

### ITGA7 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21366b

### **Specification**

## ITGA7 Antibody (C-term) - Product Information

Application WB,E
Primary Accession Q13683
Reactivity Human
Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Calculated MW 128948

## ITGA7 Antibody (C-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 a rabbit immunized with a KLH conjugated synthetic peptide between 1149-1181 amino acids from the C-terminal region of human ITGA7.

#### **Dilution**

WB~~1:2000

#### **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 (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### ITGA7 Antibody (C-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 a 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**

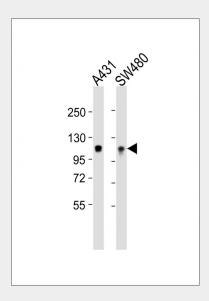
Isoforms containing segment A are predominantly expressed in skeletal muscle. Isoforms containing segment B are abundantly expressed in skeletal muscle, moderately in cardiac muscle, small intestine, colon, ovary and prostate and weakly in lung and testes. Isoforms containing segment X2D are expressed 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 cardiac muscle

### ITGA7 Antibody (C-term) - Protocols

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

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

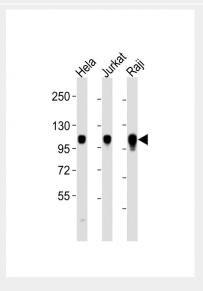
### ITGA7 Antibody (C-term) - Images



All lanes: Anti-ITGA7 Antibody (C-term) at 1:8000 dilution Lane 1: A431 whole cell lysates Lane 2:



SW480 whole cell lysates Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 129 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



All lanes : Anti-ITGA7 Antibody (C-term) at 1:2000 dilution Lane 1: Hela whole cell lysates Lane 2: Jurkat whole cell lysates Lane 3: Raji whole cell lysates Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 129 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

## ITGA7 Antibody (C-term) - Background

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.

### ITGA7 Antibody (C-term) - References

Leung E., et al. Biochem. Biophys. Res. Commun. 243:317-325(1998). Hayashi Y.K., et al. Nat. Genet. 19:94-97(1998). Vizirianakis I.S., et al. Submitted (JUN-1998) to the EMBL/GenBank/DDBJ databases. Vignier N., et al. Biochem. Biophys. Res. Commun. 260:357-364(1999). Clark H.F., et al. Genome Res. 13:2265-2270(2003).

### ITGA7 Antibody (C-term) - Citations

• Integrin  $\alpha$ 7 is a functional cancer stem cell surface marker in oesophageal squamous cell carcinoma.