abcam

Product datasheet

Anti-CD41 antibody [EPR4330] - Low endotoxin, Azide free ab229448

Recombinant RabMAb

4 Images

Overview

Product name	Anti-CD41 antibody [EPR4330] - Low endotoxin, Azide free
Description	Rabbit monoclonal [EPR4330] to CD41 - Low endotoxin, Azide free
Host species	Rabbit
Specificity	Mouse reactivity is only guaranteed for IHC-P.
Tested applications	**Suitable for:** WB, IHC-P, ICC/IF **Unsuitable for:** IP
Species reactivity	**Reacts with:** Mouse, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	Human platelet, fetal liver and placenta lysates; Human spleen tissue
General notes	ab229448 is the carrier-free version of **ab134131**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. Our **Low endotoxin, azide-free formats** have low endotoxin level (≤ 1 EU/ml, determined by the LAL assay) and are free from azide, to achieve consistent experimental results in functional assays. Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR4330
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab229448 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 113 kDa.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		Use at an assay dependent concentration.

Application notes Is unsuitable for IP.

Target

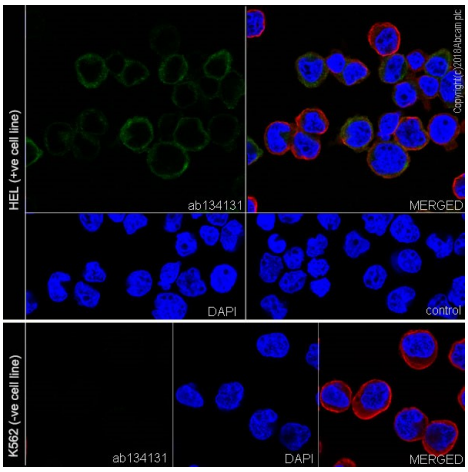
Function Integrin alpha-IIb/beta-3 is a receptor for fibronectin, fibrinogen, plasminogen, prothrombin, thrombospondin and vitronectin. It recognizes the sequence R-G-D in a wide array of ligands. It recognizes the sequence H-H-L-G-G-G-A-K-Q-A-G-D-V in fibrinogen gamma chain. Following activation integrin alpha-IIb/beta-3 brings about platelet/platelet interaction through binding of soluble fibrinogen. This step leads to rapid platelet aggregation which physically plugs ruptured endothelial cell surface.

Tissue specificity Isoform 1 and isoform 2 were identified in platelets and megakaryocytes, but not in reticulocytes or in Jurkat and U937 white blood cell line. Isoform 3 is expressed by leukemia, prostate adenocarcinoma and melanoma cells but not by platelets or normal prostate or breast epithelial cells.

Involvement in disease Defects in ITGA2B are a cause of Glanzmann thrombasthenia (GT) [MIM:273800]; also known as thrombasthenia of Glanzmann and Naegeli. GT is the most common inherited disease of platelets. It is an autosomal recessive disorder characterized by mucocutaneous bleeding of mild-to-moderate severity and the inability of this integrin to recognize macromolecular or synthetic peptide ligands. GT has been classified clinically into types I and II. In type I, platelets show absence of the glycoprotein IIb/beta-3 complexes at their surface and lack fibrinogen and clot retraction capability. In type II, the platelets express the glycoprotein IIb/beta-3 complex at reduced

	levels (5-20% controls), have detectable amounts of fibrinogen, and have low or moderate clot retraction capability. The platelets of GT 'variants' have normal or near normal (60-100%) expression of dysfunctional receptors.
Sequence similarities	Belongs to the integrin alpha chain family. Contains 7 FG-GAP repeats.
Cellular localization	Membrane.

Images

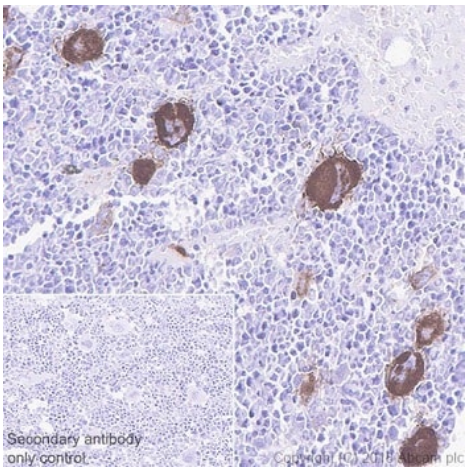


Immunocytochemistry/ Immunofluorescence - Anti-CD41 antibody [EPR4330] - Low endotoxin, Azide free (ab229448)

Ab134131 staining CD41 in HEL (human Erythroleukemia erythroblast) cells by ICC/IF (Immunocytochemistry/Immunofluorescence. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% TritonX-100. Samples were incubated with primary antibody at 1/100 dilution (6 µg/ml). An AlexaFluor® 488 Goat anti-Rabbit (**ab150077**) was used as the secondary antibody at 1/1000 dilution (2 µg/ml). Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) , **ab195889** was used a counterstain antibody at 1/200 dilution (2.5 µg/ml). DAPI was used as a nuclear counterstain. Confocal image showing membranous staining in HEL cell line.

Negative control: K562(PMID 2458779)

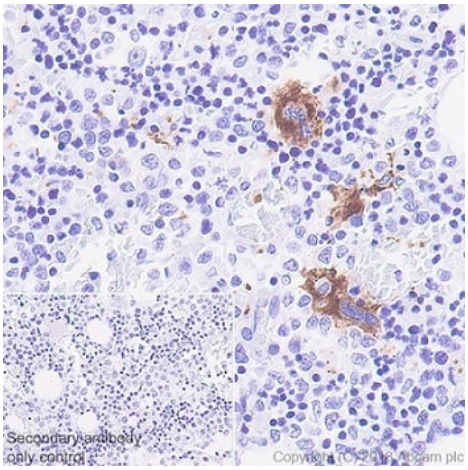
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab134131**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD41 antibody [EPR4330] - Low endotoxin, Azide free (ab229448)

Ab134131 staining CD41 paraffin embedded Mouse bone marrow tissue sections by Immunohistochemistry. Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). Samples were incubated with primary antibody at 1/500 dilution (1.21 µg/ml). A ready to use Goat Anti-rabbit IgG H&L (HRP) was used as the secondary antibody. Hematoxylin was used as a counterstain. Cytoplasmic staining in megakaryocytes of mouse bone marrow (PMID: 27128503).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab134131**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD41 antibody [EPR4330] - Low endotoxin, Azide free (ab229448)

Ab134131 staining CD41 in paraffin embedded Human bone marrow tissue sections by Immunohistochemistry. Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). Samples were incubated with primary antibody at 1/2000 dilution (0.30 µg/ml). A ready to use Goat Anti-rabbit IgG H&L (HRP) was used as the secondary antibody. Hematoxylin was used as a counterstain. Cytoplasmic staining in megakaryocytes of human bone marrow (PMID: 27128503; PMID: 23667055).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab134131**).

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