Anti-Human CD41 Antibody, Clone HIP8, APC

Antibodies

Mouse monoclonal IgG1 antibody against human, rhesus, cynomolgus CD41, APC-conjugated

Catalog	#60114AZ	100 Tests	5 µL/test
	#60114AZ.1	25 Tests	5 µL/test

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Product Description

The HIP8 antibody reacts with the ~125 kDa GPIIbα subunit of human CD41, a heterodimeric member of the integrin protein family expressed primarily on platelets, megakaryocytes, monocytes, and acute megakaryoblastic leukemia cells. The GPIIbα subunit is linked to a smaller ~25 kDa subunit (GPIIbβ) by a single disulfide bond. Three isoforms of CD41 that are generated by alternative splicing have been identified, one of which is expressed only by cancerous cells. CD41 associates non-covalently with CD61 (integrin b3) in a calcium-dependent manner to form the CD41/CD61 (or GPIIb/IIIa) complex, which has been identified as a receptor for several ligands, including fibrinogen, fibronectin, von Willebrand factor, vitronectin, plasminogen, thrombin, and thrombospondin. Binding to the CD41/CD61 complex involves an RGD tripeptidyl sequence in the ligand, and both ligand occupancy and ligand-mediated receptor clustering are functionally important in the integrin-mediated response, as exemplified by the role of fibrinogen in platelet adhesion and aggregation. The HIP8 antibody reportedly blocks platelet aggregation and inhibits the activation of platelets by several compounds, including ADP, epinephrine, and collagen.

Target Antigen Name:	CD41
Alternative Names:	GPIIb, Integrin alpha 2b, Integrin alpha IIb, ITGA2B, Platelet glycoprotein IIb
Gene ID:	3674
Species Reactivity:	Human, Rhesus, Cynomolgus, Baboon, Capuchin Monkey, Chimpanzee, Pig
Host Species:	Mouse (BALB/c)
Clonality:	Monoclonal
Clone:	HIP8
Isotype:	IgG1, kappa
Immunogen:	Purified platelet membrane glycoproteins
Conjugate:	APC

Applications

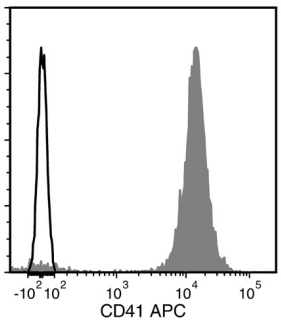
Verified:	FC
Reported:	FC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Direct Human Total Lymphocyte Isolation Kit (Catalog #19655), and RosetteSep™ Human Monocyte Enrichment Cocktail (Catalog #15028).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) bovine serum albumin
Purification:	The antibody was purified by affinity chromatography and conjugated with APC under optimal conditions. The solution is free of unconjugated APC and unconjugated antibody.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. For product expiry date, please contact techsupport@stemcell.com.
Directions for Use:	For flow cytometry the suggested use of this antibody is ≤ 5 µL per 1 x 10^6 cells in 100 µL or per 100 µL whole blood. It is recommended that the antibody be titrated for optimal performance for each application.

Data



Flow cytometry analysis of human platelets labeled with Anti-Human CD41 Antibody, Clone HIP8, APC (filled histogram) or Mouse IgG1, kappa Isotype Control Antibody, Clone MOPC-21, APC (Catalog #60070AZ) (solid line histogram).

Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

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