

Product datasheet for **RC216207**

P2X2 (P2RX2) (NM_170682) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	P2X2 (P2RX2) (NM_170682) 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:

>RC216207 representing NM_170682
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCCGCGCCAGCCCAAGTACCCCGCGGGGCGACCGCCGCGCCTGGCCCGGGCTGCTGGTCCG
 CCCTCTGGGACTACGAGACGCCAAGGTGATCGTGGTGAGGAACCGCGCCTGGGGTCTGTACCGCGC
 CGTGACAGTCTCATCTCTACTTCGTGTGTGACGTATTCATCGTGCAGAAAAGCTACCAGGAGAGC
 GAGACGGGCCCGAGAGCTCCATCATCACCAAGGTCAAGGGGATCACACGTCCGAGCACAAAGTGTGGG
 ACGTGGAGGAGTACGTGAAGCCCCGAGGGGGCAGCGTGTTCAGCATCATCACCAGGGTCGAGGCCAC
 CCACTCCCAGACCCAGGGAACCTGCCCGAGAGCATAAGGGTCCACAACGCCACCTGCCTCTCCGACGCC
 GACTGCGTGGCTGGGAGCTGGACATGCTGGGAAACGGCCTGAGGACCGGGCGCTGTGTGCCCTATTACC
 AGGGGCCCTCCAAGACCTGCGAGGTGTTCCGCTGGTCCCGGTGGAAGATGGGGCCTCTGTCAGCCAATT
 TCTGGGTACGATGGCCCCAAATTCACCATCCTCATCAAGAACAGCATCCACTACCCCAAATTCACCTTC
 TCCAAGGGCAACATCGCCGACCGCACAGACGGGTACCTGAAGCGTGCAGTTCCACGAGGCCTCCGACC
 TCTACTGCCCCATCTTCAAGCTGGGCTTATCGTGGAGAAGGCTGGGGAGAGCTTACAGAGCTCGCACA
 CAAGGGTGGTGTATCGGGTCAATCAACTGGGACTGTGACCTGGACCTGCCTGCATCGGAGTGAAC
 CCCAAGTACTCCTCCGGAGGCTTGACCCCAAGCACGTGCCTGCCTCGTCAAGGCTACGGGATCCGCATTGACGT
 CAAATACTACAAGATCAATGGCACCACCACCCGACGCTCATCAAGGCCTACGGGATCCGCATTGACGT
 CATTGTGCATGGACAGCCGGGAAGTTCAGCCTGATTCCACCATTATTAATCTGGCCACAGCTCTGACT
 TCCGTCCGGGTGGGCTCCTTCTGTGCGACTGGATCTTGCTAACATTATGAACAAAAACAAGGTCTACA
 GCCATAAGAAAATTTGACAAGGTGTGACGCCGAGCCACCCCTCAGTAGTGGCTGTGACCTTGGCCG
 TGTATTGGGCCAGGCCCTCCCGAACCCGCGCACCGCTCCGAGGACCAGCACCCAGCCCTCCATCAGCC
 CAGGAGGGCCAACAAGGGGACAGGTGTGGCCAGCCTTCCCGCCCTGCGGCCTTGCCCCATCTTGCCC
 CTTCTGAGCAGATGGTGGACTCCTGCCTCCGAGCCTGCCAAGCCTCCACACCACAGACCCCAAAGG
 TTTGGCTCAACTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC216207 representing NM_170682
 Red=Cloning site Green=Tags(s)

MAAAQPKYPAGATARLRGCSALWDYETPKVIIVRNRRGLVLYRAVQLLILLYFVWYVIVQKSYQES
 ETGPESSIIITKVGITTTSEHKVWDVEEYVKPEGGSVFSIITRVEATHSQTQGTCPESIRVHNATCLSDA
 DCVAGELDMLGNLRTGRCPYYPYQGPSKTCEVFGWCPVEDGASVSQFLGTMAPNFTILIKNSIHYPKFHF
 SKGNIADRTDGYLKRCTFHEASDLYCPIFKLGFIVEKAGESFTELAHKGGVIGVIINWDCDLDPASECN
 PKYSFRRLDPKHVPASSGYNFRFAKYKINGTTTTRTLIKAYGIRIDVIVHGQAGKFSLIPTIINLATALT
 SVGVGSFLCDWILLTFMKNKVYSHKFKDKVCTPSHPSGSPVTLARVLGQAPPEPGHRSEDQHPSPSSG
 QEQQQGAECGPAFPPLRPCPISAPSEQMVDTPASEPAQASTPTDPKGLAQL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6159_d06.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_170682

ORF Size: 1413 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_170682.4](#)

RefSeq Size: 1830 bp

RefSeq ORF: 1416 bp

Locus ID: 22953

UniProt ID: [Q9UBL9](#)

Cytogenetics: 12q24.33

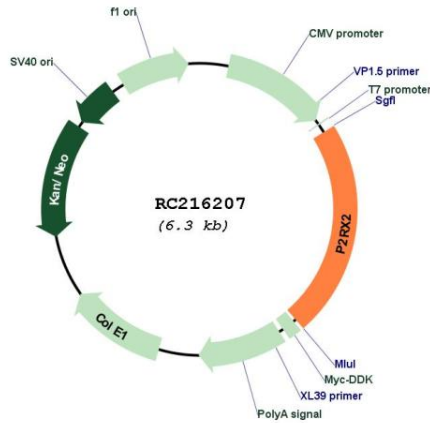
Protein Families: Druggable Genome, Ion Channels: ATP Receptors, Transmembrane

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

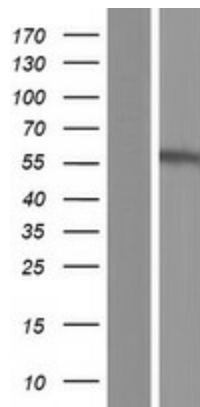
MW: 51.6 kDa

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]

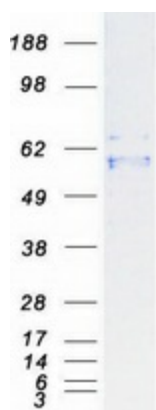
Product images:



Circular map for RC216207



Western blot validation of overexpression lysate (Cat# [LY403528]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216207 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified P2RX2 protein (Cat# [TP316207]). The protein was produced from HEK293T cells transfected with P2RX2 cDNA clone (Cat# RC216207) using MegaTran 2.0 (Cat# [TT210002]).