Human Integrin α5/CD49e Antibody

Monoclonal Mouse IgG_{2A} Clone # 612557

Catalog Number: MAB18642

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Integrin α5/CD49e in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant mouse Integrin α5, recombinant human (rh) Integrin α1, 2, 3, 4, 6, 7x2, 8, 9, 10, 11, M, X, D, or rhIntegrin β1 is observed.
Source	Monoclonal Mouse IgG_{2A} Clone # 612557
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human Integrin α5/CD49e Phe42-Tyr995 Accession # P08648
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

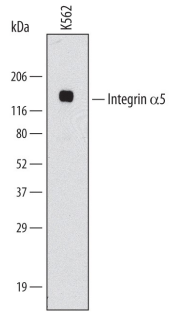
APPLICATIONS

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 µg/mL	See Below

DATA

Western Blot



Detection of Human Integrin α5/CD49e by Western Blot. Western blot shows lysates of K562 human chronic myelogenous leukemia cell line. PVDF Membrane was probed with 2 µg/mL of Mouse Anti-Human Integrin α5/CD49e Monoclonal Antibody (Catalog # MAB18642) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for Integrin α5/CD49e at approximately 140 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

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.** ● 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 α5, also known as CD49e and vitronectin receptor subunit α, is a 140-150 kDa integrin alpha chain that forms dimers with at least five beta chains including β1, 3, 5, 6, and 8. It is a 1018 amino acid (aa) residue type I membrane protein with a large (962 aa) extracellular domain (ECD) and a short (32 aa) cytoplasmic tail. The N-terminal region of Integrin α5, which is important for ligand binding, contains seven FG-GAP (phenylalanyl-glycyl and glycyl-alanyl-prolyl) consensus repeats that fold into a β-propeller domain. Furin cleavage of the Integrin α5 ECD occurs after Gly 889, generating a disulfide-linked, heteromeric subunit Integrin α5 chain. Integrin α5-containing integrins bind multiple ECM molecules, including Vitronectin, Osteopontin, MMP-2, and TSP. The ECD of human Integrin α5 shares 92% aa sequence identity with mouse Integrin α5 ECD.

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