



Product Information

Anti-Muscle-Specific Kinase (529-668)

(MuSK)

Developed in Rabbit, Affinity Isolated Antibody

Product Number **M 6443**

Product Description

Anti-Muscle-Specific Kinase (529-668) was developed in rabbit using a fusion protein containing residues 529-668 from the intracellular domain of rat MuSK as the immunogen. The antibody was affinity purified.

Anti-Muscle-Specific Kinase (529-668) recognizes muscle-specific kinase (MuSK) from mouse and rat tissue samples. It has been successfully used in Western blot, immunofluorescence and immunoprecipitation procedures. By Western blot, this antibody detects an ~110 kDa protein representing MuSK from mouse C2C12 cell lysate. Immunofluorescence staining of MuSK in adult rat gastrocnemius results in staining of cells within the neuromuscular junction.

MuSK has been shown to be specifically expressed in the muscle cells within the neuromuscular junction and plays an important role in the development and architectural maintenance of the neuromuscular junction. It has been shown to be part of the agrin signaling complex, and is the key component that mediates the synapse-inducing role of motoneuron-derived agrin at the neuromuscular junction.¹ MuSK is believed to be involved in seronegative myasthenia gravis, with the discovery of anti-MuSK antibodies, and to a type of congenital myasthenic syndrome.^{2,3}

Reagent

The antibody is supplied as 200 µl of affinity purified antibody in PBS containing 1 mg/ml BSA, 10% glycerol, 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. Centrifuge before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

The recommended working dilution is 1:100 for immunoblotting, and 1:30 for immunofluorescence.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.

References

1. Hoch, W., Molecular dissection of neuromuscular junction formation, *Trends Neurosci.*, **26**, 335-7 (2003).
2. McConville, J. and Vincent, A., Diseases of the neuromuscular junction, *Curr. Opin. Pharmacol.*, **2**, 296-301 (2002).
3. Keeseey, J.C., Clinical evaluation and management of myasthenia gravis, *Muscle Nerve*, **29**, 484-505 (2004).

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