Antibody to Nicotinic Acetylcholine Receptor alpha 1 (mAb 35)
RAT MONOCLONAL

Catalog Number: AB-N36
Quantity: 100 micrograms
Format: Purified on a Protein A column; PBS (0.14 M Sodium Chloride; 0.003 M Potassium Chloride; 0.002 M Potassium Phosphate; 0.01 M Sodium Phosphate; pH
Host: Rat
Isotype: IgG1
Clone: 35
Immunogen: full-length denatured AChRα1

Background:
Nicotinic Acetylcholine Receptors (nAChR) respond to acetylcholine as well as nicotine. This antibody can be used to map structural features on the surface of the acetylcholine molecule relevant to the aspect of its function as a neurotransmitter receptor. Acetylcholine receptor plays a role as an immunogen and antigen in the autoimmune disease Myasthenia Gravis (MG). Anti-nAChR is also useful in the research of Alzheimer's disease and other neurodegenerative diseases.

Specificity and Preparation:
This antibody binds to nicotinic acetylcholine receptors (nAChR) in several species, including human and rat. The antibody was originally raised against the electric organ of Electrophorus electricus and produces experimental autoimmune myasthenia graves. mAb 35 cross-reacts with muscle-type and some neuronal nAChRs. It reacts with a single epitope in α1, α3, and α5 subunits of nAChR.

Usage and Storage:
Applications include immunohistochemistry (1:3000),5 in vivo (20 µg),3 immunocytochemistry (10 nM),2 upregulation of myocytes in vitro (50 µg/ml),1 and receptor affinity purification.4 Store the antibody at 4°C for one year. Avoid repeated freezing and thawing. Gently spin down material before use; 5-10 seconds in a microfuge should be adequate.

References:

For research use only, not for use as a diagnostic. 11/9/07