

DATASHEET

P2RX7 Rabbit Polyclonal Antibody

CAT. NO. APA13962

KEY FEATURES

Target	P2RX7	Source / Host	Rabbit
Reactivity	Human, Mouse	Clonality	Polyclonal
Applications	WB, IHC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at-20°C

BACKGROUND

ATP-gated nonselective transmembrane cation channel that requires high millimolar concentrations of ATP for activation . Upon ATP binding, it rapidly opens to allow the influx of small cations Na(+) and Ca(2+), and the K(+) efflux . Also has the ability to form a large pore in the cell membrane, allowing the passage of large cationic molecules . In microglia, may mediate NADPH transport across the plasma membrane . In immune cells, P2RX7 acts as a molecular sensor in pathological inflammatory states by detecting and responding to high local concentrations of extracellular ATP. In microglial cells, P2RX7 activation leads to the release of pro-inflammatory cytokines, such as IL-1beta and IL-18, through the activation of the NLRP3 inflammasome and caspase-1 .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:50 - 1:200

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to P2RX7
Specificity	Recognizes endogenous levels of P2RX7 protein.
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human P2RX7
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 14; Observed: 65 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	P2X purinoceptor 7; P2X7; ATP receptor; P2Z receptor; Purinergic receptor
Gene Symbol	P2RX7
Entrez Gene	5027(Human); 18439(Mouse)
SwissProt	Q99572(Human); Q9Z1M0(Mouse)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

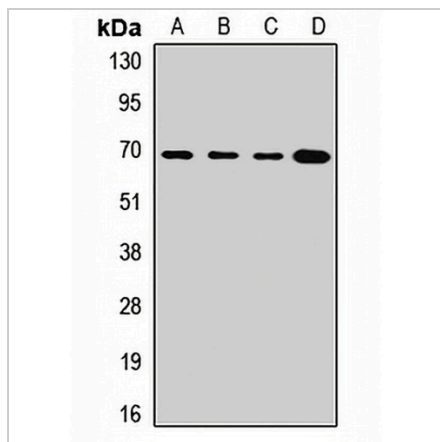
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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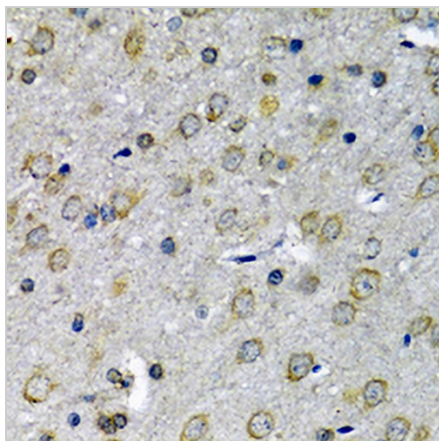
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Western blot analysis of P2RX7 expression in A375 (A), HT29 (B), mouse heart (C), mouse kidney (D) whole cell lysates. (Predicted band size: 14; 31; 35; 41; 49; 58; 68 kD; Observed band size: 65 kD)



Immunohistochemical analysis of P2RX7 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.