

## Anti-acetylcholine receptor [mAb198] Standard Size Ab00909-13.12

This chimeric human antibody was made using the variable domain sequences of the original Rat IgG2a format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgG4-S228P, Kappa Clone Number: mAb198 Alternative Name(s) of Target: nAchR; Neuronal acetylcholine receptor UniProt Accession Number of Target Protein: P02708 Published Application(s): crystallisation, deplete, IP, WB, ELISA, IHC Published Species Reactivity: Human Immunogen: This antibody was raised by immunising rats with acetylcholine receptor derived from human skeletal muscle.

**Specificity:** This antibody is specific for the main immunogenic region of human acetylcholine receptor, which encompasses residues 67–76 of the extracellular region of the acetylcholine receptor  $\alpha$  subunit. It cross-reacts with acetylcholine receptors from mammalian muscle, including bovine muscle, and from the electric organs of Torpedo rays and Electrophorus electric eels.

**Application Notes:** The specificity of this antibody for the major immunogenic region of human acetylcholine receptor has been confirmed in Western blot and ELISA analysis (Barchan et al, 1998). This antibody cross-links acetylcholine receptors on the muscle surface and promotes their degradation; incubation of AChR-expressing cell lines with mAb198 results in a reduction in AChR (Barchan et al, 1988). Indeed, administration of this antibody to mice is sufficient to induce experimental autoimmune myasthenia gravis (EAMG), a neuromuscular disorder arising from a reduction in available acetylcholine receptors at the NMJ (Asher, 1993).

**Antibody First Published in:** Tzartos et al. Demonstration of a main immunogenic region on acetylcholine receptors from human muscle using monoclonal antibodies to human receptor. FEBS Lett. 1983 Jul 11;158(1):116-8. PMID:6862030

**Note on publication:** Describes the original generation of this antibody, and characterisation of its specificity.

## **Product Form**

**Size:** 200 μg Purified antibody. **Purification:** Protein A affinity purified

Supplied In: PBS with 0.02% Proclin 300.

**Storage Recommendation:** Store at 4°C for up to 3 months. For longer storage, aliquot and store at - 20°C.

**Concentration:** 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.