

ITGA7 Blocking Peptide (N-term)

Synthetic peptide

Catalog # BP21359a

Specification**ITGA7 Blocking Peptide (N-term) - Product Information**Primary Accession [Q13683](#)**ITGA7 Blocking Peptide (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

The synthetic peptide sequence is selected from aa 247-259 of HUMAN ITGA7

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ITGA7 Blocking Peptide (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

ITGA7 Blocking Peptide (N-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 Blocking Peptide (N-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).

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 cardiac muscle

ITGA7 Blocking Peptide (N-term) - Protocols

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

- [Blocking Peptides](#)