Datasheet for ABIN5709979
MUSK Protein (AA 24-495, Extracellular) (GST tag)
1 Image


## Overview

| Quantity: | $100 \mu \mathrm{~g}$ |
| :--- | :--- |
| Target: | MUSK |
| Protein Characteristics: | Extracellular, AA 24-495 |
| Origin: | Human |
| Source: | Escherichia coli (E. coli) |
| Protein Type: | This MUSK protein is labelled with GST tag. |
| Purification tag / Conjugate: | SDS-PAGE (SDS) |
| Application: |  |

Product Details

Sequence:
LPKAPVITTP LETVDALVEE VATFMCAVES YPQPEISWTR NKILIKLFDT RYSIRENGQL LTILSVEDSD DGIYCCTANN GVGGAVESCG ALQVKMKPKI TRPPINVKII EGLKAVLPCT TMGNPKPSVS WIKGDSPLRE NSRIAVLESG SLRIHNVQKE DAGQYRCVAK NSLGTAYSKV VKLEVEEESE PEQDTKVFAR ILRAPESHNV TFGSFVTLHC TATGIPVPTI TWIENGNAVS SGSIQESVKD RVIDSRLQLF ITKPGLYTCI ATNKHGEKFS TAKAAATISI AEWREYCLAV KELFCAKEWL VMEEKTHRGL YRSEMHLLSV PECSKLPSMH WDPTACARLP HLAFPPMTSS KPSVDIPNLP SSSSSSSFSVS PTYSMTVIIS IMSSFAIFVL LTITTLYCCR RRKQWKNKKR ESAAVTLTTL PSELLLDRLH PNPMYQRMPL LLNPKLLSLE YPRNNIEYVR DI

| Purification: | SDS-PAGE |
| :--- | :--- |
| Purity: | $>90 \%$ |


| Target: | MUSK |
| :---: | :---: |
| Alternative Name: | MUSK (MUSK Products) |
| 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 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 mbrane. 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 mbranes 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 syst by mediating cholinergic responses, synaptic plasticity and mory formation . 1 Publication |
| Molecular Weight: | 79.9 kDa |
| UniProt: | 015146 |
| Pathways: | RTK Signaling, Regulation of Muscle Cell Differentiation, Synaptic Membrane, Regulation of Cell Size, Skeletal Muscle Fiber Development |
| Application Details |  |
| Application Notes: | Optimal working dilution should be determined by the investigator. |
| Restrictions: | For Research Use only |
| Handling |  |
| Format: | Liquid |
| Concentration: | $0.1-2 \mathrm{mg} / \mathrm{mL}$ |
| Buffer: | 20 mM Tris-HCl based buffer, pH 8.0 |
| Storage: | $-80^{\circ} \mathrm{C}, 4^{\circ} \mathrm{C},-20^{\circ} \mathrm{C}$ |

116 kDa
66.2 kDa
45 kDa
35 kDa
25 kDa
$18 . \mathrm{kDa}$
14.4 kDa

## SDS-PAGE

## Image 1.

35 kDa

25 kDa
18. kDa
14.4 kDa

