overexpression lysate (Cat# [LY419263]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218626 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified P2RX3 protein (Cat# [TP318626]). The protein was produced from HEK293T cells transfected with P2RX3 cDNA clone (Cat# RC218626) using MegaTran 2.0 (Cat# [TT210002]).