

#### Anti-MUSK Reference Antibody (Argenx patent anti-MuSK) Recombinant Antibody Catalog # APR10989

# Specification

# Anti-MUSK Reference Antibody (Argenx patent anti-MuSK) - Product Information

Application Primary Accession Reactivity Clonality Isotype Calculated MW FC, E, FTA <u>O15146</u> Human, Mouse Monoclonal IgG1 145 KDa

## Anti-MUSK Reference Antibody (Argenx patent anti-MuSK) - Additional Information

Target/Specificity MUSK

**Endotoxin** < 0.001EU/ μg,determined by LAL method.

Conjugation Unconjugated

Expression system CHO Cell

Format

Purified monoclonal antibody supplied in PBS, pH6.0, without preservative. This antibody is purified through a protein A column.

## Anti-MUSK Reference Antibody (Argenx patent anti-MuSK) - Protein Information

Name MUSK

#### Function

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 (PubMed:<a href="http://www.uniprot.org/citations/25537362" target="\_blank">25537362</a>). 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 (By similarity).

#### **Cellular Location**

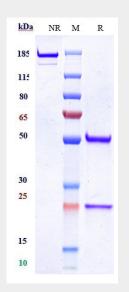
Postsynaptic cell membrane; Single-pass type I membrane protein. Note=Colocalizes with acetylcholine receptors (AChR) to the postsynaptic cell membrane of the neuromuscular junction

## Anti-MUSK Reference Antibody (Argenx patent anti-MuSK) - Protocols

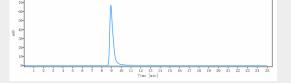
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

#### Anti-MUSK Reference Antibody (Argenx patent anti-MuSK) - Images



Anti-MUSK Reference Antibody (Argenx patent anti-MuSK) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



The purity of Anti-MUSK Reference Antibody (Argenx patent anti-MuSK) is more than 95% , determined by SEC-HPLC.