

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Integrin β 4/CD104 in Western blots. In Western blots, no cross-reactivity with recombinant human Integrin β 1, β 2, β 3, β 5, β 6, β 8, or recombinant mouse Integrin β 4 is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 422325
Purification	Protein A or G purified from hybridoma culture supernatant
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 as a 0.2 μ m filtered solution in PBS.

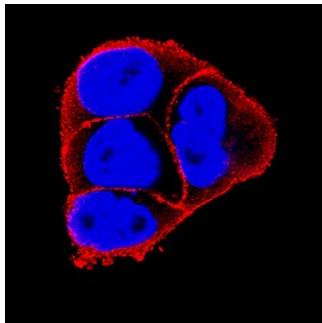
APPLICATIONS

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	Recombinant Human Integrin β 4/CD104 under non-reducing conditions only
Flow Cytometry	0.25 μ g/10 ⁶ cells	A431 human epithelial carcinoma cell line
Immunocytochemistry	8-25 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 Mouse Anti-Human Integrin β 4/CD104 Monoclonal Antibody (Catalog # MAB4060) at 25 μ g/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) 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 0.5 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 β 4 (also 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 alternative 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 β 4 ECD shares 88% aa sequence identity with mouse β 4 ECD.