

## Product datasheet for **RG223279**

### **P2X2 (P2RX2) (NM\_174873) Human Tagged ORF Clone**

#### **Product data:**

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids                             |
| Product Name:             | P2X2 (P2RX2) (NM_174873) Human Tagged ORF Clone |
| Tag:                      | TurboGFP  |
| Symbol:                   | P2RX2   |
| Synonyms:                 | DFNA41; P2X2                                    |
| Mammalian Cell Selection: | Neomycin  |
| Vector:                   | pCMV6-AC-GFP (PS100010)                         |
| E. coli Selection:        | Ampicillin (100 ug/mL)                          |



[View online »](#)

**ORF Nucleotide Sequence:**

>RG223279 representing NM\_174873  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGGCCGCGCCAGCCCAAGTACCCCGCGGGGCGACCGCCGCGCCTGGCCCGGGCTGCTGGTCCG  
 CCCTCTGGGACTACGAGACGCCAAGGTGATCGTGGTGAGGAACCGCGCCTGGGGTCTGTACCGCGC  
 CGTGACGCTGCTCATCTGCTCTACTTCGTGTGGTACGTATTCATCGTGCAGAAAAGCTACCAGGAGAGC  
 GAGACGGGCCCGAGAGCTCCATCATCACCAAGGTCAAGGGGATCACCACGTCCGAGCACAAAGTGTGGG  
 ACGTGGAGGAGTACGTGAAGCCCCCGAGGGGGCAGCGTGTTCAGCATCATCACCAGGGTCGAGGCCAC  
 CCACTCCCAGACCCAGGGAACCTGCCCGAGAGCATAAGGGTCCACAACGCCACCTGCCTCTCCGACGCC  
 GACTGCGTGGCTGGGAGCTGGACATGCTGGGAAACGGCCTGAGGACCGGGCGCTGTGTGCCCTATTACC  
 AGGGGCCCTCCAAGACCTGCGAGGTGTTCCGGCTGGTCCCGGTGGAAGATGGGGCCTCTGTACGCCAATT  
 TCTGGGTACGATGGCCCAAATTCACCATCCTCATCAAGAACAGCATCCACTACCCCAAATTCACCTTC  
 TCCAAGGCAACATCGCCGACCGCACAGACGGGTACCTGAAGCGCTGCAGTTCCACGAGGCCTCCGACC  
 TCTACTGCCCCATCTTCAAGCTGGGCTTATCGTGGAGAAGGCTGGGGAGAGCTTACAGAGCTCGCACA  
 CAAGGGTGGTGTATCGGGTCAATCAACTGGGACTGTGACCTGGACCTGCCTGCATCGGAGTGAAC  
 CCCAAGTACTCCTCCGGAGGCTTGACCCCAAGCACGTGCCTGCCTCGTCAAGGCTACGGGATCCGCATTGACGT  
 CATTGTGCATGGACAGGCCGGGAAGTTCAGCCTGATTCCACCATTATTAATCTGGCCACAGCTCTGACT  
 TCCGTCCGGGTGGGCTCCTTCTGTGCGACTGGATCTTGCTAACATTATGAACAAAAACAAGGTCTACA  
 GCCAATAAGAAATTTGACAAGGTGTGACGCCGAGCCACCCCTCAGGTAGCTGGCCTGTGACCCCTTGCCCG  
 TGTATTGGCCAGGCCCTCCCGAACCCGCGCACCGCTCCGAGGACCAGCACCCAGCCCTCCATCAGGC  
 CAGGAGGGCCAACAAGGGGACAGGTGTGGCCAGCCTTCCCGCCCTGCGGCCTTGCCCATCTCTGCC  
 CTTCTGAGCAGATGGTGGACTCCTGCCTCCGAGCCTGCCAAGCCTCCACACCACAGACCCCAAAGG  
 TTTGGCTCAACTC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>RG223279 representing NM\_174873  
 Red=Cloning site Green=Tags(s)

MAAAQPKYPAGATARRLARGCWSALWDYETPKVIIVRNRRRLGVL YRAVQLL ILLYFVWYV FIVQKSYQES  
 ETGPESSII TKVKGIT TSEHKVWDVEEYVKPEGGSVFSII TRVEATHSQTQGTCPESIRVHNATCLSDA  
 DCVAGELDMLGNLRTGRCPYYPYQGPSKTCEVFGWCPVEDGASVSQFLGTMAPNF TILIKNSIHYPKFHF  
 SKGNIADRTDGYLKRCTFHEASDLYCPIFKLGFIVEKAGESFTELAHKGGVIGVIINWDCDLDPASECN  
 PKYSFRRLDPKHVPASSGYNFRFAKYKINGTTTTRTLIKAYGIRIDVIVHGQAGKFSLIPTIINLATALT  
 SVGVGSFLCDWILLTFMKNKVVYSHKFKDKVCTPSHPSGWPVTLARVLGQAPPEPGHRSEDQHPSPSPSG  
 QEQQGAECGPAFPPLRPCPISAPSEQMVDTPASEPAQASTPTDPKGLAQL

TRTRPLE – GFP Tag – V

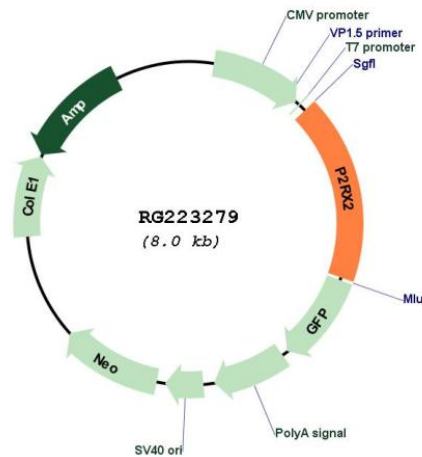
**Restriction Sites:**

Sgfl-Mlul

Cloning Scheme:



Plasmid Map:



ACCN: NM\_174873

ORF Size: 1212 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).

|                               |   |
|-------------------------------|---|
| <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_174873.1</a> , <a href="#">NP_777362.1</a>   |
| <b>RefSeq Size:</b>           | 1629 bp   |
| <b>RefSeq ORF:</b>            | 1215 bp   |
| <b>Locus ID:</b>              | 22953   |
| <b>UniProt ID:</b>            | <a href="#">Q9UBL9</a>  |
| <b>Cytogenetics:</b>          | 12q24.33  |
| <b>Protein Families:</b>      | Druggable Genome, Ion Channels: ATP Receptors, Transmembrane  |
| <b>Protein Pathways:</b>      | Calcium signaling pathway, Neuroactive ligand-receptor interaction  |
| <b>Gene Summary:</b>          | 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]   |