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

Anti-P2X2 Picoband Antibody

Catalog # ABO11994

Product Information

Application	WB, IHC-P
Primary Accession	Q9UBL9
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for P2X purinoceptor 2(P2RX2) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	22953
Other Names	P2X purinoceptor 2, P2X2, ATP receptor, Purinergic receptor, P2RX2, P2X2
Calculated MW	51754
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, By Heat Western blot, 0.1-0.5 □g/ml, Human, Mouse, Rat
Subcellular Localization	Cell membrane ; Multi-pass membrane protein . Localizes to the apical membranes of hair cells in the organ of Corti.
Source	Eukaryota
Protein Name	P2X purinoceptor 2
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E.coli-derived human P2X2 recombinant protein (Position: D139-L471). Human P2X2 shares 84% amino acid (aa) sequence identity with both mouse and rat P2X2.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities	Belongs to the P2X receptor family.

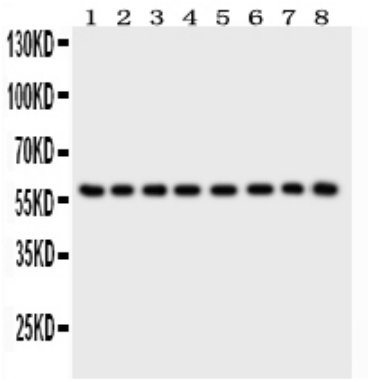
Protein Information

Name	P2RX2 (HGNC:15459)
Synonyms	P2X2
Function	ATP-gated nonselective transmembrane cation channel permeable to potassium, sodium and calcium (PubMed:10570044, PubMed:31636190). Activation by extracellular ATP induces a variety of cellular responses, such as excitatory postsynaptic responses in sensory neurons, neuromuscular junctions (NMJ) formation, hearing, perception of taste and peristalsis (By similarity). In the inner ear, regulates sound transduction and auditory neurotransmission, outer hair cell electromotility, inner ear gap junctions, and K(+) recycling (PubMed:23345450). Mediates synaptic transmission between neurons and from neurons to smooth muscle (By similarity).
Cellular Location	Cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:P56373}. Note=Localizes to the apical membranes of hair cells in the organ of Corti.
Tissue Location	Expressed in both the central and peripheral nervous system, as well as in the pituitary gland

Background

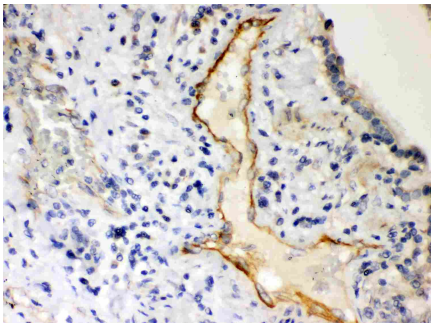
The P2RX2 gene encodes the P2X2 receptor, which assembles as a trimer to form a ligand-gated ion channel gated by extracellular ATP. P2X2 receptors mediate a variety of cellular responses, including excitatory postsynaptic responses in sensory neurons. The product of this gene belongs to the family of purinoceptors for ATP. P2RX2 is mapped to 12q24.33. It has been found that ATP-activated P2RX2 influenced OHC electromotility, a stimulus-induced change in hair cell length that functions as an amplifier to determine hearing sensitivity and frequency selectivity. What â€™s more, P2RX2 channels were necessary for development of the temporary threshold shift.

Images



Anti- P2X2 Picoband antibody, ABO11994, Western blottingAll lanes: Anti P2X2 (ABO11994) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Mouse Brain Tissue Lysate at 50ugLane 3: Human Placenta Tissue Lysate at 50ugLane 4: HELA Whole Cell Lysate at 40ugLane 5: SHG Whole Cell Lysate at 40ugLane 6: NEURO Whole Cell Lysate at 40ugLane 7: 22RV1 Whole Cell Lysate at 40ugLane 8: U87 Whole Cell Lysate at 40ugPredicted bind size: 52KDObserved bind size: 60KD

Anti- P2X2 Picoband antibody, ABO11994, IHC(P)IHC(P): Human Lung Cancer Tissue



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