

## Product datasheet for **TA329004**

### **P2rx2 Rabbit Polyclonal Antibody**

#### **Product data:**

Product Type:	Primary Antibodies
Applications:	IF, WB
Recommended Dilution:	WB: 1:200-1:2000; FC: 1:50-1:600
Reactivity:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)KSDYLKHSTFDQDS, corresponding to amino acid residues 207-220 of rat P2X2 with replacement of cysteine 214 (C214) with serine (*S) . Extracellular.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: Phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.05% NaN <sub>3</sub> .
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	purinergic receptor P2X 2
Database Link:	<a href="#">NP_446108</a> <a href="#">Entrez Gene 231602 Mouse</a> <a href="#">Entrez Gene 114115 Rat</a> <a href="#">P49653</a>



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**Background:**

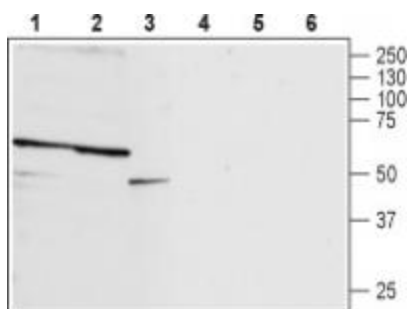
The P2X receptors belong to the ligand-gated ion channel family and are activated by extracellular ATP. The structure and function of the P2X receptors, which were mainly investigated using in vitro models, show their involvement in synaptic communication, cell death, and differentiation. Seven mammalian P2X receptor subtypes (P2X1–P2X7) have been identified and cloned. All P2X receptor subtypes share the same structure of intracellular N- and C-termini, two membrane-spanning domains and a large extracellular loop. All P2X subtypes can assemble to form homomeric or heteromeric functional channels with the exception of P2X6, which only seems to function as part of a heteromeric complex. The various mammalian P2X receptors show distinct expression patterns. P2X1-6 have been found in the central and peripheral nervous system, while the P2X7 receptor is predominantly found in cells of the immune system. The P2X2 receptor subtype has a widespread tissue distribution in autonomic neurons, but it is generally found to be co-expressed with one or more subtypes. mRNA of the P2X1, P2X2, P2X3, and P2X6 receptors is found in neurons of dorsal root ganglia (DRG), trigeminal, and nodose ganglia where heteromeric P2X2/P2X3 receptors are found.

**Synonyms:**

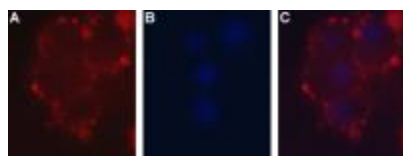
MGC129601; P2X2

**Note:**

This antibody was tested in live cell imaging. Please see IF/ICC data for detail.

**Product images:**


Western blot analysis of rat brain membrane (lanes 1 and 4), mouse brain membrane (lanes 2 and 5) and PC12 (lanes 3 and 6): 1-3. Anti-P2X2 Receptor (extracellular) antibody, (1:200). 4-6. Anti-P2X2 Receptor (extracellular) antibody, preincubated with the control peptide antigen.



Expression of P2X2 in rat PC12 cells. Immunocytochemical staining of P2X2 in intact living rat pheochromocytoma cell line (PC12). A. Extracellular staining of cells with Anti-P2X2 Receptor (extracellular) antibody, (1:50) followed by goat anti-rabbit-AlexaFluor-594 secondary antibody. B. Staining of cells with DAPI used as the counterstain. C. Merged images of A and B.