

## Product datasheet for **RG219998**

### **P2X2 (P2RX2) (NM\_016318) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	P2X2 (P2RX2) (NM_016318) 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)



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**ORF Nucleotide Sequence:**

>RG219998 representing NM\_016318  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCCGCGCCAGCCCAAGTACCCCGCGGGGCGACCGCCCGCGCCTGGCCCGGGCTGCTGGTCCG  
 CCCTCTGGGACTACGAGACGCCAAGGTGATCGTGGTGAGGAACCGCGCCTGGGGTCTGTACCGCGC  
 CGTGACGTGCTCATCTGCTCTACTTCGTGTGGTACGTATTCATCGTGCAGAAAAGCTACCAGGAGAGC  
 GAGACGGGCCCGAGAGCTCCATCATCACCAAGGTCAAGGGGATCACACGTCCGAGCACAAAGTGTGGG  
 ACGTGGAGGAGTACGTGAAGCCCCGAGAGCATAAGGGTCCACAACGCCACCTGCCTCTCCGACGCCGA  
 CTGCGTGGCTGGGAGCTGGACATGCTGGGAAACGGCCTGAGGACTGGGCGCTGTGTGCCATTACCAG  
 GGGCCCTCCAAGACCTGCGAGGTGTTCCGCTGGTCCCGGTGGAAGATGGGGCCTCTGTCAGCCAATTTT  
 TGGGTACGATGGCCCAAATTTACCATCTCATCAAGAACAGCATCCACTACCCCAAATTCACCTTCTC  
 CAAGGGCAACATCGCCGACCGCACAGACGGGTACCTGAAGCGCTGCACGTTCCACGAGGCCTCCGACCTC  
 TACTGCCCATCTTCAAGCTGGGCTTTATCGTGGAGAAGGCTGGGGAGAGCTTACAGAGCTCGCACACA  
 AGGGTGGTGTATCGGGTCAATCAACTGGGACTGTGACCTGGACCTGCCTGCATCGGAGTGCAACCC  
 CAAGTACTCCTTCGGAGGCTTGACCCCAAGCACGTGCCTGCCTCGTCAGGCTACAACTTCAGGTTTGCC  
 AAATACTACAAGTCAATGGCACCACCACCCGACGCTCATCAAGGCCTACGGGATCCGCATTGACGTCA  
 TTGTGCATGGACAGGCCGGGAAGTTCAGCCTGATCCCACCATTATTAATCTGGCCACAGCTCTGACTTC  
 CGTCGGGTGGCTCCTTCTGTGCGACTGGATCTTGTAACATTCATGAACAAAAACAAGGTCTACAGC  
 CATAAGAAATTTGACAAGGTGTGTACCCGAGCCACCCCTCAGGTAGCTGGCCTGTGACCCTTGCCCGTG  
 TATTGGCCAGGCCCTCCCGAACCCGGCCACCGCTCCGAGGACCAGCACCCAGCCCTCCATCAGGCCA  
 GGAGGGCCAACAAGGGGAGAGTGTGGCCAGCCTTCCCGCCCTGCGGCCTTGCCCATCTCTGCCCT  
 TCTGAGCAGATGGTGGACTCTGCTCCGAGCCTGCCAAGCCTCCACACCCACAGACCCCAAAGGTT  
 TGGCTCAACTC

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>RG219998 representing NM\_016318  
 Red=Cloning site Green=Tags(s)

MAAAQPKYPAGATARRLARGCWSALWDYETPKVIVVRNRRLGVL YRAVQLL ILLYFVWYVFIVQKSYQES  
 ETGPESSIIITKVKGITTEHKVVDVEEYVKPPESIRVHNATCLSDADCVAGELDMLGNLRTGRCVPPYQ  
 GPSKTCVFGWCPVEDGASVSQFLGTMAPNFTILIKNSIHYPKFHFSKGNIADRTDGYLKRCTFHEASDL  
 YCPIFKLGFIVEKAGESFTELAHKGGVIGVIINWDCDLDPASECNPKYSFRRLDPKHVPASSGYNFRFA  
 KYYKINGTTTRTLKAYGIRIDIVIHGQAGKFSLIPTIINLATALTSVGVGSFLCDWILLTFMKNKNVYS  
 HKKFDKVCPTSPHSGSWPVTLARVLGQAPPEPGHRSEDQHPSPPSGQEGQGAECGPAFPPLRPCPISAP  
 SEQMVDTPASEPAQASTPTDPKGLAQL

**TR**TRPLE – GFP Tag – V

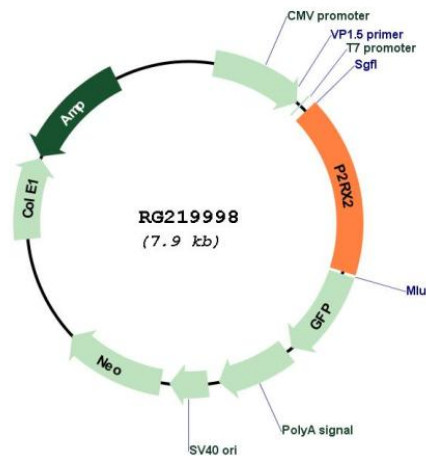
**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_016318

ORF Size: 1341 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.

<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_016318.4</a>
<b>RefSeq Size:</b>	1758 bp
<b>RefSeq ORF:</b>	1344 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]