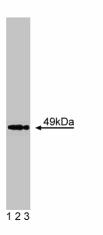
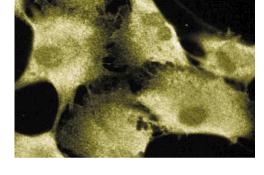
Technical Data Sheet **Purified Mouse Anti-Acetylcholine Receptor α**

Product Information	
Material Number:	610988
Size:	50 µg
Concentration:	250 µg/ml
Clone:	26/Acetylchloine Receptor α
Immunogen:	Rat Acetylcholine Receptor α aa. 332-457
Isotype:	Mouse IgG2a
Reactivity:	QC Testing: Mouse Tested in Development: Rat
Target MW:	49 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and $\leq 0.09\%$ sodium azide.

Description

Acetylcholine is an amine neurotransmitter at the neuromuscular junction. It is released from the presynaptic membrane of a cholinergic synapse into the synaptic cleft. It diffuses across the cleft and binds acetylcholine receptors (AChR) on the postsynaptic membrane. Receptor binding induces postsynaptic membrane depolarization and the generation of an action potential that produces effects such as muscle contraction. The AChR is a 250kDa pentameric complex of four transmembrane subunits in a stoichiometry of $\alpha 2\beta\gamma\delta$. In response to ligand binding, all subunits participate in the formation of an integral cation channel. However, the acetylcholine binding site is primarily within the α subunit. Myasthenia gravis (MG) is an autoimmune condition in which AchR levels are decreased. Autoantibodies bind and crosslink the AchRs leading to their internalization and degradation. This results in a decreased number of functional AChRs. Patients develop muscular weakness and some voluntary muscle fatigue. However, development of MG is also affected by genetic factors. One of the allelic forms of the *AchRa* gene appears to significantly contribute to MG susceptibility.





Western blot analysis of Acetylcholine Receptor a on BC3H1 lysate. Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of Acetylcholine Receptor a. BC3H1

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at -20°C.

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Application Notes

Application

r	Appication		
	Western blot	Routinely Tested	
	Immunofluorescence	Tested During Development	

Product Notices

- 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
- 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

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