

Product datasheet

Anti-CD41 antibody [HIP8] ab15021

1 References 1 Image

Overview

Product name	Anti-CD41 antibody [HIP8]
Description	Mouse monoclonal [HIP8] to CD41
Host species	Mouse
Specificity	Ab15021 recognizes the GPIIb-alpha (heavy chain) of CD41. The CD41/CD61 complex is a receptor for fibronectin, fibrinogen, von Willebrand factor, vitronectin and thrombospondin and mediates platelets aggregation. Ab15021 [HIP8] blocks platelet aggregation and completely inhibits ADP, epinephrine, and collagen-induced platelet activation, and partially inhibits ristocetin and thrombin-induced platelet activation.
Tested applications	Suitable for: Flow Cyt, IHC-Fr
Species reactivity	Reacts with: Human
Immunogen	Full length native protein (purified) corresponding to Human CD41. Full length native protein (purified) (Human). Database link: P08514

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 or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.097% Sodium azide Constituent: PBS
Purity	Protein G purified
Clonality	Monoclonal
Clone number	HIP8
Isotype	IgG1

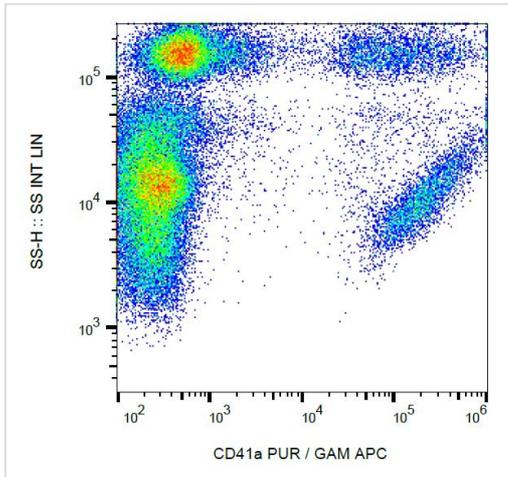
Applications

Our [Abpromise guarantee](#) covers the use of **ab15021** 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 at an assay dependent concentration. Can be used at 0.5 mg or less per 100 ml blood (per 10 ⁶ cells). Tested on human platelets.
		ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
IHC-Fr		Use at an assay dependent concentration.
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



Flow cytometry analysis staining CD41 in human peripheral blood cells using ab15021.

Flow Cytometry - Anti-CD41 antibody [HIP8]
(ab15021)

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