

Product datasheet for **SC310230**

P2RX7 (NM_002562) Human Untagged Clone

Product data:

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|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | P2RX7 (NM_002562) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | P2RX7 |
| Synonyms: | P2X7 |
| Mammalian Cell Selection: | None |
| Vector: | <u>pCMV6-XL5</u> |
| E. coli Selection: | Ampicillin (100 ug/mL) |



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Fully Sequenced ORF:

>OriGene sequence for NM_002562 edited
 AGGAAGAGTAGAGCTCTGGTCCAGCTCCGCGCAGGGAGGGAGGCTGTCACCATGCCGGCC
 TGCTGCAGCTGCAGTGATGTTTTCCAGTATGAGACGAACAAAGTCACTCGGATCCAGAGC
 ATGAATTATGGCACCATTAAGTGGTTCTTCCACGTGATCATCTTTTCTACGTTTGCTTT
 GCTCTGGTGAGTGACAAGCTGTACCAGCGGAAAGAGCCTGTCATCAGTTCTGTGCACACC
 AAGGTGAAGGGGATAGCAGAGGTGAAAGAGGAGATCGTGGAGAATGGAGTGAAGAAGTTG
 GTGCACAGTGTCTTTGACACCGCAGACTACACCTTCCCTTTCAGGGGAACTCTTTCTTC
 GTGATGACAAACTTTCTCAAACAGAAGGCCAAGAGCAGCGGTTGTGCCGAGTATCCC
 ACCCGCAGGACGCTCTGTTCTCTGACCGAGGTTGTAAGGGAAGGATGGATGGACCCGAC
 AGCAAAGGAATTCAGACCGGAAGGTGTGTAGTGTATGAAGGGAACAGAAAGACCTGTGAA
 GTCTCTGCCTGGTGCCCATCGAGGCAGTGAAGAGGCCCGCCCGCTGCTCTTGAAC
 AGTGCCGAAAACCTCACTGTGCTCATCAAGAACAATATCGACTTCCCGGCCACAACACTAC
 ACCACGAGAAACATCCTGCCAGGTTTAAACATCACTTGTACCTTCCACAAGACTCAGAAT
 CCACAGTGTCCCATTTTCCGACTAGGAGACATCTCCGAGAAACAGGCGATAATTTTTCA
 GATGTGGCAATTCAGGGCGGAATAATGGGCATTGAGATCTACTGGGACTGCAACCTAGAC
 CGTTGGTTCCATCACTGCCGTCCAAATACAGTTTCCGTGCGCTTGACGACAAGACCACC
 AACGTGTCCTTGTACCCTGGCTACAACCTCAGATACGCCAAGTACTACAAGGAAAACAAT
 GTTGAGAAACGGACTCTGATAAAAGTCTTCGGGATCCGTTTTGACATCCTGGTTTTTGGC
 ACCGGAGGAAAATTTGACATTATCCAGCTGGTTGTGTACATCGGCTCAACCCCTCCTAC
 TTCGGTCTGGCCGCTGTGTTTCATCGACTTCTCATCGACACTTACTCCAGTAACTGCTGT
 CGCTCCATATTTATCCCTGGTGAAGTGTGTGAGCCCTGTGTGGTCAACGAATACTAC
 TACAGGAAGAAGTCCGAGTCCATTGTGGAGCCAAAGCCGACATTAAGTATGTGTCCTTT
 GTGGATGAATCCACATTAGGATGGTGAACAGCAGCTACTAGGGAGAAGTCTGCAAGAT
 GTCAAGGGCCAAGAAGTCCCAAGACCTGCGATGGACTTACAGATTTGTCCAGGCTGCC
 CTGGCCCTCCATGACACACCCCGATTCTGGACAACAGAGGAGATACGCTGCTTAGA
 AAGGAGGCGACTCCTAGATCCAGGGATAGCCCGCTCTGGTGCCAGTGTGGAAGCTGCCTC
 CCATCTCAACTCCCTGAGAGCCACAGGTGCCTGGAGGCGCTGTGCTGCCGAAAAAGCCG
 GGGGCTGCATCACACCTCAGAGCTGTTCAAGAACTGGTCTGTCAGACACGTCCTG
 CAGTTCCTCTGCTCTACCAGGAGCCCTTGTGCGCTGGATGTGGATTCCACCAACAGC
 CGGCTGCGGCACTGTGCCTACAGGTGCTACGCCACCTGGCGCTTCCGCTCCAGGACATG
 GCTGACTTTGCCATCCTGCCAGCTGCTGCCGCTGGAGGATCCGGAAGAGTTTCCGAAG
 AGTGAAGGGCAGTACAGTGGCTTCAAGAGTCTTACTGAAGCCAGGCACCGTGGCTCAGG
 TCTGTAATCCCAGCGCTTTGGGAGGCCGAGGCAGGCAGATCACCTGAGGTCCGGAGTTGG
 AGACCCGCTGGCTAACAAGGCGAAATCCTGTGTACTAAAAATACAAAAATCAGCCAG
 ACATGGTGGCATGCACCTGCAATCCCAGTACTCGGGAGGCTGAGGCACAAGAATCACTT
 GAACCCGGGTGGCA

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_002562 unedited
 TCACTATAGGGCGCCGGAATTCGGCAGCAAAGGAAGAGTAGAGCTCTGGTCCAGCTCC
 GCGCAGGGAGGGAGGCTGTACCATGCCGGCTGCTGCAGCTGCAGTGATGTTTTCCAGT
 ATGAGACGAACAAAGTCACTCGGATCCAGAGCATGAATTATGGCACCATTAAGTGGTTCT
 TCCACGTGATCATCTTTTCTACGTTTGTCTTGGTCTGGTGAGTGACAAGCTGTACCAGC
 GGAAGAGCCTGTATCAGTTCTGTGCACACCAAGGTGAAGGGGATAGCAGAGGTGAAAG
 AGGAGATCGTGGAGAATGGAGTGAAGAAGTTGGTGCACAGTGTCTTTGACACCGCAGACT
 ACACCTTCCCTTTCAGGGGAACTCTTTCTTCGTGATGACAAACTTTCTCAAACAGAAG
 GCCAAGAGCAGCGGTTGTGCCGAGTATCCACCCGAGGACGCTCTGTTTCTCTGACC
 GAGGTTGTAAGGGAAGGATGGATGGACCCGAGAGCAAAGGAATTCAGACCGGAAGGTGTG
 TAGTGTATGAAGGGAACAGAAAGACCTGTGAAGTCTCTGCCTGGTGCCCATCGAGGCAG
 TGGAAGAGGCCCGCCGCTGCTCTTGAACAGTGGCGAAAACCTCACTGTGCTCATCA
 AGAACAATATCGACTTCCCGGCCACAACACTACACCACGAGAAACATCCTGCCAGGTTTTA
 AACATCACTTGTACCTTCCACAAGACTCAGAATCCACAGTGTCCCATTTTCCGACTAGGA
 GACATCTTCCGAGAAACAGGCGATAATTTTTCAC

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| Restriction Sites: | Please inquire |
| ACCN: | NM_002562 |
| Insert Size: | 2100 bp |
| OTI Disclaimer: | Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP). |
| OTI Annotation: | There is 2 nucleotide difference between the OriGene clone and the NCBI reference ORF. OriGene considers these to be polymorphisms and to reflect the natural differences between individuals. These result in the substitution of 2 aa. |
| 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: | <ol style="list-style-type: none"> 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: | <u>NM_002562.4</u> , <u>NP_002553.2</u> |
| RefSeq Size: | 3155 bp |
| RefSeq ORF: | 1788 bp |
| Locus ID: | 5027 |
| UniProt ID: | <u>Q99572</u> |
| Cytogenetics: | 12q24.31 |
| Domains: | P2X_receptor |
| Protein Families: | Druggable Genome, Ion Channels: ATP Receptors, Transmembrane |
| Protein Pathways: | Calcium signaling pathway, Neuroactive ligand-receptor interaction |

Gene Summary:

The product of this gene belongs to the family of purinoceptors for ATP. This receptor functions as a ligand-gated ion channel and is responsible for ATP-dependent lysis of macrophages through the formation of membrane pores permeable to large molecules. Activation of this nuclear receptor by ATP in the cytoplasm may be a mechanism by which cellular activity can be coupled to changes in gene expression. Multiple alternatively spliced variants have been identified, most of which fit nonsense-mediated decay (NMD) criteria. [provided by RefSeq, Jul 2010]

Transcript Variant: This variant (1) encodes a functional protein. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.