

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Integrin $\beta 5$ in direct ELISAs and Western blots. In direct ELISAs, approximately 50% cross-reactivity with recombinant mouse (rm) Integrin $\beta 5$ is observed, and less than 5% cross-reactivity with recombinant human (rh) Integrin $\beta 1$, rhIntegrin $\beta 3$, rhIntegrin $\beta 4$, rhIntegrin $\beta 6$ and rmIntegrin $\beta 7$ is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO cell-derived recombinant human Integrin $\beta 5$ Gly24-Asn719 Accession # P18084
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.

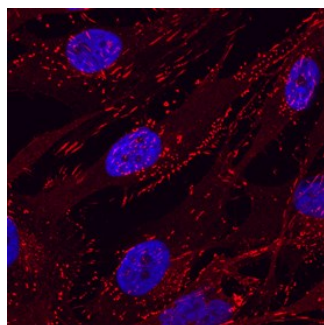
APPLICATIONS

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	HT-29 human colon adenocarcinoma cell line
Flow Cytometry	2.5 μ g/10 ⁶ cells	MG-63 human osteosarcoma cell line
Immunocytochemistry	5-15 μ g/mL	See Below
Simple Western	50 μ g/mL	MG-63 human osteosarcoma cell line
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

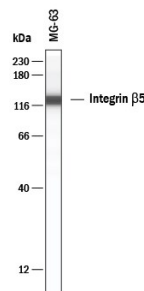
DATA

Immunocytochemistry



Integrin $\beta 5$ in MG-63 Human Cell Line. Integrin $\beta 5$ was detected in immersion fixed MG-63 human osteosarcoma cell line using Sheep Anti-Human Integrin $\beta 5$ Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3824) at 10 μ g/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red; Catalog # NL010) and counterstained with DAPI(blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

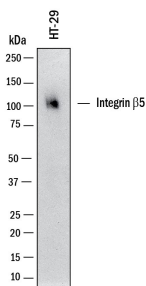
Simple Western



Detection of Human Integrin $\beta 5$ by Simple Western™. Simple Western lane view shows lysates of MG-63 human osteosarcoma cell line, loaded at 0.2 mg/mL. A specific band was detected for Integrin $\beta 5$ at approximately 129 kDa (as indicated) using 50 μ g/mL of Sheep Anti-Human Integrin $\beta 5$ Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3824) followed by 1:50 dilution of HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



Western Blot



Detection of Human Integrin $\beta 5$ by Western Blot. Western blot shows lysates of HT-29 human colon adenocarcinoma cell line. PVDF membrane was probed with 1 μ g/mL of Sheep Anti-Human Integrin $\beta 5$ Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3824) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Integrin $\beta 5$ at approximately 100 kDa (as indicated). This experiment was conducted under reducing conditions and using Western Blot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
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	<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

Integrin $\beta 5$ is a 100-110 kDa type I transmembrane glycoprotein that forms a non-disulfide-linked heterodimer with Integrin αV . Integrin $\alpha V \beta 5$ is a receptor for vitronectin that is expressed on a wide variety of cell types including keratinocytes, fibroblasts, adhesive monocytes, and select endothelium. The 696 amino acid residue Integrin $\beta 5$ extracellular region contains a vWF-A domain and a cysteine-rich tandem repeat region. Human Integrin $\beta 5$ shares 91% and 89% amino acid sequence homology with mouse and canine Integrin $\beta 5$, respectively.