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P2RX4 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58716

Specification

P2RX4 Polyclonal Antibody - Product Information

Application	**WB, IHC-P, IHC-F, IF, E**
Primary Accession	Q99571
Reactivity	**Rat, Dog, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**43 KDa**
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.**
SIMILARITY	**Belongs to the P2X receptor family.**
SUBUNIT	**Functional P2XRs are organized as homomeric and heteromeric trimers.**
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.

P2RX4 Polyclonal Antibody - Additional Information

Gene ID 5025

Other Names
P2X purinoceptor 4, P2X4, ATP receptor, Purinergic receptor, P2RX4

Dilution
WB~~1:1000<br \><span class

="dilution_IHC-P">IHC-P~~N/A<br \><span class
="dilution_IHC-F">IHC-F~~N/A<br \><span class
="dilution_IF">IF~~1:50~200<br \>E~~N/A

Format
0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage
Store at -20 ℃ 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 ℃.

P2RX4 Polyclonal Antibody - 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

P2RX4 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

P2RX4 Polyclonal Antibody - Images

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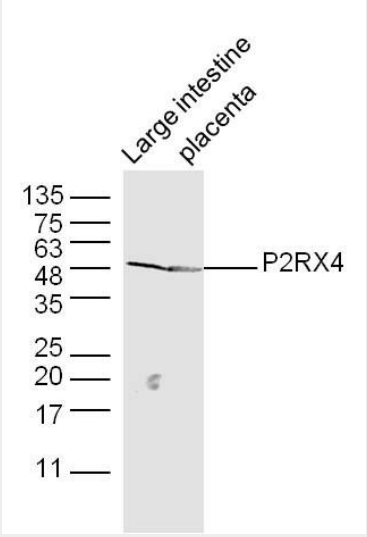

Sample:
Large intestine (Mouse) Lysate at 40 ug
Placenta (Mouse) Lysate at 40 ug
Primary: Anti-P2RX4 (bs-7690R) at 1/300 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 43 kD
Observed band size: 48 kD