

DESCRIPTION

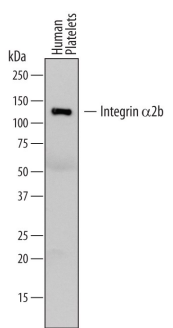
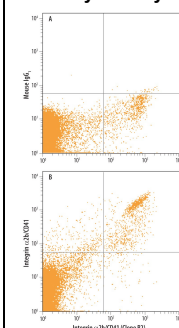
Species Reactivity	Human
Specificity	Detects human Integrin $\alpha 2b/CD41$ in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human Integrin $\alpha 5$, $\alpha 8$, αV , $\beta 3$, $\beta 5$, $\beta 6$, recombinant mouse Integrin $\beta 2b$ or $\beta 3$ is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 745201
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	heterodimer of human Integrin alpha 2B (Leu32-Arg993; R887L) Accession P08514 + human Integrin beta 3 (Gly27-Asp718) Accession P05106
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μ m filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	2 μ g/mL	See Below
Flow Cytometry	2.5 μ g/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

<p>Western Blot</p>  <p>Detection of Human Integrin $\alpha 2b/CD41$ by Western Blot. Western blot shows lysates of human platelets. PVDF membrane was probed with 2 μg/mL of Mouse Anti-Human Integrin $\alpha 2b/CD41$ Monoclonal Antibody (Catalog # MAB7616) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for Integrin $\alpha 2b/CD41$ at approximately 130 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 5.</p>	<p>Flow Cytometry</p>  <p>Detection of Integrin $\alpha 2b/CD41$ in Human Blood Platelets by Flow Cytometry. Human peripheral blood platelets were stained with Fluorescein-conjugated Anti-Mouse Integrin $\alpha 2b/CD41$ (Clone P2) and either (A) Mouse IgG₁ Isotype Control (Catalog # MAB002) or (B) Mouse Anti-Human Integrin $\alpha 2b/CD41$ Monoclonal Antibody (Catalog # MAB7616) followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B). MAB7616 stains the same population as Clone P2.</p>
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PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Integrin $\alpha 2b$ (ITGA2b), also known as CD41 and GPIIb, is a transmembrane glycoprotein that is expressed by megakaryocytes and platelets. It is cleaved into two disulfide-linked chains (114 kDa and 22 kDa) during transit through the Golgi. Integrin $\alpha 2b$ associates with Integrin $\beta 3$ to form complexes that interact with Fibrinogen, von Willebrand factor, Fibronectin, and Vitronectin. Integrin $\alpha 2b$ is required for platelet aggregation, and defects lead to disorders of coagulation. Within the extracellular domain, human Integrin $\alpha 2b$ shares 80% and 78% amino acid sequence identity with mouse and rat Integrin $\alpha 2b$, respectively.