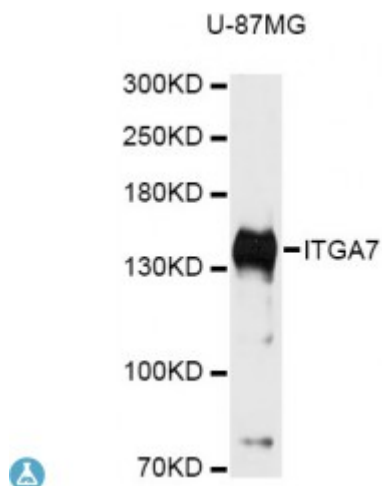


Anti-ITGA7 Antibody



Description

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.

Model	STJ116459
Host	Rabbit
Reactivity	Human
Applications	WB
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 880-1020 of human ITGA7 (NP_002197.2).
Gene ID	3679
Gene Symbol	ITGA7
Dilution range	WB 1:500 - 1:2000
Tissue Specificity	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 n

Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	Integrin alpha-7
Molecular Weight	128.948 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:6143 OMIM:600536 Reactome:R-HSA-216083
Alternative Names	Integrin alpha-7
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 , Required to promote contractile phenotype acquisition in differentiated airway smooth muscle (ASM) cells,
Cellular Localization	Membrane
Post-translational Modifications	ADP-ribosylated on at least two sites of the extracellular domain in skeletal myotubes,