abcam

ab34445

Anti-Integrin alpha 1 antibody [TS2/7]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	pH: 7.4 Preservative: 0.09% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Cell preparation containing ITGA1 protein. The exact immunogen used to generate this antibody is proprietary information. Database link P56199
Clone number	TS2/7
Purification technique	Affinity purification Protein G
Specificity	ab34445 recognises alpha 1 integrin subunit.
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from tissue culture supernatant.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1/25 - 1/50
Notes	Use 10µl of the suggested working dilution to label 10^6 cells in 100µl.

ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target data

See full target information ITGA1

Function	Integrin alpha-1/beta-1 is a receptor for laminin and collagen. It recognizes the proline-hydroxylated sequence G-F-P-G-E-R in collagen. Involved in anchorage-dependent, negative regulation of EGF-stimulated cell growth.

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
Storage information	Avoid freeze / thaw cycle

Supplementary info

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

Activity summary	Integrin alpha 1 also called CD49a is a protein that functions as a mechanical link between cells and the extracellular matrix. It is part of the integrin protein family and partners with beta 1 integrin to form the integrin alpha 1 beta 1 complex. This protein is a heterodimer and weighs approximately 180 kDa. The integrin alpha 1 is expressed in various tissues including the dermis cartilage and the immune system especially on activated T cells and natural killer cells.
Biological function summary	Integrin alpha 1 beta 1 mediates cell adhesion and migration. It plays an important role in collagen binding influencing various cellular processes like proliferation and differentiation. Integrin alpha 1 forms a complex with ligand molecules notably collagen which assists in remodeling the extracellular matrix. This activity contributes to the development and repair of tissues offering structural support and pathways for cell signaling events.

Pathways	Integrin alpha 1 engages in the MAPK signaling pathway and regulation of the TGF-beta signaling cascade. By mediating interactions between cells and their environment it influences downstream signaling and gene expression. Integrins including integrin alpha 1 have roles in pathways related to cellular stress responses and signal modulation interacting with proteins such as fibronectin within these processes.
Associated diseases and disorders	Integrin alpha 1 has been linked to fibrosis and chronic inflammatory diseases. By modulating matrix-related signals it influences the pathology of fibrosis through upregulation of matrix metalloproteinases. In chronic inflammatory diseases its interaction with collagen and other matrix proteins can affect immune cell trafficking and signaling. Understanding these connections helps in exploring potential therapeutic targets and interventions.

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

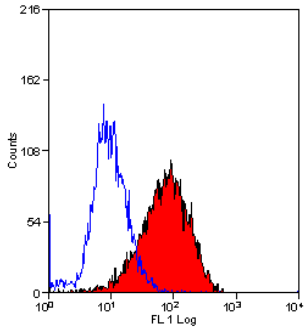
We do not recommend this combination. It is not covered by our product promise.

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 1 antibody [TS2/7] (ab34445)

Integrin alpha 1 Flow Cytometry staining using mouse Anti-Integrin alpha 1 antibody

Staining of HeLa cells with MOUSE ANTI HUMAN CD49a (ab34445).

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