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ProductInformation

Monoclonal Anti-Rapsyn, Clone 1234
Purified Mouse Immunoglobulin

Product Number **R 2029**

Product Description

Monoclonal Anti-Rapsyn, Clone 1234, was developed in mouse using whole purified rapsyn from *Torpedo californica* electric organ postsynaptic membrane as the immunogen.

Monoclonal Anti-Rapsyn recognizes rapysn from mouse, rat, chicken, amphibian and fish samples. The antibody detects a 48 kDa protein representing rapsyn from *Torpedo californica* electrocyte cell extracts by immunoblotting.

The protein rapsyn is essential for the formation and maintenance of nicotinic acetylcholine receptors (AchR) at the neuromuscular synapse.[1] Rapsyn is essential for AChR cluster formation, and appears to be involved in AChR stabilization as well as maturation of the neuromuscular junction.[2] Mutations which impair the activity of rapsyn can lead to the formation of congenital myasthenic syndrome (CMS).[3]

Reagent

The antibody is supplied as protein G purified antibody at a concentration of 1 mg/ml in PBS containing 1.0 mg/ml BSA and 0.05 % sodium azide as preservative.

Precautions and Disclaimer

Due to the sodium azide content, a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazards and safe handling.

Storage/Stability

Store at –20 °C. For extended storage, freeze in working aliquots. Avoid repeated freezing and thawing. 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 0.5 µg/ml for immunoblotting and 2 µg/ml for immunofluorescence.

Note: In order to obtain best results and assay sensitivities of different techniques and preparations, determination of optimal working dilutions by titration test is recommended.

References

1. Eckler, S.A., et al., Deletion of N-terminal rapsyn domains disrupts clustering and has dominant negative effects on clustering of full-length rapsyn., Neuroscience, **131**, 661-670 (2005).
2. Banks, G.B., et al., The postsynaptic submembrane machinery at the neuromuscular junction: requirement for rapsyn and the utrophin/dystrophin-associated complex., J. Neurocytol., **32,** 709-26 (2003).
3. Engel, A.G., et al., Sleuthing molecular targets for neurological diseases at the neuromuscular junction., Nat. Rev. Neurosci., **4,** 339-352 (2003).

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