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Product Information

Anti-Rhodopsin
produced in rabbit, affinity isolated antibody

Catalog Number **R9153**

Product Description

Anti-Rhodopsin is produced in rabbit using as immunogen a synthetic peptide conjugated to KLH. The peptide corresponds to the 2nd extracellular loop of human rhodopsin. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

The antibody specifically recognizes human rhodopsin by immunohistochemistry with formalin-fixed, paraffin-embedded tissues. Not tested for other uses. The immunizing peptide has 100% homology with the rat and mouse gene. Other species reactivity has not been confirmed.

Human rhodopsin is a G-protein-coupled receptor and integral membrane protein of the light-absorbing molecules that mediate vision. It consists of a protein, opsin, covalently linked to 11-cis-retinal. Rhodopsin expression has been reported in the rod-shaped photoreceptor cells of the retina. Retinitis pigmentosa is a hereditary disorder of photoreceptor degeneration. Phosphorylation of rhodopsin on multiple phosphorylation sites is necessary for its rapid and reproducible deactivation.

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 at –70 °C. 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 1-3 µg/mL is determined using human retinal tissue

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

References

1. Palczewski, K., et al., Crystal structure of rhodopsin: a G protein-coupled receptor**.** *Science*, **289**, 739-745 (2000).
2. Mendez, A. et al., Rapid and reproducible deactivation of rhodopsin requires multiple phosphorylation sites. *Neuron*, **28**, 153-164 (2000).

This product is manufactured by MBL International.

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