

Product datasheet

Anti-CD41 antibody [EPR17876] ab181582

Recombinant RabMAb

[4 References](#) [4 Images](#)

Overview

Product name	Anti-CD41 antibody [EPR17876]
Description	Rabbit monoclonal [EPR17876] to CD41
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Mouse, Rat
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Rat platelet and spleen tissue lysate; mouse platelet, lung and spleen tissue lysate. IHC: Mouse and rat spleen tissue.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR17876
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab181582 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		1/1000. Detects a band of approximately 113 kDa (predicted molecular weight: 113 kDa).
IHC-P		1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

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-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.

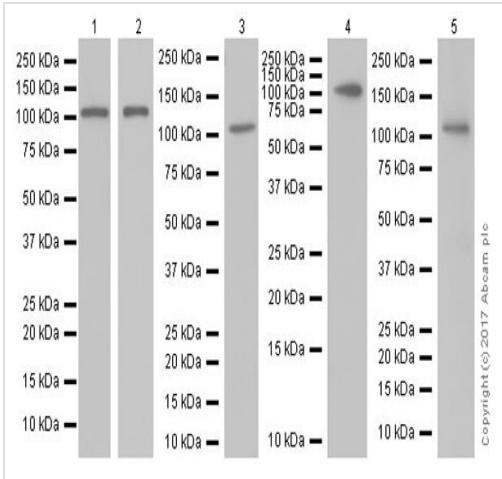
Sequence similarities

Belongs to the integrin alpha chain family.
Contains 7 FG-GAP repeats.

Cellular localization

Membrane.

Images



Western blot - Anti-CD41 antibody [EPR17876] (ab181582)

All lanes : Anti-CD41 antibody [EPR17876] (ab181582) at 1/1000 dilution

- Lane 1 :** Rat platelet lysate
- Lane 2 :** Mouse platelet lysate
- Lane 3 :** Mouse lung tissue lysate
- Lane 4 :** Mouse spleen tissue lysate
- Lane 5 :** Rat spleen tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

Lanes 1-2 : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Lanes 3-5 : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

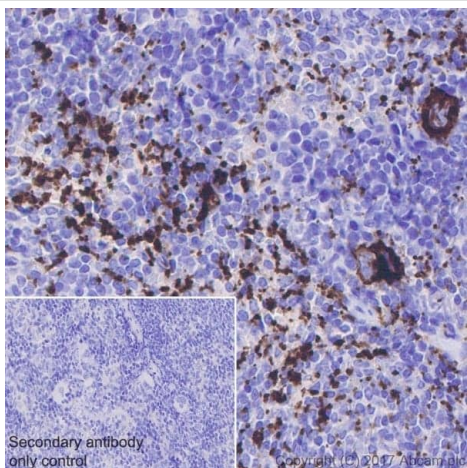
Developed using the ECL technique.

Predicted band size: 113 kDa

Observed band size: 113 kDa

Blocking/Dilution: 5% NFDM/TBST

Exposure: Lanes 1, 3, 4: 3 minutes; lane 2: 10 seconds; Lane 5: 1 minute.



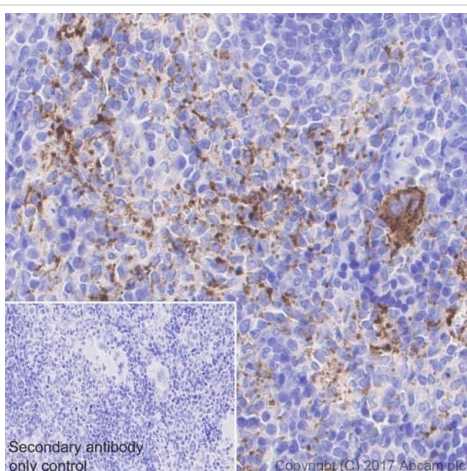
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD41 antibody [EPR17876] (ab181582)

Immunohistochemical analysis of paraffin-embedded mouse spleen tissue labeling CD41 with ab181582 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP), ready to use. Cytoplasmic staining on megakaryocytes and thrombocytes of mouse spleen (PMID: 28133558). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP), ready to use.

Antigen Retrieval was heat mediated using 0.01M Tris-EDTA, pH 9.0 or 0.01M Sodium Citrate Buffer, pH 6.0.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD41 antibody [EPR17876] (ab181582)

Immunohistochemical analysis of paraffin-embedded rat spleen tissue labeling CD41 with ab181582 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP), ready to use. Cytoplasmic staining on megakaryocytes and thrombocytes of rat spleen (PMID: 28133558). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP), ready to use.

Antigen Retrieval was heat mediated using 0.01M Tris-EDTA, pH 9.0 or 0.01M Sodium Citrate Buffer, pH 6.0.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-CD41 antibody [EPR17876] (ab181582)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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