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P2X1 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51813

Product Information

Application WB Primary Accession P51575

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 44980

Additional Information

Gene ID 5023

Other Names P2X purinoceptor 1, P2X1, ATP receptor, Purinergic receptor, P2RX1, P2X1

Dilution WB~~1:1000

Format 0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name P2RX1

Synonyms P2X1

Function ATP-gated nonselective transmembrane cation channel permeable to

potassium, sodium and with relatively high calcium permeability

(PubMed:<u>10440098</u>, PubMed:<u>15056721</u>, PubMed:<u>20699225</u>,

PubMed:8834001, PubMed:8961184). Furthermore, CTP functions as a weak

affinity agonist for P2RX1 (PubMed: 14699168). Plays a role in

urogenital, immune and cardiovascular function (By similarity). Specifically, plays an important role in neurogenic contraction of smooth muscle of the vas deferens, and therefore is essential for normal male reproductive

function (By similarity). In addition, contributes to smooth muscle

contractions of the urinary bladder (By similarity). On platelets, contributes to platelet activation and aggregation and thereby, also to thrombosis (By similarity). On neutrophils, it is involved in chemotaxis and in mitigating the

activation of circulating cells (PubMed: 19635923).

Cellular Location Cell membrane; Multi-pass membrane protein

{ECO:0000250|UniProtKB:P56373}. Note=Detected at plasma membrane lipid

rafts.

Expressed on neutrophils and platelets (PubMed:19635923). Expressed on urinary bladder smooth muscle (PubMed:8834001).

Background

Ligand-gated ion channel with relatively high calcium permeability. Binding to ATP mediates synaptic transmission between neurons and from neurons to smooth muscle. Seems to be linked to apoptosis, by increasing the intracellular concentration of calcium in the presence of ATP, leading to programmed cell death (By similarity).

References

Valera S., et al.Recept. Channels 3:283-289(1995). Longhurst P.A., et al.Biochim. Biophys. Acta 1308:185-188(1996). Sun B., et al.J. Biol. Chem. 273:11544-11547(1998). Dhulipala P.D., et al.Submitted (AUG-1999) to the EMBL/GenBank/DDBJ databases. Ennion S.I., et al.Mol. Pharmacol. 61:303-311(2002).

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