abcam

ab256135

Anti-Integrin beta 3 antibody [Y2/51] - BSA and Azide free

Recombinant

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Carrier free	Yes
Clone number	Y2/51
Purification technique	Affinity purification Protein A
Light chain type	kappa

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	-

WB

Not recommended

Species	Human
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Human
Dilution info	-
Notes	-

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Supplementary info

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

Activity summary

	Integrin beta 3 also known as ITGB3 beta 3 integrin or CD41/CD61 is a cell surface receptor that plays a role in cell adhesion and signal transduction. It is a member of the integrin family characterized by a heterodimer structure formed with an alpha subunit. This integrin has a molecular mass of approximately 88 kDa. Integrin beta 3 is expressed on platelets megakaryocytes and several other cell types such as endothelial cells and certain tumor cells.
Biological function summary	Integrins serve as the mechanical link between the extracellular matrix and the cytoskeleton. Beta 3 integrin forms a complex with different alpha subunits most notably alpha IIb to function as a receptor for fibrinogen fibronectin and vitronectin. This receptor complex is essential for platelet aggregation and normal hemostasis. Dysregulation can lead to altered cellular responses impacting processes like immune response and tumor progression.
Pathways	Integrin beta 3 participates in the signaling of outside-in and inside-out pathways that are fundamental in cellular dynamics. Of particular significance are the integrin-mediated signaling pathways and the TGF-beta signaling pathway which influence cellular proliferation and differentiation. Integrin beta 3 interacts with proteins such as talin and kindlin which are vital for activation and clustering of integrins during cell signaling processes.
Associated diseases and disorders	Altered expression or function of integrin beta 3 is associated with bleeding disorders like Glanzmann's thrombasthenia where platelet aggregation is impaired. Additionally it plays a role in the progression of certain cancers due to its involvement in cell migration and invasion. The interaction of integrin beta 3 with proteins such as VEGF and MMPs is significant in the context of tumor angiogenesis and metastasis.

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

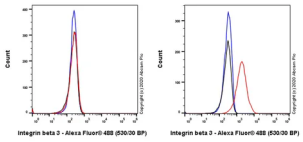
We do not recommend this combination. It is not covered by our product promise.

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.

2 product images



Flow Cytometry - Anti-Integrin beta 3 antibody [Y2/51] - BSA and Azide free (ab256135)

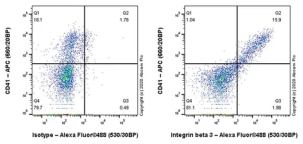
Integrin beta 3 Flow Cytometry staining of HeLa cells using mouse Anti-Integrin beta 3 antibody

This data was developed using ab9509, the same antibody clone in a different buffer formulation.

Flow cytometric analysis of HeLa (Human cervix adenocarcinoma epithelial cell, Left) / HUVEC (Human umbilical vein endothelial cell, Right) cells labelling Integrin beta 3 with ab9509 at 1/1000 dilution (0.1 ug)/Red compared with a Mouse monoclonal IgG / Black isotype control and an unlabelled control (Cell without incubation with primary antibody and secondary antibody / Blue).

Secondary antibody was Goat anti mouse IgG (Alexa Fluor® 488, ab150113) used at 1/2000 dilution.

Negative control: HeLa.
Gated on viable cells.



Flow Cytometry - Anti-Integrin beta 3 antibody [Y2/51] - BSA and Azide free (ab256135)

Integrin beta 3 Flow Cytometry staining using mouse Anti-Integrin beta 3 antibody

This data was developed using ab9509, the same antibody clone in a different buffer formulation.

Flow cytometric analysis of Human peripheral blood mononuclear cell (PBMC) cells labelling Integrin beta 3 with ab9509 at 1/1000 dilution (0.1 ug) / Right compared with a Mouse monoclonal IgG / Left.

Goat anti mouse IgG (Alexa Fluor® 488, ab150113) was used as the secondary antibody at 1/2000 dilution.

Cells were stained with mouse IgG or ab9509. Then stained with anti-CD41 conjugated to APC.
Gated on viable cells.

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