

Anti-ITGA7 Antibody (N-term)

Catalog Number: M03267

About ITGA7

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.

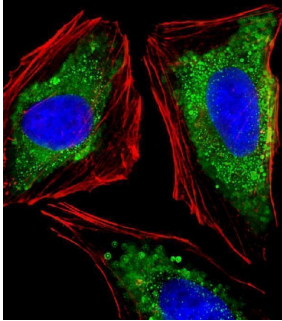
Overview

Product Name	Anti-ITGA7 Antibody (N-term)
Reactive Species	Human
Description	Boster Bio Anti-ITGA7 Antibody (N-term) (Catalog # M03267). Tested in WB, Flow Cytometry, IHC-P, IF application(s). This antibody reacts with Human.
Application	Flow Cytometry, IF, IHC-P, WB
Clonality	Polyclonal
Formulation	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.
Storage Instructions	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.
Host	Rabbit
Uniprot ID	Q13683

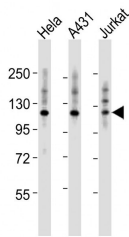
Technical Details

Immunogen	This ITGA7 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 247-279 amino acids from the N-terminal region of human ITGA7.
Predicted Reactive Species	Bovine, Chicken, Horse, Monkey, Pig, Sheep, Xenopus
Isotype	Rabbit IgG
Purification	This antibody is purified through a protein A column, followed by peptide affinity purification.
Suggested Dilutions	IF: 1:25 WB: 1:4000 IHC-P: 1:25 FC: 1:25

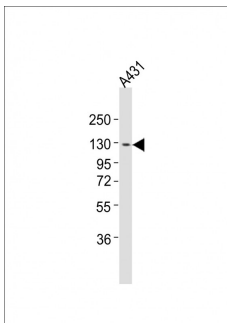
Anti-ITGA7 Antibody (N-term) (M03267) Images



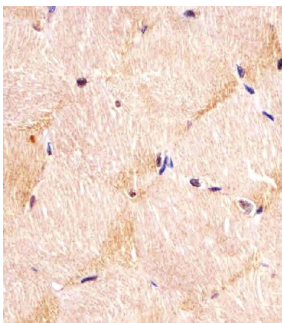
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (human cervical epithelial adenocarcinoma cell line) cells labeling ITGA7 with M03267 at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-rabbit IgG secondary antibody at 1/200 dilution (green). Immunofluorescence image showing vesicles, cytoplasm and weakly nucleus staining on HeLa cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin at 1/100 dilution (red). The nuclear counter stain is DAPI (blue).



All lanes : Anti-ITGA7 Antibody (N-term) at 1:2000 dilution
Lane 1: HeLa whole cell lysates
Lane 2: A431 whole cell lysates
Lane 3: Jurkat whole cell lysates
Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution
Predicted band size : 129 kDa
Blocking/Dilution buffer: 5% NFDN/TBST.

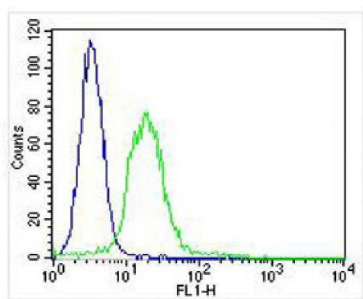


Anti-ITGA7 Antibody (N-term) at 1:4000 dilution + A431 whole cell lysates
Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution
Predicted band size : 129 kDa
Blocking/Dilution buffer: 5% NFDN/TBST.



M03267 staining ITGA7 in human skeletal muscle sections by Immunohistochemistry (IHC-P -paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

Overlay histogram showing U-2 OS cells stained with M03267 (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (M03267, 1:25 dilution) for 60 min at 37°C. The secondary antibody used



was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed at 1/400 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG (1g/1x10⁶ cells) used under the same conditions. Acquisition of >10,000 events was performed.

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