

## Product datasheet for **RC223878**

### **P2Y2 (P2RY2) (NM\_176071) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** P2Y2 (P2RY2) (NM\_176071) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** P2Y2  
**Synonyms:** HP2U; P2RU1; P2U; P2U1; P2UR; P2Y2; P2Y2R  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC223878 representing NM\_176071  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGC**C

ATGGCAGCAGACCTGGGCCCTGGAATGACACCATCAATGGCACCTGGGATGGGGATGAGCTGGGCTACA  
 GGTGCCGCTTCAACGAGGACTTCAAGTACGTGCTGCTGCCTGTGTCTACGGCGTGGTGTGCGTGCCTGG  
 GCTGTGTCTGAACGCCGTGGCGCTCTACATCTTCTGTGCCGCTCAAGACCTGGAATGCGTCCACCACA  
 TATATGTTCCACCTGGCTGTGTCTGATGACTGTATGCGGCTCCCTGCCGCTGCTGGTCTATTACTACG  
 CCCGGCGGACCACTGGCCCTTACGACGGTGTCTGCAAGCTGGTGGCGTTCCTCTTACACCAACCT  
 TTAGTGCAGCATCCTCTTCTCCTCAGTGCATCAGCGTGCACCGGTGTCTGGGCGTCTTACGACCTCTGCGC  
 TCCTGCGCTGGGGCCGGGCCCGTACGCTCGCCGGTGGCCGGGGCCGTGTGGGTGTTGGTGTGGCCT  
 GCCAGGCCCGTGTCTACTTTGTACACCAGCGCGCGGGGGCCGTAACCTGCCACGACACCTC  
 GGCACCCGAGCTCTTACGCCGCTTCGTGGCCTACAGCTCAGTCATGCTGGGCTGCTCTTCGCGGTGCC  
 TTTGCCGTCATCCTTGTCTGTTACGTGCTCATGGCTCGGCGACTGCTAAAGCCAGCTACGGGACCTCGG  
 GCGGCTGCCTAGGGCAAGCGCAAGTCCGTGCGCACCATCGCGTGGTGTGCTGGTGTCTTCGCCCTCTG  
 CTTCTGCCATTCCACGTACCCGACCCCTCTACTACTCTTCCGCTCGTGGACCTCAGCTGCCACACC  
 CTAACGCCATCAACATGGCCTACAAGTTACCCGGCCGCTGGCCAGTGTAAACAGTTGCCTTGACCCCG  
 TGCTCTACTTCTGGCTGGGACAGAGGCTCGTACGCTTTGCCGAGATGCCAAGCCACCCACTGGCCCCAG  
 CCCTGCCACCCCGGCTCGCCGAGGCTGGGCTGCGCAGATCCGACAGAAGTACATGCAGAGGATAGAA  
 GATGTGTTGGGACGAGTGGGACTCTAGGCGGACAGTCCACGCCGGTGGTAGCGAGAACAATAAGG  
 ACATTCGGCTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >RC223878 representing NM\_176071  
Red=Cloning site Green=Tags(s)

MAADLGPWNDT INGTWGDDELGYRCRFNEDFKYVLLPVSYGVVCPVGLCLNAVALYIFLCRLKTNASTT  
 YMFHLAVSDALYAASLPLL VYYYARGDHPFSTVLCKLVRFLFYTNLYCSILFLTCISVHRCLGVLRLR  
 SLRWGRARYARRVAGAVWVVLACQAPVLYFVTT SARGGRVTCHDTSAPELFSRFVAYSSVMLGLLFAVP  
 FAVILVCYVLMARRLLKPAYGTSGGLPRAKRKSVRTIAVVLAVFALCFLPFHVTRTLYYSFRLDLSCHT  
 LNAINMAYKVTRPLASANSCLDPVLYFLAGQRLVRFARDAKPPTGSPATPARRRLGLRRSDRTDMQRIE  
 DVLGSSSEDSRRTESTPAGSENTKDIRL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6431\\_f05.zip](https://cdn.origene.com/chromatograms/mk6431_f05.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_176071

**ORF Size:** 1131 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\\_176071.3](#)

**RefSeq Size:** 2613 bp

**RefSeq ORF:** 1134 bp

**Locus ID:** 5029

**UniProt ID:** [P41231](#)

**Cytogenetics:** 11q13.4

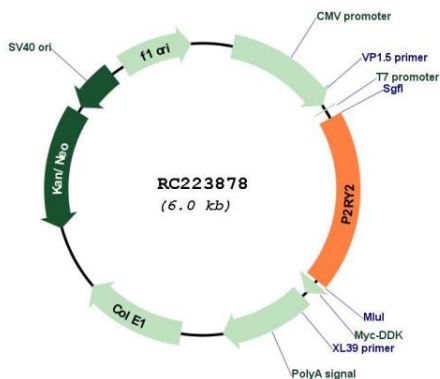
**Protein Families:** Druggable Genome, GPCR, Transmembrane

**Protein Pathways:** Neuroactive ligand-receptor interaction

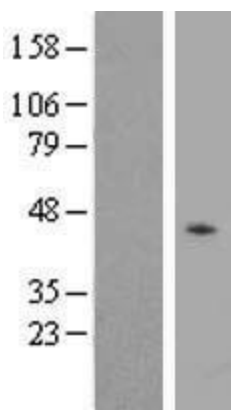
**MW:** 42.1 kDa

**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]

Product images:



Circular map for RC223878



Western validation with an anti-DDK antibody \* L: Control HEK293 lysate R: Over-expression lysate