

## Musk Antibody [clone 1429CT456.173.44] (F52966)

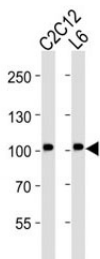
Catalog No.	Formulation	Size
F52966-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F52966-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

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<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Mouse, Rat
<b>Format</b>	Purified
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal (mouse origin)
<b>Isotype</b>	Mouse IgG1, k
<b>Clone Name</b>	1429CT456.173.44
<b>Purity</b>	Purified
<b>UniProt</b>	Q61006
<b>Applications</b>	IHC (Paraffin) : 1:25 Western Blot : 1:2000
<b>Limitations</b>	This Musk antibody is available for research use only.



Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle using Musk antibody at 1:25 dilution.



Western blot analysis of lysate from C2C12, L6 cell line (left to right) using Musk antibody at 1:2000 for each lane.

## Description

Receptor tyrosine kinase which plays a central role in the formation and the maintenance of the neuromuscular junction (NMJ), the synapse between the motor neuron and the skeletal muscle. Recruitment of AGRIN by LRP4 to the MUSK signaling complex induces phosphorylation and activation of MUSK, the kinase of the complex. The activation of MUSK in myotubes regulates the formation of NMJs through the regulation of different processes including the specific expression of genes in subsynaptic nuclei, the reorganization of the actin cytoskeleton and the clustering of the acetylcholine receptors (AChR) in the postsynaptic membrane. May regulate AChR phosphorylation and clustering through activation of ABL1 and Src family kinases which in turn regulate MUSK. DVL1 and PAK1 that form a ternary complex with MUSK are also important for MUSK-dependent regulation of AChR clustering. May positively regulate Rho family GTPases through FNTA. Mediates the phosphorylation of FNTA which promotes prenylation, recruitment to membranes and activation of RAC1 a regulator of the actin cytoskeleton and of gene expression. Other effectors of the MUSK signaling include DNAJA3 which functions downstream of MUSK. May also play a role within the central nervous system by mediating cholinergic responses, synaptic plasticity and memory formation.

## Application Notes

Titration of the Musk antibody may be required due to differences in protocols and secondary/substrate sensitivity.

## Immunogen

This mouse Musk antibody was produced from a mouse immunized with recombinant protein from a mouse Musk.

## Storage

Aliquot the Musk antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw cycles.