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Product Information

Anti-Pyrimidinergic Receptor $P2Y_4$
produced in rabbit, affinity isolated antibody

Catalog Number **P6497**

Product Description

Anti-Pyrimidinergic Receptor $P2Y_4$ is produced in rabbit using as immunogen a synthetic peptide corresponding to the second extracellular loop of human pyrimidinergic receptor $P2Y_4$. The antibody was affinity isolated on immobilized immunogen.

Anti-Pyrimidinergic Receptor $P2Y_4$ specifically recognizes human pyrimidinergic receptor $P2Y_4$ by immunohistochemistry with formalin-fixed, paraffin-embedded tissues. The immunizing peptide has 67% homology with the rat and mouse genes. Other species reactivity has not been confirmed.

The P2Y receptors belong to the G-protein coupled receptors superfamily. They mediate the actions of the extracellular nucleotides (ATP, ADP, UTP AND UDP). Eight functional mammalian P2Y receptors have been described: P2Y1, P2Y2, P2Y4, P2Y6, P2Y11, P2Y12, P2Y13, and the UDP-glucose receptor, now renamed P2Y14.[1-3] Based on their functional coupling to particular G proteins and effector proteins, P2Y receptors can be categorized into two broad classes: five G_q-coupled subtypes (P2Y1, P2Y2, P2Y4, P2Y6, P2Y11) and three G_i-coupled subtypes (P2Y12, P213, P2Y14).[4] P2Y4 expression has been documented in blood, bone, heart, lung, pancreas, placenta, and umbilical cord.

Reagent

Supplied as a solution of 1 mg/ml in phosphate buffered saline, pH 7.7, containing 0.01% sodium azide as a preservative.

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

For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunohistochemistry: a minimum working concentration of 4 μg/ml is determined using human tonsil, neutrophils and macrophages.

Note: In order to obtain best results and assay sensitivities of different techniques and preparations, we recommend determining optimal working dilutions by titration test.

References

1. Queiroz, G., et al., *J. Pharmacol. Exp. Ther*,. **307**, 809 (2003).
2. Ralevic, V. and Burnstock G., *Pharmacol. Rev*., **50**, 413 (1998).
3. Abbracchio, M.P., et al., *Trends. Pharmacol. Sci*,. **24**, 52 (2003).
4. Dubyak, G. R., *Mol. Pharmacol*., **63**, 773-776 (2003).

This product is manufactured by MBL International Corporation.

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