

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Integrin β 4/CD104 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 25% cross-reactivity with recombinant mouse Integrin β 4 is observed and less than 1% cross-reactivity with recombinant human (rh) Integrin β 2, rhIntegrin β 3, and rhIntegrin β 5 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human Integrin β 4/CD104 Asn28-Ser710 Accession # P16144
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.

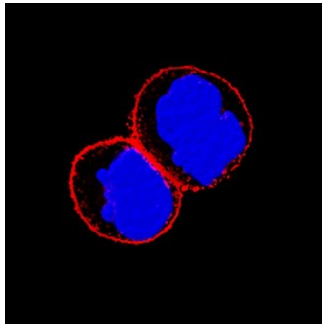
APPLICATIONS

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	0.1 μ g/mL	Recombinant Human Integrin β 4/CD104
Flow Cytometry	0.25 μ g/ 10^6 cells	A431 human epithelial carcinoma cell line
Immunocytochemistry	5-15 μ g/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

Immunocytochemistry



Integrin β 4/CD104 in A431 Human Cell Line. Integrin β 4/CD104 was detected in immersion fixed A431 human epithelial carcinoma cell line using Sheep Anti-Human Integrin β 4/CD104 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4060) at 15 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 cell surfaces. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

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	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 beta 4 (also known as GP150 and CD104) is a 150-200 kDa member of the Integrin beta family. It forms noncovalent heterodimers with Integrin α 6 and participates in the formation of epithelial hemidesmosomes. Human Integrin β 4 is a type I transmembrane glycoprotein that is 1795 amino acids (aa) in length. It contains a 683 aa extracellular domain (ECD) (aa 28-710) and a large 1089 aa cytoplasmic region. Two ECD alternate splice forms may exist. One shows an 84 aa substitution for the 84 aa between aa 621-704. A second shows a 144 aa substitution for the first 704 amino acids. Human Integrin β 4 ECD shares 88% sequence identity with mouse Integrin β 4 ECD.