Datasheet for ABIN6242455

anti-MUSK antibody (AA 600-860)

2 Images

Go to Product page

Overview

Quantity:	400 µL
Target:	MUSK
Binding Specificity:	AA 600-860
Reactivity:	Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This MUSK antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	This mouse Musk antibody is generated from a mouse immunized with recombinant protein from mouse Musk.
Clone:	1429CT456-173-44
Isotype:	IgG1 kappa
Purification:	This antibody is purified through a protein G column, followed by dialysis against PBS.

Target Details

Target:	MUSK
Alternative Name:	Musk (MUSK Products)
Background:	Receptor tyrosine kinase which plays a central role in the formation and the maintenance of the

Target Details

	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.
Molecular Weight:	96693
UniProt:	Q61006
Pathways:	RTK Signaling, Regulation of Muscle Cell Differentiation, Synaptic Membrane, Regulation of Cell Size, Skeletal Muscle Fiber Development

Application Details

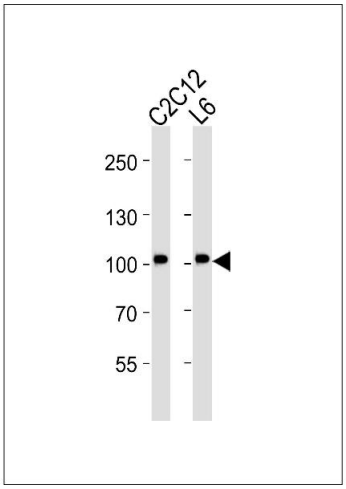
Application Notes:	WB: 1:2000. IHC-P: 1:25
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	Purified monoclonal antibody supplied in PBS with 0.09 % (W/V) 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:	4 °C,-20 °C
Expiry Date:	6 months

Immunohistochemistry (Paraffin-embedded Sections)

Image 1. Immunohistochemical analysis of paraffin-embedded M. skeletal muscle section using Musk Antibody (ABIN6242455 and ABIN6577083). (ABIN6242455 and ABIN6577083) was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.



Western Blotting

Image 2. Western blot analysis of lysates from C2C12, L6 cell line (from left to right), using Musk Antibody (ABIN6242455 and ABIN6577083). (ABIN6242455 and ABIN6577083) was diluted at 1:2000 at each lane. A goat anti-mouse IgG H&L(HRP) at 1:3000 dilution was used as the secondary antibody. Lysates at 20 µg per lane.