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#4707

Integrin β 4 Antibody

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 210	Source/Isotype: Rabbit	UniProt ID: #P16144	Entrez-Gene Id: 3691
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Product Usage Information

Application

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Integrin β 4 Antibody detects endogenous levels of total integrin β 4 protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ser1812 of human integrin β 4 protein. Antibodies are purified by peptide affinity chromatography.

Background

Integrins are α/β 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 α and 8 β 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 β 4 pairs with integrin α 6 on the cell surface membrane to form the integrin α 6 β 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 β 4 is an important component in several growth factor induced signaling pathways that are involved in tumorigenesis and invasive cell growth (6,7).

Background References

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

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human

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