

ITGA7 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18839A

Specification

ITGA7 Antibody (N-term) - Product Information

Application	WB, E
Primary Accession	Q13683
Other Accession	Q61738 , NP_002197.2
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Calculated MW	128948
Antigen Region	229-257

ITGA7 Antibody (N-term) - Additional Information

Gene ID 3679

Other Names

Integrin alpha-7, Integrin alpha-7 heavy chain, Integrin alpha-7 light chain, Integrin alpha-7 70 kDa form, ITGA7

Target/Specificity

This ITGA7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 229-257 amino acids from the N-terminal region of human ITGA7.

Dilution

WB~1:1000

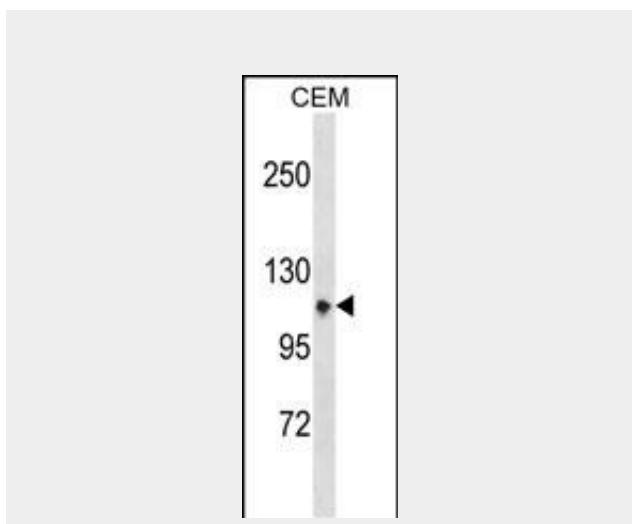
Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions



ITGA7 Antibody (N-term)(Cat. #AP18839a) western blot analysis in CEM cell line lysates (35ug/lane). This demonstrates the ITGA7 antibody detected the ITGA7 protein (arrow).

ITGA7 Antibody (N-term) - Background

The protein encoded by this gene belongs to the integrin alpha chain family. Integrins are heterodimeric integral membrane proteins composed of an alpha chain and a beta chain. They mediate a wide spectrum of cell-cell and cell-matrix interactions, and thus play a role in cell migration, morphologic development, differentiation, and metastasis. This protein functions as a receptor for the basement membrane protein laminin-1. It is mainly expressed in skeletal and cardiac muscles and may be involved in differentiation and migration processes during myogenesis. Defects in this gene are associated with congenital myopathy. Alternatively spliced transcript variants encoding different isoforms have been noted for this gene.

ITGA7 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ITGA7 Antibody (N-term) - Protein Information

Name ITGA7

Function

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.

Cellular Location

Membrane; Single-pass type I membrane protein.

Tissue Location

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

ITGA7 Antibody (N-term) - References

- Liu, C.Y., et al. *Carcinogenesis* 31(7):1259-1263(2010)
Han, Y.C., et al. *Cancer Res.* 70(11):4375-4384(2010)
Rooney, J.E., et al. *Proc. Natl. Acad. Sci. U.S.A.* 106(19):7991-7996(2009)
Liu, J., et al. *J. Biol. Chem.* 283(51):35668-35678(2008)
Tran, T., et al. *Am. J. Respir. Cell Mol. Biol.* 37(6):668-680(2007)

cardiac muscle

ITGA7 Antibody (N-term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)