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Product Information

Anti-Serotonin 5-HT$_7$ Receptor
produced in rabbit, affinity isolated antibody

Catalog Number **S0320**

Product Description

Anti-Serotonin 5-HT$_7$ Receptor is produced in rabbit using as immunogen a synthetic peptide conjugated to KLH. The peptide corresponds to the C-terminal domain of human serotonin 5-HT$_7$ receptor. The antibody is affinity purified using the immunizing peptide immobilized on agarose.

Anti-Serotonin 5-HT$_7$ Receptor specifically recognizes human serotonin 5-HT$_7$ receptor in small intestine by immunohistochemistry with formalin-fixed, paraffin-embedded tissues. The immunizing peptide has 75% homology with the rat gene and 89% homology with the mouse gene. Other species reactivity has not been confirmed.

The monoamine serotonin (5-hydroxytryptamine [5-HT]) mediates its effects in a number of physiological processes, including anxiety, depression, sexual activity and sleep, through interactions with different receptor subtypes.[1] At least 14 mammalian serotonin receptor subtypes have been identified and classified into several families on the basis of common structural, pharmacological and functional criteria.[2] These receptors differ in their tissue and cellular localization, affinity for serotonin and second messenger pathways. The majority of these receptors stimulate a GTP binding protein upon agonist stimulation and couple to adenylate cyclase or phospholipase C. The serotonin 5-HT$_7$ receptor has been implicated in numerous physiological and pathological processes from circadian rhythms to depression and schizophrenia. 5-HT$_7$ Receptor has been reported in aorta, brain, heart, placenta, small intestine, spleen, artery, and vessel. An EST has been isolated from a testis library.

Reagents

Supplied as a solution of 1 mg/mL in phosphate buffered saline containing 0.1% 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 concentration of 11 µg/mL is determined using human small intestine, smooth muscle.

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. Teitler, M. and Herrick-Davis, K., Multiple serotonin receptor subtypes: molecular cloning and functional expression, *Crit. Rev. Neurobiol.*, **8**, 175-188 (1994).
2. Leonard, B.E., Serotonin receptors and their function in sleep, anxiety disorders and depression, *Psychother. Psychosom.*, **65**, 66-75 (1996).

This product is manufactured by MBL International Corporation

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