



Biotinylated Anti-mouse Integrin β 4/CD104 Antibody

ORDERING INFORMATION

Catalog Number: BAF4054

Lot Number: CCWV01

Size: 50 μ g

Formulation: 0.2 μ m filtered solution in PBS with BSA

Storage: -20° C

Reconstitution: sterile 0.1% BSA in TBS

Specificity: mouse Integrin β 4

Immunogen: CHO cell-derived rmIntegrin β 4 isoform 1

Ig Type: goat IgG

Application: Western blot

Background

Integrin β 4 (also GP150 and CD104) is a 150 - 180 kDa member of the integrin beta family of molecules. It is found on keratinocytes, Schwann cells and perineural fibroblasts, and participates in the formation of epithelial hemidesmosomes by forming noncovalent heterodimers with Integrin α 6. Mature mouse Integrin β 4 is a type I transmembrane glycoprotein that is 1774 amino acids (aa) in length. It contains a 683 aa extracellular domain (aa 29 - 711) and a large 1068 aa cytoplasmic region. Three variant splice forms may exist. One shows a GlyGluHis insertion after Leu1103, a second shows a deletion of aa 1447 - 1499, and a third shows the same deletion accompanied by an insertion of 65 aa after Thr1367. Over aa 29 - 711, mouse β 4 shares 88% and 96% aa identity with human and rat β 4, respectively.

Preparation

Produced in goats immunized with purified, CHO cell-derived, recombinant mouse Integrin β 4 isoform 1 (rmIntegrin β 4; aa 29 - 707; Accession # NP_001005608, with an additional aa LPAPS at the N-terminus). Mouse Integrin β 4 specific IgG was purified by mouse Integrin β 4 affinity chromatography and then biotinylated.

Formulation

Lyophilized from a 0.2 μ m filtered solution in phosphate-buffered saline (PBS) containing 50 μ g of bovine serum albumin (BSA) per 1 μ g of antibody.

Reconstitution

Reconstitute with sterile Tris-buffered saline pH 7.3 (20 mM Trizma base, 150 mM NaCl) containing 0.1% BSA. If 1 mL of buffer is used, the antibody concentration will be 50 μ g/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C **in a manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody has been selected for use as a detection antibody in mouse Integrin β 4 Western blots.

Application

Western blot - This antibody can be used at 0.1 - 0.2 μ g/mL with the appropriate secondary reagents to detect mouse Integrin β 4. The detection limit for rmIntegrin β 4 is approximately 1 ng/lane and 5 ng/lane under non-reducing and reducing conditions, respectively. In this format, this antibody shows approximately 10% cross-reactivity with rhIntegrin β 4.

Optimal dilutions should be determined by each laboratory for each application.