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P2RX1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16798b

Product Information

Application	WB, E
Primary Accession	P51575
Other Accession	P47824, P51576, NP_002549.1
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB36282
Calculated MW	44980
Antigen Region	345-372

Additional Information

Gene ID	5023
Other Names	P2X purinoceptor 1, P2X1, ATP receptor, Purinergic receptor, P2RX1, P2X1
Target/Specificity	This P2RX1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 345-372 amino acids from the C-terminal region of human P2RX1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	P2RX1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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).

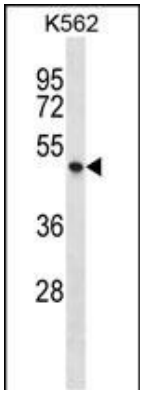
Background

The product of this gene belongs to the family of purinoceptors for ATP. This receptor functions as a ligand-gated ion channel with relatively high calcium permeability. Binding to ATP mediates synaptic transmission between neurons and from neurons to smooth muscle, being responsible, for example, for sympathetic vasoconstriction in small arteries, arterioles and vas deferens. Mouse studies suggest that this receptor is essential for normal male reproductive function. It is possible that the development of selective antagonists for this receptor may provide an effective non-hormonal male contraceptive pill.

References

Allsopp, R.C., et al. J. Biol. Chem. 285(43):32770-32777(2010)
Harper, M.T., et al. J. Thromb. Haemost. 8(7):1604-1613(2010)
Lalo, U., et al. J. Neurochem. 113(5):1177-1187(2010)
Varani, K., et al. Cell. Physiol. Biochem. 25 (2-3), 325-336 (2010) :
Corriden, R., et al. Sci Signal 3 (104), RE1 (2010) :

Images



P2RX1 Antibody (C-term) (Cat. #AP16798b) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the P2RX1 antibody detected the P2RX1 protein (arrow).

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