abcam

ab225284

PE Anti-Integrin alpha 2 antibody [EPR17338]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	PE
Excitation/Emission	Ex: 480;565nm, Em: 578nm
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituents: PBS, 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR17338
Purification technique	Affinity purification Protein A
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1/1000

Notes	The cellular localisation of this product has been verified in ICC/IF.

Predicted

Species	Mouse, Rat, Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Expected

Species	Human, Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

ICC/IF

Expected

Species	Human, Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-P

Expected

Species	Human, Mouse, Rat
Dilution info	Use at an assay dependent concentration.
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 conditions	+4°C
Appropriate long-term storage conditions	+4°C
Aliquoting information	Upon delivery aliquot
Storage information	Do Not Freeze, Store in the dark

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

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

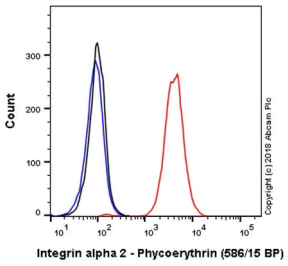
We do not recommend this combination. It is not covered by our product promise.

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.

Full details and terms and conditions can be found here:
Terms & Conditions.

1 product image



Flow Cytometry (Intracellular) - PE Anti-Integrin alpha 2 antibody [EPR17338] (ab225284)

Integrin alpha 2 Flow Cytometry (Intracellular) staining using rabbit Anti-Integrin alpha 2 antibody

Overlay histogram showing A431 cells stained with ab225284 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (ab225284, 1/1000 dilution) for 30 min at 22°C.
Isotype control antibody (black line) was Rabbit IgG (monoclonal) Phycoerythrin (ab209478) used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5,000 events were collected using a 50 mW Yellow/Green laser (561nm) and 586/15 bandpass filter.

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