abcam

Product datasheet

Recombinant human MUSK protein ab71693

5 Images

Description

Product name Recombinant human MUSK protein

Biological activity Specific activity is 6.7 nmol/min/mg.

Purity > 85 % Densitometry.

Affinity purified.

Expression system Baculovirus infected Sf9 cells

Accession <u>O15146-1</u>

Protein length Protein fragment

Animal free No

Nature Recombinant

Species Human

Predicted molecular weight 63 kDa

Amino acids 519 to 869

Tags GST tag N-Terminus

Additional sequence information Recombinant fragment from human MUSK, cytoplasmic domain, amino acids 519-end.

Specifications

Our Abpromise guarantee covers the use of ab71693 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications SDS-PAGE

Functional Studies

Form Liquid

Additional notes <u>ab64311</u> (Myelin Basic Protein protein) can be utilized as a substrate for assessing kinase

activity

Preparation and Storage

Stability and Storage Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 7.50

Constituents: 0.0038% EGTA, 0.00174% PMSF, 0.00385% DTT, 0.79% Tris HCl, 0.00292%

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This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

Function Receptor tyrosine kinase that is a key mediator of agrin's action and is involved in neuromuscular

junction (NMJ) organization.

Involvement in diseaseDefects in MUSK is a cause of congenital myasthenic syndrome with acetylcholine receptor

deficiency (CMS-ACHRD) [MIM:608931]. A post-synaptic congenital myasthenic syndrome. Mutations underlying AChR deficiency cause a 'loss of function' and show recessive inheritance. Note=MUSK mutations lead to decreased agrin-dependent AChR aggregation, a critical step in

the formation of the neuromuscular junction.

Sequence similaritiesBelongs to the protein kinase superfamily. Tyr protein kinase family.

Contains 1 FZ (frizzled) domain.

Contains 3 lg-like C2-type (immunoglobulin-like) domains.

Contains 1 protein kinase domain.

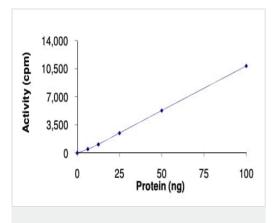
Post-translational modifications

Ubiquitinated by PDZRN3. Ubiquitination promotes endocytosis and lysosomal degradation.

Cellular localization

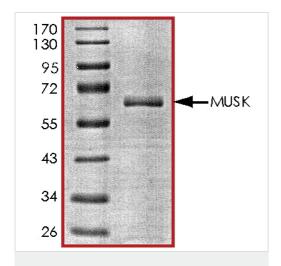
Membrane.

Images



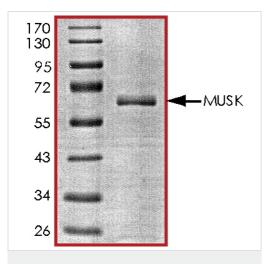
Functional Studies - Recombinant human MUSK protein (ab71693)

The specific activity of MUSK (ab71693) was determined to be 6 nmol/min/mg as per activity assay protocol



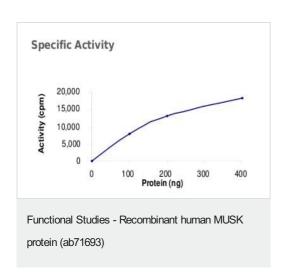
SDS PAGE analysis of ab71693

SDS-PAGE - Recombinant human MUSK protein (ab71693)



SDS PAGE analysis of ab71693

SDS-PAGE - Recombinant human MUSK protein (ab71693)





Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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