

Mouse Monoclonal Antibody to P2RX7

Purified Mouse Monoclonal Antibody Catalog # AO2457a

Specification

Mouse Monoclonal Antibody to P2RX7 - Product Information

Application E, WB, FC, IHC

Primary Accession
Reactivity
Human
Host
Clonality
Isotype
Calculated MW

Moyse

Q99572
Human
Mouse
Mouse
Mouse
Monoclonal
Mouse IgG2b
C8.6kDa KDa

Description

The product of this gene 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. Multiple alternatively spliced variants have been identified, most of which fit nonsense-mediated decay (NMD) criteria.;

Immunogen

Purified recombinant fragment of human P2RX7 (AA: 226-452) expressed in E. Coli.

Formulation

Purified antibody in PBS with 0.05% sodium azide

Application Note

ELISA: 1/10000; WB: 1/500 - 1/2000; IHC: 1/200 - 1/1000; FCM: 1/200 - 1/400

Mouse Monoclonal Antibody to P2RX7 - Additional Information

Gene ID 5027

Other Names

P2X7

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Mouse Monoclonal Antibody to P2RX7 is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Monoclonal Antibody to P2RX7 - 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:21821797, PubMed:23303206).

Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location

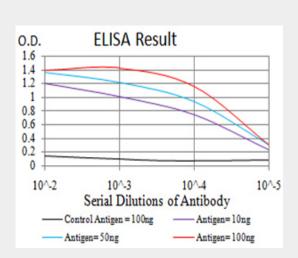
Widely expressed with highest levels in brain and immune tissues.

Mouse Monoclonal Antibody to P2RX7 - Protocols

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

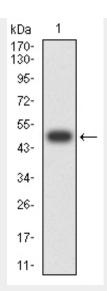
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Mouse Monoclonal Antibody to P2RX7 - Images

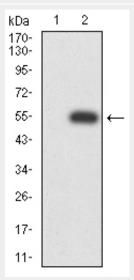


Black line: Control Antigen (100 ng); Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)

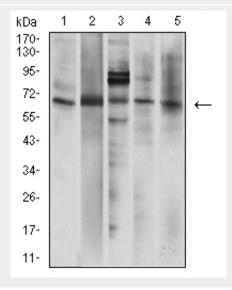




Western blot analysis using P2RX7 mAb against human P2RX7 (AA: 226-452) recombinant protein. (Expected MW is $48.9\ kDa$)

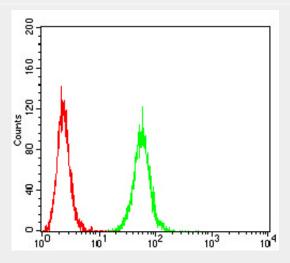


Western blot analysis using P2RX7 mAb against HEK293 (1) and P2RX7 (AA: 226-452)-hlgGFc transfected HEK293 (2) cell lysate.

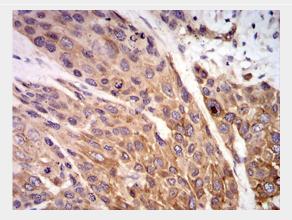




Western blot analysis using P2RX7 mouse mAb against A431 (1), U251 (2), Hela (3), U937 (4), and HepG2 (5) cell lysate.



Flow cytometric analysis of Hela cells using P2RX7 mouse mAb (green) and negative control (red).



Immunohistochemical analysis of paraffin-embedded esophageal cancer tissues using P2RX7 mouse mAb with DAB staining.

Mouse Monoclonal Antibody to P2RX7 - References

1.Cancer Sci. 2015 Sep;106(9):1224-31.; 2.J Hypertens. 2013 Dec;31(12):2362-9.;