abcam

Product datasheet

Anti-CD41 antibody [M148] ab11024

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Overview

Product name Anti-CD41 antibody [M148]

Description Mouse monoclonal [M148] to CD41

Host species Mouse

Tested applications
Suitable for: Flow Cyt
Species reactivity
Reacts with: Human

ImmunogenTissue, cells or virus. This information is proprietary to Abcam and/or its suppliers.

Positive control Flow Cyt: HEL92.1.7 cells.

General notes

This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or

conjugation for your experiments, please contact orders@abcam.com.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

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: 0.02% Sodium azide

Constituents: PBS, 6.97% L-Arginine

Purity Protein G purified

Clonality Monoclonal

Clone number M148

Myeloma P3x63-Ag8.653

Isotype IgG2a

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Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab11024 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
Flow Cyt		Use a concentration of 0.1 µg/ml. ab170190 - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.

Target

Function

Integrin alpha-Ilb/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-Ilb/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 Ilb/beta-3 complexes at their surface and lack fibrinogen and clot retraction capability. In type II, the platelets express the glycoprotein Ilb/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

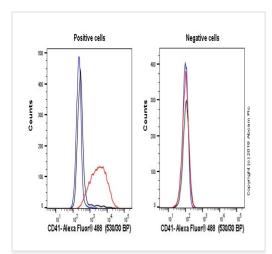
Belongs to the integrin alpha chain family.

Contains 7 FG-GAP repeats.

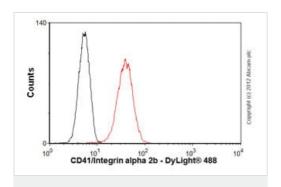
Cellular localization

Membrane.

Images



Flow Cytometry - Anti-CD41 antibody [M148] (ab11024)



Flow Cytometry - Anti-CD41 antibody [M148] (ab11024)

Overlay histograms showing left HEL92.1.7 cells and right Jurkat cells stained with ab11024 (red line). The cells were incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (ab11024) ($1x10^6$ in 100μ l at 0.1μ g/ml) for 30 min on ice.

The secondary antibody Goat anti-mouse IgG H&L (Alexa Fluor [®] 488, pre-adsorbed) (<u>ab150177</u>)was used at 1/2000 dilution for 30 min at 4°C. Isotype control antibody (black line) was mouse IgG1κ (<u>ab170190</u>) 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 Blue laser (488nm) and 530/30 bandpass filter. Events were gated on viable single cells.

Overlay histogram showing HL60 cells stained with ab11024 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab11024, 1µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight[®] 488 goat antimouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive result in 80% methanol (5 min) fixed HL60 cells used under the same conditions.

Please note that Abcam do not have any data for use of this antibody on non-fixed cells. We welcome any customer feedback.

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

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