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Anti-P2X1 Antibody

Catalog # AP51813

Product Information

Application	WB, IF/IC
Primary Accession	P51575
Reactivity	Human, Mouse, Rat, Rabbit, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	44980

Additional Information

Gene ID	5023
Other Names	P2X1; P2X purinoceptor 1; P2X1; ATP receptor; Purinergic receptor
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human P2X1. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

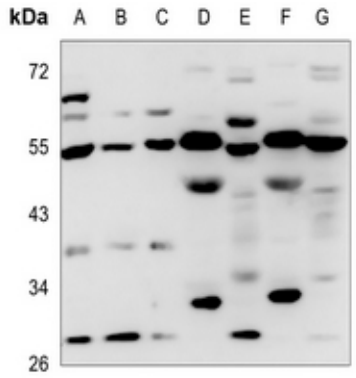
Name	P2RX1
Synonyms	P2X1
Function	ATP-gated nonselective transmembrane cation channel permeable to potassium, sodium and with relatively high calcium permeability (PubMed:10440098, PubMed:15056721, PubMed:20699225, PubMed:8834001, PubMed:8961184). Furthermore, CTP functions as a weak affinity agonist 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).

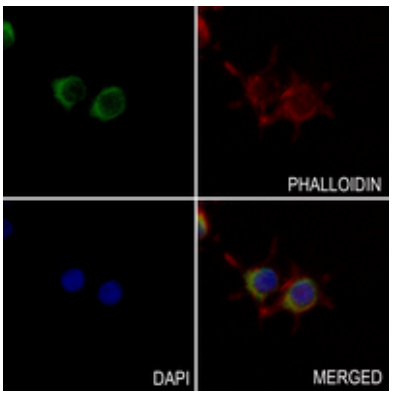
References

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Images



Western blot analysis of P2X1 expression in HEK293T (A), A549 (B), PC12 (C), mouse muscle (D), mouse spleen (E), rat muscle (F), rat spleen (G) whole cell lysates. (Predicted band size: 44 kD; Observed band size: 55 kD)



Immunofluorescent analysis of P2X1 staining in RAW264.7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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