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 7.4).
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 & 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 gravis. mAb 35 cross-reacts with muscle-type and some neuronal nAChRs. It reacts with a single epitope in a1, a3, and a5 subunits of nAChR.

**Usage:** Applications include immunohistochemistry (1:3000),\(^1\) in vivo (20 µg),\(^2\) immunocytochemistry (10 nM),\(^3\) upregulation of myocytes in vitro (50 µg/ml),\(^4\) and receptor affinity purification.

**Storage:** Store the antibody at 4°C for one year. Avoid repeated freezing and thawing. Gently spin down material 5-10 seconds in a microfuge before use.

**Selected References:**

*To view protocol(s) for this and other products please visit: www.ATSbio.com/library/protocols*