

Product datasheet for **SC109532**

P2Y2 (P2RY2) (NM_176072) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	P2Y2 (P2RY2) (NM_176072) Human Untagged Clone
Tag:	Tag Free
Symbol:	P2Y2
Synonyms:	HP2U; P2RU1; P2U; P2U1; P2UR; P2Y2; P2Y2R
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC109532 sequence for NM_176072 edited (data generated by NextGen Sequencing)

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ATGGCAGCAGACCTGGGCCCTGGAATGACACCATCAATGGCACCTGGGATGGGGATGAG
CTGGGCTACAGGTGCCGCTTCAACGAGGACTTCAAGTACGTGCTGCTGCCTGTGTCTAC
GGCGTGGTGTGCGTGTCTGGGCTGTGTCTGAACGCCGTGGCGCTCTACATCTTCTGTGC
CGCCTCAAGACCTGGAATGCGTCCACCACATATATGTTCCACCTGGCTGTGTCTGATGCA
CTGTATGCGGCCTCCCTGCCGCTGCTGGTCTATTACTACGCCCGCGGACCACTGGCCC
TTCAGCACGGTGTCTGCAAGCTGGTGCCTTCTCTTACACCAACCTTTACTGCAGC
ATCCTCTTCTCACCTGCATCAGCGTGCACCGGTGTCTGGGCGTCTTACGACCTCTGCGC
TCCCTGCGCTGGGGCCGGGCCCTACGCTCGCCGGTGGCCGGGCGGTGTGGGTGTTG
GTGCTGGCCTGCCAGGCCCGTCTACTTTGTCACCACCAGCGCGCGGGGGCCGC
GTAACCTGCCACGACACCTCGGCACCCGAGCTTTCAGCCGCTTCGTGGCCTACAGCTCA
GTCATGTGGGCTGCTCTTCCGCGTGCCTTTGCCGTATCCTTGTCTGTTACGTGCTC
ATGGCTCGGCGACTGCTAAAGCCAGCCTACGGGACCTCGGGCGGCTGCCTAGGGCCAAG
CGCAAGTCCGTGCGCACCATCGCCGTGGTGTGGTGTCTTCCGCTCTGCTTCTGCTGCA
TTCCACGTCAACCGCACCTCTACTACTCCTTCCGCTCGCTGGACCTCAGCTGCCACACC
CTCAACGCCATCAACATGGCCTACAAGTTACCCGGCCGCTGGCCAGTGTAAACAGTTGC
CTTGACCCCGTGTCTACTTCTGGCTGGGAGAGGCTCGTACGCTTTGCCGAGATGCC
AAGCCACCACTGGCCCCAGCCCTGCCACCCCGGCTCGCCGAGGCTGGGCTGCGCAGA
TCCGACAGAACTGACATGCAGAGGATAGAAGATGTGTTGGGAGCAGTGAAGACTCTAGG
CGGACAGAGTCCACGCCGCTGGTAGCGAGAACCTAAGGACATTCGGCTGTAG

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Clone variation with respect to NM_176072.1
137 c=>t



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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_176072 unedited
 CGTCAAAATTTTGTATACGACTCATATAGGGCGGCCGGAATTCGCACGAGGACGGCTTG
 AACGCGCCTGTGGGTCCGTGGTTGAACTTTGTCTCCACGGGAGCGTCGGTCTCGGAGCCC
 CTTGTGGCAGCAGCACTACCTGCCAGAAAATGCTGGAGGCTGGGCGTGGCCCCAGGCCT
 GGGGACCTGTTTTCTGTTTCCCGCAGAGTTCCTGCAGCCCGTCCAGGTCCAGGCCT
 GTGCATTCATGAGTGAGGAACCCGTGCAGGCGCTGAGCATCCTGACCTGGAGAGCAGGGG
 CTGGTCAGGGCGATGGCAGCAGACCTGGGCCCTGGAATGACACCATCAATGGCACCTGG
 GATGGGGATGAGCTGGGCTACAGGTGCCGCTTCAACGAGGACTTCAAGTACGTGCTGCTG
 CCTGTGTCTACGGCGTGGTGTGCGTGCTTGGGCTGTGTCTGAACGCCGTGGCGCTCTAC
 ATCTTCTGTGCCGCTCAAGACCTGGAATGCGTCCACCACATATATGTTCCACCTGGCT
 GTGTCTGATGCACTGTATGCGGCCTCCCTGCCGCTGCTGGTCTATTACTACGCCCGCGC
 GACCACTGGCCCTTACGACGGTGTCTGCAAGCTGGTGCCTTCTCTTCTACACCAAC
 CTTTACTGCAGCATCCTTCTTCTCACCTGCATCAGCGTGCACCGGTGTCTGGGCTCTTA
 CGACCTCTGCGCTCCCTGCGCTGGGGCCGGGCCGCTACGCTCGCCGGTGGCCCCGNGCC
 GTGTGGGTGTTGGTGTGCTGCCTGCCAGCCCCGTGCTCTACTTTGTACCACAGCGCGCG
 CGGGGGCCGCGTAACCTGCCACGACAACCTGGCACCCGAGCTTTTAGCCCTTTCTGGCC
 TACAGCTCAGTCATGCCTGGCC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_176072 unedited
 GGGTGTAGGGTTATTTAGATAATATAAAAAACGACCTCGTGGGTTAGTTTCNATTTGTGC
 CTAANATTTTTGCACCTGGNAAAGGGCAGTTCTACAAATAAGGGTCCCAGTTAAATCGG
 AGCTCCAGTTAAATGGCTTAACATTTACCAGCACATGACTGGCCATCACCTAAACTGGGA
 AATCTCAAGGACTGGGACTGCACCTGACTTTTCTCTGTGCTCAGCACAGAGTCAGGCACA
 GAAGCCAACTGGCTTTACAGTGGGGATGACCTGGGGCCTGGAGAGAGGATCCCTGATAT
 GAGACTACTCCTGAGACAGCTAGTGAGAAGGCAGGTGGCAGAAGGGAACGGATTGGAGAA
 AGGACCCTTGTGTGGCTGGTAAAGCTTCCCTGCCATATCCTCATCCCCGACCACAAA
 TAGGGCACAGCTCAGCAGGCAACACAACCTTTAGTATAAGTTACAGCCTCACACTGGCTC
 CTAGCCCATGGGAGCCTCCAGATGGGTCTATGATATTAGTCCCCAGATGTTTCATCTTTG
 GGCTGGGGTACTCCTCAGAGCTAAGTCCACCGTGGCACCCAGTCCATTCCAGACCACTG
 TGCAAACCTCAGCCCTCATTACTTACCAGGGTTTTCTGGCCAACCTGTGACTTGGCCCCCA
 CCCCAGGTAGCTCAGCTCCAGACTCTGGTATGTGATCTTGGTAAGCCACCTTCTCTCTG
 GGCTGTTTTCTCATTGACTTGATTAGGCTGGACTCCAACCTANGTACCTTGGCAGTAC
 AGCCAGCTACTTGCATGGGAGTCAAGCCAGGGGTGTCATTGACCTTGAGCTCTTGCCCTT
 CTTGAACTTAATCCCCCACTTATACACAACGATGACTAGGGTTATGGGGACAGTTG
 ACTCTGGACACAGAGTGATATTCCGAGCCCTGTCAATGACGAG

Restriction Sites:

NotI-NotI

ACCN:

NM_176072

Insert Size:

3000 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

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_176072.1](#), [NP_788086.1](#)

RefSeq Size: 2681 bp

RefSeq ORF: 1134 bp

Locus ID: 5029

UniProt ID: [P41231](#)

Cytogenetics: 11q13.4

Protein Families: Druggable Genome, GPCR, Transmembrane

Protein Pathways: Neuroactive ligand-receptor interaction

Gene Summary:

The product of this gene belongs to the family of P2 receptors, which is activated by extracellular nucleotides and subdivided into P2X ligand-gated ion channels and P2Y G-protein coupled receptors. This family has several receptor subtypes with different pharmacological selectivity, which overlaps in some cases, for various adenosine and uridine nucleotides. This receptor, found on many cell types, is activated by ATP and UTP and is reported to be overexpressed on some cancer cell types. It is involved in many cellular functions, such as proliferation, apoptosis and inflammation. Three transcript variants encoding the same protein have been identified for this gene. [provided by RefSeq, Mar 2013]

Transcript Variant: This variant (1) represents the longest transcript. Transcript variants 1, 2 and 3 encode the same 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.