abcam

Product datasheet

Recombinant Human ITGA7 protein ab114551

1 图像

描述

产品名称 重组人ITGA7蛋白

表达系统 Wheat germ

Accession Q13683

蛋白长度 Protein fragment

无动物成分 No

性质 Recombinant

种属 Human

序列 SHEVSIAPRSIDLEQPNCAGGHSVCVDLRVCFSYIAVPSSYS

PTVALDYV

LDADTDRRLRGQVPRVTFLSRNLEEPKHQASGTVWLKHQHDR

VCGDAMFQ

预测分子量 37 kDa including tags

氨基酸 478 to 577

技术指标

Our Abpromise guarantee covers the use of ab114551 in the following tested applications.

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

应用 Western blot

ELISA

SDS-PAGE

形式 Liquid

补充说明

制备和贮存

稳定性和存储 Shipped on dry ice. Upon delivery aliquot and store at -80℃. Avoid freeze / thaw cycles.

pH: 8.00

Constituents: 0.3% Glutathione, 0.79% Tris HCI

1

常规信息

功能

Integrin alpha-7/beta-1 is the primary laminin receptor on skeletal myoblasts and adult myofibers. During myogenic differentiation, it may induce changes in the shape and mobility of myoblasts, and facilitate their localization at laminin-rich sites of secondary fiber formation. It is involved in the maintenance of the myofibers cytoarchitecture as well as for their anchorage, viability and functional integrity. Isoform Alpha-7X2B and isoform Alpha-7X1B promote myoblast migration on laminin 1 and laminin 2/4, but isoform Alpha-7X1B is less active on laminin 1 (In vitro). Acts as Schwann cell receptor for laminin-2. Acts as a receptor of COMP and mediates its effect on vascular smooth muscle cells (VSMCs) maturation (By similarity). Required to promote contractile phenotype acquisition in differentiated airway smooth muscle (ASM) cells.

组织特异性

Isoforms containing segment A are predominantly expressed in skeletal muscle. Isoforms containing segment B are abundantly expressed in skeletal muscle, moderately in cardiac muscle, small intestine, colon, ovary and prostate and weakly in lung and testes. Isoforms containing segment X2D are expressed at low levels in fetal and adult skeletal muscle and in cardiac muscle, but are not detected in myoblasts and myotubes. In muscle fibers isoforms containing segment A and B are expressed at myotendinous and neuromuscular junctions; isoforms containing segment C are expressed at neuromuscular junctions and at extrasynaptic sites. Isoforms containing segments X1 or X2 or, at low levels, X1X2 are expressed in fetal and adult skeletal muscle (myoblasts and myotubes) and cardiac muscle.

疾病相关

Defects in ITGA7 are the cause of muscular dystrophy congenital due to integrin alpha-7 deficiency (MDCI) [MIM:613204]. A form of congenital muscular dystrophy. Patients present at birth, or within the first few months of life, with hypotonia, muscle weakness and often with joint contractures.

序列相似性

Belongs to the integrin alpha chain family.

Contains 7 FG-GAP repeats.

发展阶段

In renewing intestinal epithelium, expression of isoforms containing segment B correlates with the

onset of enterocytic differentiation.

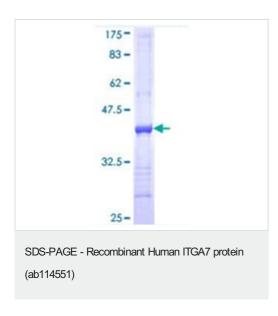
翻译后修饰

ADP-ribosylated on at least two sites of the extracellular domain in skeletal myotubes. A 70 kDa form is created by proteolytic cleavage. Cleavage is elevated during myogenic differentiation and the cleaved form enhances cell adhesion and spreading on laminin.

细胞定位

Membrane.

图片



12.5% SDS-PAGE Stained with Coomassie Blue showing ab114551.

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