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Anti-P2X2 Picoband Antibody

Catalog # ABO11994

Specification

Anti-P2X2 Picoband Antibody - Product Information

Application	**WB, IHC**
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.

Anti-P2X2 Picoband Antibody - Additional Information

Gene ID 22953

Other Names
P2X purinoceptor 2, P2X2, ATP receptor, Purinergic receptor, P2RX2, P2X2

Calculated MW
51754 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat
Western blot, 0.1-0.5 µg/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.

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.

Anti-P2X2 Picoband Antibody - 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

Anti-P2X2 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-P2X2 Picoband Antibody - Images

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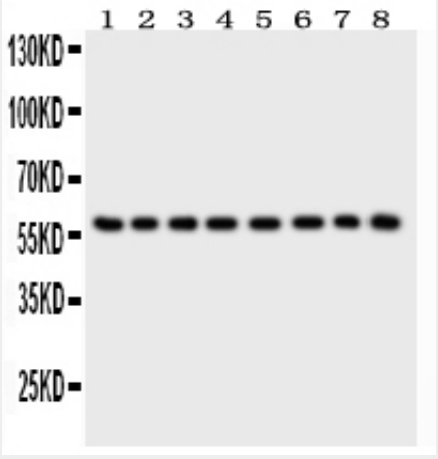
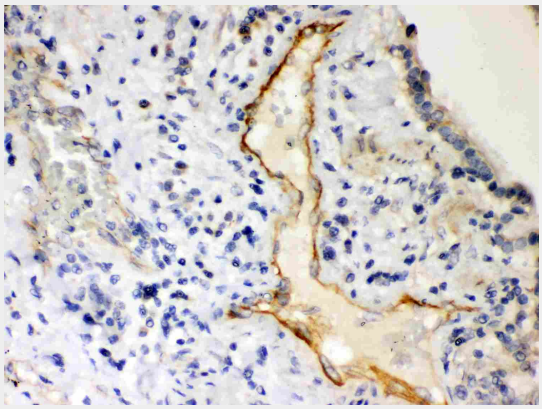


Anti- P2X2 Picoband antibody, ABO11994, Western blottingAll lanes: Anti P2X2 (ABO11994) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Mouse Brain Tissue Lysate at 50ugLane 3: Human Placenta Tissue Lysate at 50ugLane 4: HELA Whole Cell Lysate at 40ugLane 5: SHG Whole Cell Lysate at 40ugLane 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

Anti-P2X2 Picoband Antibody - 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. Whatâ€™s more, P2RX2 channels were necessary for development of the temporary threshold shift.