

## Product Information

### Anti-Purinergic Receptor P2Y<sub>6</sub>

produced in rabbit, affinity isolated antibody

Catalog Number **P6622**

#### Product Description

Anti-Purinergic Receptor P2Y<sub>6</sub> is produced in rabbit using as immunogen a synthetic peptide corresponding to the C-terminal of human purinergic receptor P2Y<sub>6</sub>. The antibody was affinity isolated on immobilized immunogen.

Anti-Purinergic Receptor P2Y<sub>6</sub> specifically recognizes human purinergic receptor P2Y<sub>6</sub> by immunohistochemistry with formalin-fixed, paraffin-embedded tissues and by immunocytochemistry. The immunizing peptide has 100% homology with the rat and mouse gene. 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.<sup>1-3</sup> Based on their functional coupling to particular G proteins and effector proteins, P2Y receptors can be categorized into two broad classes: five G<sub>q</sub>-coupled subtypes (P2Y1, P2Y2, P2Y4, P2Y6, P2Y11) and three G<sub>i</sub>-coupled subtypes (P2Y12, P2Y13, P2Y14).<sup>4</sup> P2Y6 expression has been documented in various blood cells, bone marrow, brain, colon, heart, kidney, ovary, placenta, spleen, and thymus. Based on the receptor tissue distribution, the physiological role of the P2Y6 nucleotide receptor may involve cardiovascular, immune and digestive functions.<sup>5</sup> ESTs have been isolated from cervix, embryo, eye, kidney, liver/spleen, placenta, and vessel libraries.

#### 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 and Immunocytochemistry: the minimum working concentration is 3 µg/mL using human placental villi.

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

#### 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).
5. Mamedova, L.K., et al., Biochem Pharmacol., **67**, 1763-1770 (2004).

*This product is manufactured by MBL International Corporation*

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