abcam

ab30487

Anti-Integrin alpha 2 antibody [AK7]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Preservative: 0.09% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Clone number	AK7
Purification technique	Affinity purification Protein G
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1/50 - 1/100
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

IHC-P

Not recommended

Species	Human
Dilution info	-
Notes	-

Target data

See full target information ITGA2

Function	Integrin alpha-2/beta-1 is a receptor for laminin, collagen, collagen C-propeptides, fibronectin and E-cadherin. It recognizes the proline-hydroxylated sequence G-F-P-G-E-R in collagen. It is responsible for adhesion of platelets and other cells to collagens, modulation of collagen and collagenase gene expression, force generation and organization of newly synthesized extracellular matrix. (Microbial infection) Integrin ITGA2:ITGB1 acts as a receptor for Human rotavirus A. (Microbial infection) Integrin ITGA2:ITGB1 acts as a receptor for Human echoviruses 1 and 8.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot

Supplementary info

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

Activity summary	Integrin alpha 2 also known as CD49b ITGA2 and A2 is a protein that functions as part of the integrin family. Integrins are transmembrane receptors that facilitate cell-extracellular matrix adhesion. Integrin alpha 2 has a molecular mass of approximately 130 kDa and is widely expressed in epithelial cells fibroblasts and platelets. This protein is important for mediating adhesion between cells and the extracellular matrix affecting cell signaling and behavior. Through this adhesion cells can communicate with their environment adjusting their functions accordingly.

Biological function summary	Integrin alpha 2 plays a significant role in cellular processes like migration and proliferation. It forms a heterodimer complex by pairing with the beta 1-integrin subunit contributing to its adhesive and signaling functions. This association enables the integrin alpha 2 complex to bind specific extracellular matrix components such as collagen and laminin. Through these interactions it regulates processes like wound healing and tissue remodeling and affects how cells respond to mechanical stress.
Pathways	Integrin alpha 2 is involved in major signaling routes that influence cell fate and movement. Notably it participates in the PI3K/AKT and MAPK pathways which are important for regulating cell growth and survival. It interacts with signaling proteins like focal adhesion kinase (FAK) and Src family kinases linking extracellular matrix changes to intracellular responses. These pathways help in transmitting signals that coordinate the cell's structural and functional adjustments in response to its surroundings.
Associated diseases and disorders	Integrin alpha 2 has connections to cancer and fibrosis. In cancers its altered expression may contribute to tumor progression and metastasis often involving interactions with other integrins and matrix metalloproteinases that degrade extracellular components. In fibrosis excessive integrin alpha 2 activity can lead to abnormal tissue remodeling and scarring implicating its role alongside collagen-producing cells. Understanding these connections is vital for developing therapies targeting integrin-mediated pathways in these diseases.

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

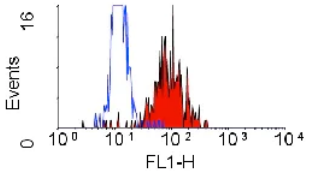
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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

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Terms & Conditions.

1 product image



Flow Cytometry - Anti-Integrin alpha 2 antibody [AK7] (ab30487)

Integrin alpha 2 Flow Cytometry staining using mouse Anti-Integrin alpha 2 antibody

Staining of human peripheral blood monocytes with MOUSE ANTI HUMAN CD49b (ab30487).

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