

## Product datasheet for **RC216261**

### **P2X2 (P2RX2) (NM\_170683) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	P2X2 (P2RX2) (NM_170683) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	P2X2
Synonyms:	DFNA41; P2X2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC216261 representing NM\_170683  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGCCGCGCCAGCCCAAGTACCCCGCGGGGCGACCGCCGCGCCTGGCCCGGGCTGCTGGTCCG  
 CCTCTGGGACTACGAGACGCCAAGGTGATCGTGGTGAGGAACCGCGCCTGGGGTCTGTACCGCGC  
 CGTGACAGTCTCATCTCTACTTCGTGTGTGACGTATTCATCGTGCAGAAAAGCTACCAGGAGAGC  
 GAGACGGGCCCGAGAGCTCCATCATCACCAAGGTCAAGGGGATCACACGTCCGAGCACAAAGTGTGGG  
 ACGTGGAGGAGTACGTGAAGCCCCCGAGGGGGCAGCGTGTTCAGCATCATCACCAGGGTCGAGGCCAC  
 CCACTCCCAGACCCAGGGAACCTGCCCGAGAGCATAAGGGTCCACAACGCCACCTGCCTCTCCGACGCC  
 GACTGCGTGGCTGGGAGCTGGACATGCTGGGAAACGGCCTGAGGACTGGGCGCTGTGTGCCCTATTACC  
 AGGGGCCCTCCAAGACCTGCGAGGTGTTCCGGTGGTCCCGGTGGAAGATGGGGCCTCTGTCAGCCAATT  
 TCTGGGTACGATGGCCCAAATTCACCATCCTCATCAAGAACAGCATCCACTACCCCAAATTCACCTTC  
 TCCAAGGCAACATCGCCGACCGCACAGACGGGTACCTGAAGCGCTGCAGTTCCACGAGGCCTCCGACC  
 TCTACTGCCCCATCTTAAGCTGGGCTTATCGTGGAGAAGGCTGGGGAGAGCTTACAGAGCTCGCACA  
 CAAGGGTGGTGTATCGGGTCACTTCAACTGGGACTGTGACCTGGACCTGCCTGCATCGGAGTGAAC  
 CCCAAGTACTCCTCCGGAGGCTTGACCCCAAGCACGTGCCTGCCTCGTCAAGGCTACGGGATCCGCATTGACGT  
 CAAATACTACAAGATCAATGGCACCACCACCCGACGCTCATCAAGGCTACGGGATCCGCATTGACGT  
 CATTGTGCATGGACAGGCCGGGAAGTTCAGCCTGATTCCCACCATTATTAATCTGGCCACAGCTCTGACT  
 TCCGTCCGGGTGGTAAGGAACCTCTCTGGGTCCCAGCGGTGCGGGGGTCCACCAGGCCCTTACACA  
 CCGTCTCTGCTGGCCAGGGCTCCTCTGCGACTGGATCTTCTAACATTCATGAACAAAAACA  
 GGCTACAGCCATAAGAAATTTGACAAGGTGTGTACGCCGAGCCACCCCTCAGGTAGCTGGCCTGTGACC  
 CTTGCCGTGATTGGGCCAGGCCCTCCCGAACCCGGCCACCGCTCCGAGGACCAGCACCCAGCCCTC  
 CATCAGGCCAGGAGGCCAACAGGGGCAGAGTGTGGCCAGCCTTCCCGCCCTGCGGCCTTGCCCAT  
 CTCTGCCCTTCTGAGCAGATGGTGGACACTCCTGCCTCCGAGCCTGCCAAGCCTCCACACCCACAGAC  
 CCCAAGGTTTGGCTCAACTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC216261 representing NM\_170683  
 Red=Cloning site Green=Tags(s)

MAAAQPKYPAGATARRLARGCWSALWDYETPKVIIVRNRRLGVL YRAVQLLILL YFVWYV FIVQKSYQES  
 ETGPESIIITKVGIITSEHKVVDVEEYVKPEGGSVFSIITRVEATHSQTQGTCPESIRVHNATCLSDA  
 DCVAGELDMLGNLRTGRCPYYQGPSKTCEVFGWCPVEDGASVSQFLGTMAPNFILIKNSIHYPKFHF  
 SKGNIADRTDGYLKRCTFHEASDLYCPIFKLGFIVEKAGESFTELAHKGGVIGVIINWDCDLDPASECN  
 PKYSFRRLDPKHVPASSGYNFRFAKYKINGTTTRTLIKAYGIRIDVIVHGQAGKFSLIPTIINLATALT  
 SVGVVRNPLWGPSGCGSTRPLHTGLCWPGSFLCDWILLTFMNKNKVYSHKFKDKVCTPSHPSGSPVPT  
 LARVLGQAPPEPGHRSEDQHPSPSQEGQQAECGPAFPPLRPCISAPSEQMVDTPASEPAQASTPTD  
 PKGLAQL

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6707\\_c10.zip](https://cdn.origene.com/chromatograms/mk6707_c10.zip)

**Restriction Sites:**

SgfI-MluI

Cloning Scheme:



ACCN: NM\_170683

ORF Size: 1491 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\\_170683.4](#)

RefSeq Size: 1908 bp

RefSeq ORF: 1494 bp

Locus ID: 22953

UniProt ID: [Q9UBL9](#)

Cytogenetics: 12q24.33

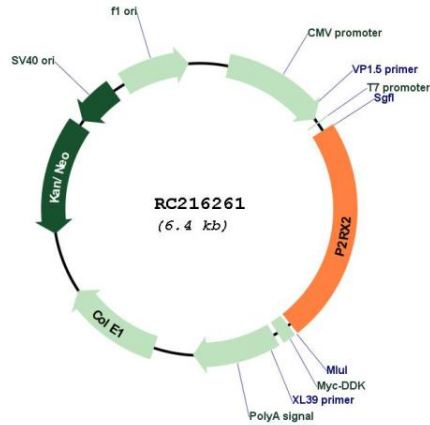
**Protein Families:** Druggable Genome, Ion Channels: ATP Receptors, Transmembrane

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

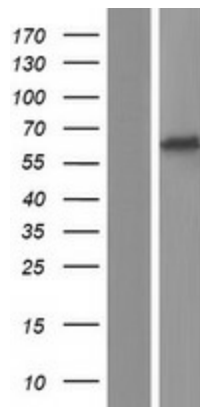
**MW:** 54.3 kDa

**Gene Summary:** The product of this gene belongs to the family of purinoceptors for ATP. This receptor functions as a ligand-gated ion channel. Binding to ATP mediates synaptic transmission between neurons and from neurons to smooth muscle. Multiple transcript variants encoding distinct isoforms have been identified for this gene. [provided by RefSeq, Aug 2013]

**Product images:**



Circular map for RC216261



Western blot validation of overexpression lysate (Cat# [LY406792]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216261 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).