abcam

ab30497

PE Anti-Integrin alpha 6 antibody [450-30A]

Anti-Integrin alpha 6 antibody [450-30A] conjugated to PE - suitable for flow cytometry, and reacts with human samples. Clone [450-30A] is a mouse monoclonal antibody cited in 14 publications.

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Key facts

Isotype	IgG1
Host species	Mouse
Conjugation	PE
Excitation/Emission	Ex: 480;565nm, Em: 578nm
Storage buffer	pH: 7.4 Preservative: 0.09% Sodium azide Constituents: PBS, 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Native Full Length Protein corresponding to Human ITGA6. Database link P23229
Clone number	450-30A
Purification technique	Affinity purification Protein G

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	10 µL for 10^6 Cells

Notes	ab91357 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target data

See full target information ITGA6

Function	Integrin alpha-6/beta-1 (ITGA6:ITGB1) is a receptor for laminin on platelets (By similarity). Integrin alpha-6/beta-1 (ITGA6:ITGB1) is present in oocytes and is involved in sperm-egg fusion (By similarity). Integrin alpha-6/beta-4 (ITGA6:ITGB4) is a receptor for laminin in epithelial cells and it plays a critical structural role in the hemidesmosome (By similarity). ITGA6:ITGB4 binds to NRG1 (via EGF domain) and this binding is essential for NRG1-ERBB signaling (PubMed:20682778). ITGA6:ITGB4 binds to IGF1 and this binding is essential for IGF1 signaling (PubMed:22351760). ITGA6:ITGB4 binds to IGF2 and this binding is essential for IGF2 signaling (PubMed:28873464).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Integrin alpha 6 also known as ITGA6 or CD49f functions as a transmembrane receptor protein involved in cell adhesion and signal transduction. As part of the broader integrin family integrin alpha 6 typically pairs with the beta 1 or beta 4 subunits forming the alpha6beta1 or alpha6beta4 integrins respectively. It has a molecular mass of approximately 150 kDa. This protein is mainly expressed in epithelial cells but also found in platelets certain immune cells and in the nervous system. Its expression patterns highlight its role in a variety of cellular and tissue functions.
Biological function summary	The integrin alpha 6 protein partners with the beta 4 subunit to form a heterodimer complex that plays an important role in cellular adhesion to the extracellular matrix specifically interacting with laminins. Its main action helps cells attach to the basement membrane which is an important component of epithelial tissue structure and integrity. The alpha 6 integrin provides structural cell support and participates in transmitting signals that influence cell behavior such as movement survival and proliferation.

Pathways	Integrins including the alpha 6 variant are important components in the integrin signaling pathway and are involved in cell motility and survival pathways. In particular the alpha 6 integrin partners with proteins like focal adhesion kinase (FAK) and phosphoinositide 3-kinase (PI3K) to initiate downstream signaling cascades. The interaction with laminins activates pathways critical for developmental processes and tissue remodeling highlighting their role in maintaining cellular environments.
Associated diseases and disorders	Integrin alpha 6 has significant implications in cancer progression and skin blistering disorders. In various cancers such as breast and skin cancers upregulation of integrin alpha 6 promotes tumor growth and metastasis through interaction with proteins like collagen and laminins found in the tumor microenvironment. Furthermore in the context of blistering disorders such as epidermolysis bullosa mutations in the beta 4 subunit that pairs with alpha 6 can disrupt the integrity of epithelial tissues leading to severe impact on the skin's structural stability.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

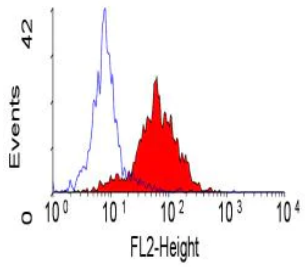
We do not recommend this combination. It is not covered by our product promise.

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In the unlikely event of one of our products not working as expected, you are covered by our product promise.

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1 product image



Flow Cytometry - PE Anti-Integrin alpha 6 antibody [450-30A] (ab30497)

Integrin alpha 6 Flow Cytometry staining using mouse Anti-Integrin alpha 6 antibody

Flow cytometric analysis of peripheral blood monocytes with 10µl for 10^6 cells of anti human Integrin alpha 6 Phycoerythrin conjugated (ab30497).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.