Technical Bulletin

Anti-Glycine Receptor

Produced in rabbit, affinity isolated antibody

G0666

Product Description

Anti-Glycine Receptor is produced in rabbit using as immunogen a KLH-conjugated synthetic peptide from the N-terminus of the human α_1 glycine receptor subunit.

Anti-Glycine Receptor recognizes the α_1 glycine receptor by Western Blotting (~48 kDa) and immunohistochemistry of rat spinal cord and in cell extracts containing the recombinant human glycine receptors. Anti-Glycine Receptor cross-reacts with human α_2 glycine receptor subunits.

Glycine is an important inhibitory neurotransmitter in the mammalian central nervous system, especially in the brainstem and spinal cord. It acts by binding to anion-conducting glycine receptors that belong to the superfamily of ligand-gated ion channels. Glycine receptors were first purified as strychnine binding sites in membrane fractions of adult spinal cord from rats. These strychnine-sensitive binding sites are different from the strychnine-insensitive binding sites found in the N-methyl-D-aspartate (NMDA) subtype of glutamate receptors. Adult glycine receptors are heteromers composed of two subunits of 48 kDa and 58 kDa, denoted as α_1 and β subunits. In contrast to adult receptors, fetal glycine receptors are homomers composed of α_2 subunits.

Reagents

Supplied as a lyophilized powder from 5 mM ammonium bicarbonate.

Preparation Instructions

Reconstitute with 1.0 mL of phosphate buffered saline.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store lyophilized powder at 2-8 °C. After reconstitution, 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

The recommended working dilution is 1:1000 for Western Blotting and Immunohistochemistry.

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

References

1. Rajendra, S. et al. *Pharmacol Ther* **73**, 121-146 (1997).
2. Raymond, L.A., et al. *Nature* **361**, 637-641 (1993).

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