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Product Information

Anti-H_3 Histamine Receptor
produced in rabbit, affinity isolated antibody

Catalog Number **H7038**

Product Description

Anti-H_3 Histamine Receptor is produced in rabbit using as immunogen a synthetic peptide conjugated to KLH. The peptide corresponds to the third cytoplasmic loop of human H_3 histamine receptor. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-H_3 Histamine Receptor specifically recognizes human H_3 histamine receptor in human brain neurons by immunohistochemistry with formalin-fixed, paraffin-embedded tissues. The immunizing peptide has 88% homology with the mouse and rat genes. Other species reactivity has not been confirmed.

Histamine exerts its actions by at least four distinct receptor subtypes, which are all members of the G-protein coupled receptor (GPCR) family.[1] Widely distributed, these receptors are involved in a variety of physiological and pathophysiological conditions. Histamine H_1 receptors are involved in the pathologic processes of allergy.[2] Histamine H_2 receptors are involved in gastric acid secretion.[3] Originally described as an autoreceptor inhibiting the release of histamine from histaminergic neurons in brain, the H_3 receptors have since been shown to regulate the release of several neurotransmitters in the central and peripheral nervous systems.[1,4] There is experimental evidence that drugs targeted at histamine H_3 receptors could be beneficial for neurodegenerative diseases such as Alzheimer and Parkinson's disease, epilepsy, affective disorders, and for control of feeding, body weight and appetite disorders, among others.[4-7] The H_4 receptor function is less well known, but its presence on a variety of cell types, including peripheral blood mononuclear cells, neutrophils, eosinophils, mast cells, and resting CD4+ cells suggest a role for the H_4 receptor in immune and/or inflammatory modulation.[3]

Reagent

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 working concentration of 18-36 µg/ml is recommended.

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

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4. Alguacil, L.F. and Perez-Garcia, C., Histamine H3 receptor: a potential drug target for the treatment of central nervous system disorders, *Curr. Drug Targets CNS Neurol.Disord*., **2**, 303-313 (2003).

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6. Drutel, G., et al., Identification of Rat H_3 Receptor Isoforms with Different Brain Expression and Signaling Properties, *Mol. Pharmacol*., **59,** 1-8 (2001).
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This product is manufactured by MBL International Corporation.

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