

DATASHEET

P2RX7 Mouse Monoclonal Antibody(C2882)

CAT. NO. AMA02494

KEY FEATURES

Target	P2RX7	Source / Host	Mouse
Reactivity	Human	Clonality	Monoclonal
Applications	WB, IHC, FC	Conjugation	Unconjugated
Form / Buffer	Mouse IgG2b. Liquid in PBS, 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	1:100 - 1:500
FC	1:100 - 1:200

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

PRODUCT OVERVIEW

Description	Mouse monoclonal to P2RX7
Specificity	Recognizes endogenous levels of P2RX7 protein
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human P2RX7 expressed in E. Coli
Purification	This antibody is purified through a protein G column.
Molecular Weight	Predicted: 69 kD; Observed: 69 kD
Form/Buffer	Mouse IgG2b. Liquid in PBS, 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)
SwissProt	Q99572(Human)

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

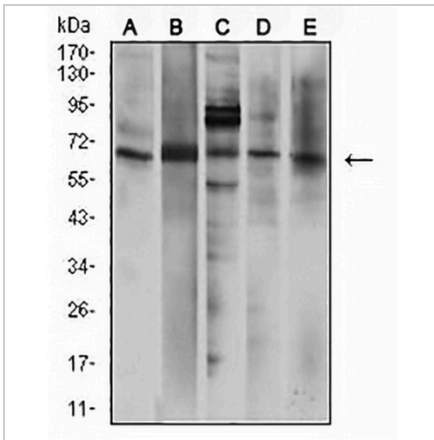
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

DATASHEET

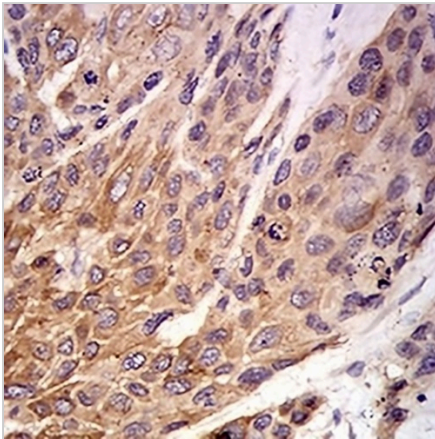
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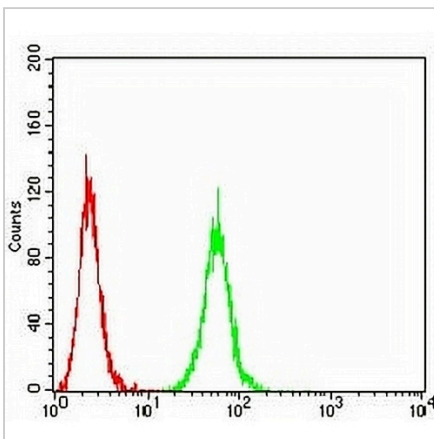
DATA



Western blot analysis of P2RX7 expression in A431 (A), U251 (B), HeLa (C), U937 (D), HepG2 (E) whole cell lysates. (Predicted band size: 69 kD; Observed band size: 69 kD)



Immunohistochemical analysis of P2RX7 staining in human esophageal cancer 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.



Flow cytometric analysis of HeLa cells using Anti-P2RX7 Antibody (green) and negative control (red).

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.