

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Integrin α 5/CD49e in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 50% cross-reactivity with recombinant mouse (rm) Integrin α 5 and less than 5% cross-reactivity with recombinant human Integrin α M, rmIntegrin α 2, rmIntegrin α 4, and rmIntegrin α E is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Integrin α 5/CD49e Phe42-Tyr995 Accession # P08648
Endotoxin Level	<0.10 EU per 1 μ g of the antibody by the LAL method.
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 either lyophilized or as a 0.2 μ m filtered solution in PBS.

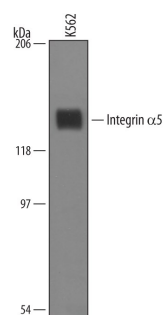
APPLICATIONS

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	1 μ g/mL	See Below
Flow Cytometry	2.5 μ g/10 ⁶ cells	K562 human chronic myelogenous leukemia cell line
Simple Western	20 μ g/mL	Exosome Standard (U87 MG) (Catalog # NBP2-49844), Exosome Standard (PC-3) (Catalog # NBP2-49856), Jurkat human acute T cell leukemia cell line, and K562 human chronic myelogenous leukemia cell line
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	
Adhesion Blockade	The adhesion of K562 human chronic myelogenous leukemia cells (5 x 10 ⁴ cells/well) to immobilized bovine Fibronectin (Catalog # 1030-FN , 10 μ g/mL, 100 μ L/well) was maximally inhibited (80-100%) by 20 μ g/mL of the antibody.	

DATA

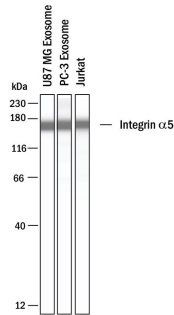
Western Blot



Detection of Human Integrin $\alpha 5$ /CD49e by Western Blot.

Western blot shows lysates of K562 human chronic myelogenous leukemia cell line. PVDF Membrane was probed with 1 μ g/mL of Goat Anti-Human Integrin $\alpha 5$ /CD49e Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1864) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for Integrin $\alpha 5$ /CD49e at approximately 135 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.

Simple Western

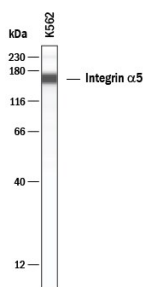


Detection of Human Integrin $\alpha 5$ /CD49e by Simple Western™.

Simple Western shows lysates of Exosome Standards (U87 MG) (Catalog # NBP2-49844), Exosome Standards (PC-3) (Catalog # NBP2-49856) and Jurkat human acute T cell leukemia cell line, loaded at 0.5 mg/ml. A specific band was detected for Integrin $\alpha 5$ /CD49e at approximately 165 kDa (as indicated) using 20 μ g/mL of Goat Anti-Human Integrin $\alpha 5$ /CD49e Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1864). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



Simple Western



Detection of Human Integrin $\alpha 5$ /CD49e by Simple Western™.

Simple Western lane view shows lysates of K562 human chronic myelogenous leukemia cell line, loaded at 0.2 mg/mL. A specific band was detected for Integrin $\alpha 5$ /CD49e at approximately 165 kDa (as indicated) using 50 μ g/mL of Goat Anti-Human Integrin $\alpha 5$ /CD49e Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1864). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS. For liquid material, refer to CoA for concentration.
Shipping	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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

The $\alpha 5$ subunit, also known as CD49e and VLA-5 α subunit, forms a heterodimer with the Integrin $\beta 1$ subunit (CD29). Integrin $\alpha 5\beta 1$ is a receptor for fibronectin and neural adhesion molecule L1.