

Datasheet for ABIN3031880

**anti-MUSK antibody**

3 Images

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## Overview

Quantity:	0.4 mL
Target:	MUSK
Reactivity:	Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This MUSK antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC)

## Product Details

Immunogen:	This mouse Musk antibody was produced from a mouse immunized with recombinant protein from a mouse Musk.
Clone:	1429CT456-173-44
Isotype:	IgG1 kappa
Purification:	Purified

## Target Details

Target:	MUSK
Alternative Name:	Musk ( <a href="#">MUSK Products</a> )
Background:	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

## Target Details

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.

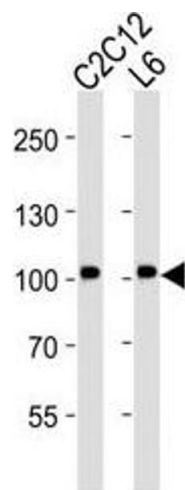
UniProt:	<a href="#">Q61006</a>
Pathways:	<a href="#">RTK Signaling</a> , <a href="#">Regulation of Muscle Cell Differentiation</a> , <a href="#">Synaptic Membrane</a> , <a href="#">Regulation of Cell Size</a> , <a href="#">Skeletal Muscle Fiber Development</a>

## Application Details

Application Notes:	Titration of the Musk antibody may be required due to differences in protocols and secondary/substrate sensitivity.\. IHC (Paraffin): 1:25,Western blot: 1?2000
Restrictions:	For Research Use only

## Handling

Format:	Liquid
Buffer:	In 1X PBS pH 7.4 with 0.09 % sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Aliquot the Musk antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw cycles.



#### Western Blotting

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



#### Immunohistochemistry

**Image 2.** Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle using Musk antibody at 1:25 dilution.



#### Immunohistochemistry

**Image 3.** Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle using Musk antibody at 1:25 dilution.