

DESCRIPTION

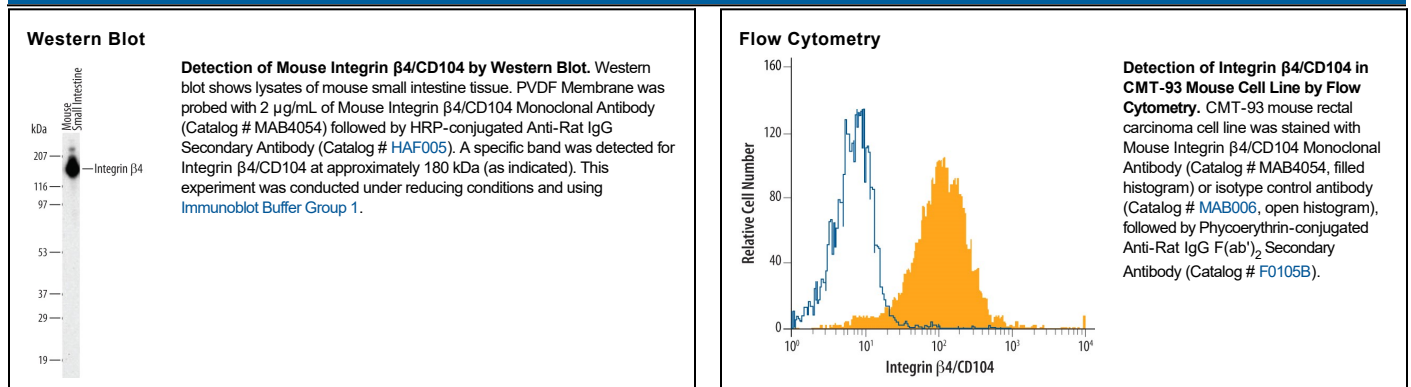
Species Reactivity	Mouse
Specificity	Detects mouse Integrin β 4/CD104 in direct ELISAs and Western blots. Does not cross-react with recombinant mouse Integrin β 1, β 2, β 6, β 7, or recombinant human Integrin β 3.
Source	Monoclonal Rat IgG _{2A} Clone # 308601
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse Integrin β 4/CD104 Asn29-Ser711 Accession # NP_001005608
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	2 μ g/mL	See Below
Flow Cytometry	2.5 μ g/10 ⁶ cells	See Below
Immunohistochemistry	8-25 μ g/mL	Perfusion fixed frozen sections of mouse intestinal villi
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA



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 known as CD104, is a 200 kDa type I transmembrane (TM) glycoprotein that associates only with Integrin α 6/CD29. Integrin α 6 β 4 is predominantly expressed by epithelial cells, binds laminins, and is essential for formation of hemidesmosomes and connection of the dermis to the epidermis. Mouse integrin β 4 contains a 680 amino acid (aa) extracellular domain (ECD) with a metal-binding site and four cysteine-rich repeats, a 22 aa TM segment and an unusually long 1073 aa cytoplasmic tail that organizes hemidesmosome components. Isoforms with shortened cytoplasmic tails have been described. Mouse and human β 4 ECD show 88% aa identity.