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Product Information

Anti-Purinergic Receptor P2Y₁₄ (extracellular)

produced in rabbit, affinity isolated antibody

Catalog Number **P0119**

Product Description

Anti-Purinergic Receptor P2Y₁₄ (extracellular) (GPR105, P2RY14) is produced in rabbit using as immunogen the peptide CIELKSELGRKWHKASN corresponding to residues 172-188 of human P2Y₁₄ located in the second extracellular loop. The antibody is affinity purified on immobilized antigen.

Anti-Purinergic Receptor P2Y₁₄ (extracellular) cross-reacts with human (P2RY14, gene ID: 9934) and rat (P2ry14, gene ID: 171108). Homology with mouse shows that 15 out of 17 residues are identical. The antibody has been used in immunoblotting.

P2Y₁₄ belongs to the P2Y receptor family that is part of the G-protein coupled receptor superfamily. To date eight functional mammalian P2Y receptors have been identified: P2Y₁, P2Y₂, P2Y₄, P2Y₆, P2Y₁₁, P2Y₁₂, P2Y₁₃ and P2Y₁₄. The P2Y receptor family mediates the effects of extracellular nucleotides such as ATP, ADP, UTP, and in the case of P2Y₁₄, UDP-glucose. UDP-glucose, as the other nucleotides, can be released to the extracellular milieu as the result of cell damage or by regulated non-lytic mechanisms. P2Y₁₄ is expressed in several tissues including brain, lung and several cells of hematopoietic origin, such as T lymphocytes and dendritic cells. The exact function of this receptor in the different tissues has not been clearly established, but an involvement in chemotaxis, maturation of immature dendritic cells and neuroimmune regulation has been suggested.

Reagent

Supplied as a lyophilized powder from phosphate buffered saline, pH 7.4, containing 1% BSA and 0.05% sodium azide.

Reconstitution

Reconstitute the lyophilized powder with 50 µL or 200 µL deionized water, depending on package size. Further dilutions should be made using a carrier protein such as BSA (1-3%).

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

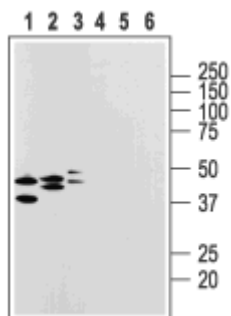
Storage/Stability

Lyophilized powder can be stored intact at room temperature for several weeks. For extended storage, it should be stored at -20 °C or below. The reconstituted solution can be stored at 2-8 °C for up to 2 weeks. For longer storage, freeze in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. Centrifuge before use. Working dilution samples should be discarded if not used within 12 hours. The antibody is stable for at least 12 months when stored appropriately.

Product Profile

Immunoblotting: a recommended working dilution of 1:200 was determined using rat brain and lung lysates, and rat heart membranes.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.



References

1. Chambers, J.K. *et al. J. Biol. Chem.* **275**, 10767 (2000).
2. Abbracchio, M.P. *et al. Trends Pharmacol. Sci.* **24**, 52 (2003).
3. Skelton, L. *et al. J. Immunol.* **171**, 1941 (2003).

AH,PHC 04/07-1

Immunoblot

Lanes 1, 4 rat heart membranes

Lanes 2, 5 rat brain lysates

Lanes 3, 6 rat lung lysates

Lanes 1, 2, 3 Anti- P2Y₁₄ extracellular antibody, 1:200.

Lanes 4, 5, 6 Anti- P2Y₁₄ extracellular antibody,
preincubated with the control peptide antigen

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