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P2RX4 Rabbit pAb

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Catalog # AP58716

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q99571
Reactivity	Human
Predicted	Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	43369
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human P2RX4
Epitope Specificity	238-338/388
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane; Multi-pass membrane protein.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The P2X receptor family is comprised of ligand-gated ion channels that allow for the increased permeability of calcium into the cell in response to extracellular ATP. The seven P2X receptors, P2X1-P2X7, form either homomeric or heteromeric channels or both. They are characterized by intracellular amino- and carboxy-termini. P2X receptors are expressed in a wide variety of tissues, including neurons, prostate, bladder, pancreas, colon, testis and ovary. The major function of the P2X receptors is to mediate synaptic transmissions between neurons and to other tissues via the binding of extracellular ATP, which acts as a neurotransmitter. The P2X receptors may be involved in the onset of necrosis or apoptosis after prolonged exposure to high concentrations of extracellular ATP.

Additional Information

Gene ID	5025
Other Names	P2X purinoceptor 4, P2X4, ATP receptor, Purinergic receptor, P2RX4
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

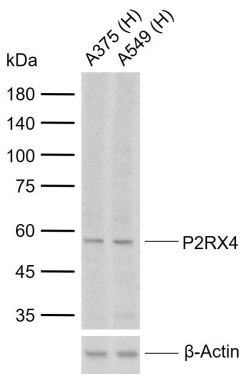
Protein Information

Name	P2RX4
Function	ATP-gated nonselective transmembrane cation channel permeable to potassium, sodium and calcium (PubMed:9016352). CTP, but not GTP or UTP, functions as a weak affinity agonist for P2RX4 (By similarity). Activated by extracellularly released ATP, it plays multiple role in immunity and central nervous system physiology (PubMed:35165166). Plays a key role in initial steps of T-cell activation and Ca(2+) microdomain formation (By similarity). Also participates in basal T-cell activity without TCR/CD3 stimulation (By similarity). Promotes the differentiation and activation of Th17 cells via expression of retinoic acid-related orphan receptor C/RORC (PubMed:35165166). Upon activation, drives microglia motility via the PI3K/Akt pathway (By similarity). Could also function as an ATP-gated cation channel of lysosomal membranes (By similarity).
Cellular Location	Cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:F8W463}. Lysosome membrane; Multi-pass membrane protein

Background

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Images



25 ug total protein per lane of various lysates (see on figure) probed with P2RX4 polyclonal antibody, unconjugated (AP58716) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.