10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human P2X1. The exact sequence is proprietary.
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:10440098, PubMed:15056721, PubMed:20699225, PubMed:8834001, PubMed:8961184). Furthermore, CTP functions as a weak affinity agonist for P2RX1 (PubMed:14699168). Plays a role 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.
Tissue Location	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

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