

#### P2RX7 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5674b

#### Specification

## P2RX7 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Antigen Region WB, IHC-P,E <u>O99572</u> <u>NP\_002553.2</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 563-592

#### P2RX7 Antibody (C-term) - Additional Information

Gene ID 5027

Other Names P2X purinoceptor 7, P2X7, ATP receptor, P2Z receptor, Purinergic receptor, P2RX7

**Target/Specificity** This P2RX7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 563-592 amino acids of human P2RX7.

**Dilution** WB~~1:1000 IHC-P~~1:50~100

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** P2RX7 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## P2RX7 Antibody (C-term) - Protein Information

Name P2RX7

**Function** Receptor for ATP that acts as a ligand-gated ion channel. Responsible for ATP-dependent lysis of macrophages through the formation of membrane pores permeable to



large molecules. Could function in both fast synaptic transmission and the ATP-mediated lysis of antigen-presenting cells. In the absence of its natural ligand, ATP, functions as a scavenger receptor in the recognition and engulfment of apoptotic cells (PubMed:<u>21821797</u>, PubMed:<u>23303206</u>).

**Cellular Location** Cell membrane; Multi-pass membrane protein

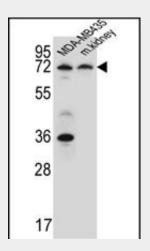
**Tissue Location** 

Widely expressed with highest levels in brain and immune tissues.

# P2RX7 Antibody (C-term) - Protocols

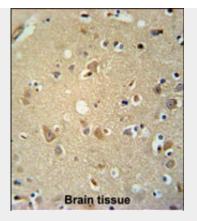
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- P2RX7 Antibody (C-term) Images



P2RX7 Antibody (C-term) (Cat. #AP5674b) western blot analysis in MDA-MB435 cell line and mouse kidney tissue lysates (15ug/lane). This demonstrates the P2RX7 antibody detected the P2RX7 protein (arrow).





P2RX7 Antibody (C-term) (Cat. #AP5674b) immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the P2RX7 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

## P2RX7 Antibody (C-term) - Background

P2RX7 belongs to the family of

purinoceptors for ATP. This receptor functions as a ligand-gated ion channel and is responsible for ATP-dependent lysis of macrophages through the formation of membrane pores permeable to large molecules. Activation of this nuclear receptor by ATP in the cytoplasm may be a mechanism by which cellular activity can be coupled to changes in gene expression.

## P2RX7 Antibody (C-term) - References

Kim, M., et al. EMBO J. 20(22):6347-6358(2001) Gartland, A., et al. J. Bone Miner. Res. 16(5):846-856(2001) Gu, B.J., et al. J. Biol. Chem. 276(14):11135-11142(2001) Buell, G.N., et al. Recept. Channels 5(6):347-354(1998) Rassendren, F., et al. J. Biol. Chem. 272(9):5482-5486(1997) **P2RX7 Antibody (C-term) - Citations** 

• P2X7 Receptor Antagonism Attenuates the Intermittent Hypoxia-induced Spatial Deficits in a Murine Model of Sleep Apnea Via Inhibiting Neuroinflammation and Oxidative Stress.