

ITGA7 / Integrin Alpha 7 Antibody (clone 3C12)
Mouse Monoclonal Antibody
Catalog # ALS16305

Specification

ITGA7 / Integrin Alpha 7 Antibody (clone 3C12) - Product Information

Application	IHC
Primary Accession	O13683
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Calculated MW	129kDa KDa

ITGA7 / Integrin Alpha 7 Antibody (clone 3C12) - 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

Mouse ITGA7

Reconstitution & Storage

Store at -20°C.

Precautions

ITGA7 / Integrin Alpha 7 Antibody (clone 3C12) is for research use only and not for use in diagnostic or therapeutic procedures.

ITGA7 / Integrin Alpha 7 Antibody (clone 3C12) - 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

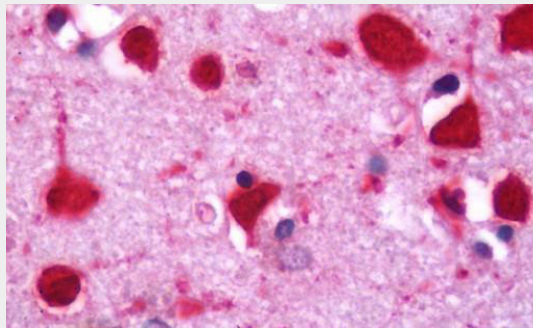
Isoforms containing segment A are predominantly expressed in skeletal muscle. Isoforms containing segment B are abundantly expressed in skeletal muscle, moderately in cardiac muscle, small intestine, colon, ovary and prostate and weakly in lung and testes. Isoforms containing segment X2D are expressed 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 / Integrin Alpha 7 Antibody (clone 3C12) - 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](#)

ITGA7 / Integrin Alpha 7 Antibody (clone 3C12) - Images



Human Brain, Cortex: Formalin-Fixed, Paraffin-Embedded (FFPE)

ITGA7 / Integrin Alpha 7 Antibody (clone 3C12) - 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 / Integrin Alpha 7 Antibody (clone 3C12) - 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).