



CD104 (Integrin beta4)

Catalog number

C2446-01J

Supplier

United States Biological

Integrins are alpha/beta heterodimeric cell surface receptors that play a pivotal role in cell adhesion and migration, as well as in growth and survival (1,2). The integrin family contains at least 18 alpha and 8 beta subunits that form 24 known integrins with distinct tissue distribution and overlapping ligand specificities (3). Integrins not only transmit signals to cells in response to the extracellular environment (outside-in signaling), but also sense intracellular cues to alter their interaction with extracellular environment (inside-out signaling) (1,2). Integrin beta 4 pairs with integrin $\alpha 6$ on the cell surface membrane to form the integrin $\alpha 6\beta 4$ heterodimer, an important laminin receptor that is essential for hemidesmosome formation and the support of stable adhesions between basal epithelial cells and the basement membrane (4,5). Integrin beta 4 is an important component in several growth factor induced signaling pathways that are involved in tumorigenesis and invasive cell growth (6,7).

Applications

Suitable for use in Western Blot. Other applications not tested.

Recommended Dilution

Western Blot: 1:1000, incubate membrane with diluted antibody in 5% BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Optimal dilutions to be determined by the researcher.

Storage and Stability

May be stored at 4°C for short-term only. For long-term storage, aliquot and store at -20°C. Aliquots are stable for 12 months at -20°C. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Further dilutions can be made in assay buffer.

Immunogen

Synthetic peptide corresponding to residues surrounding Ser1812 of human integrin beta4 protein.

Formulation

Supplied as a liquid in 10mM HEPES, pH 7.5, 150mM sodium chloride, 0.1mg/ml BSA, 50% glycerol.

Purity

Purified by peptide affinity chromatography.

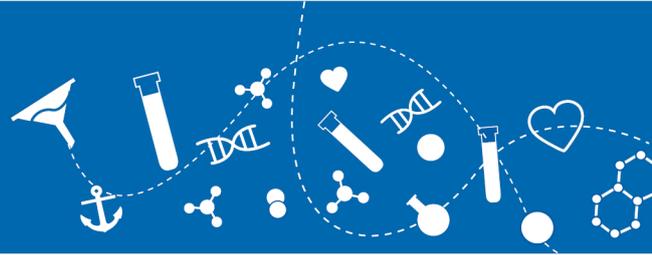
Specificity

Recognizes endogenous levels of total human integrin beta 4.

Product Type

Pab

Source



human

Isotype

IgG

Grade

Affinity Purified

Applications

WB

Crossreactivity

Hu

Storage

-20°C

MW

210

Reference

1. Liu, S. et al. (2000) J Cell Sci 113(20):3563-71. 2. Hood, J.D. and Cheresch, D.A. (2002) Nat Rev Cancer 2:91-100. 3. van der Flier, A. and Sonnenberg, A. (2001) Cell Tissue Res 305:285-98. 4. Schaapveld, R.Q. et al. (1998) J Cell Biol 142:271-84. 5. Litjens, S.H. et al. (2006) Trends Cell Biol 16:376-83. 6. Guo, W. et al. (2006) Cell 126:489-502. 7. Bertotti, A. et al. (2006) J Cell Biol 175:993-1003.