

Integrin $\beta 3$ Antibody

✓ 100 μ l
(10 western blots)

Orders ■ 877-616-CELL (2355)
orders@cellsignal.com

Support ■ 877-678-TECH (8324)
info@cellsignal.com

Web ■ www.cellsignal.com

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

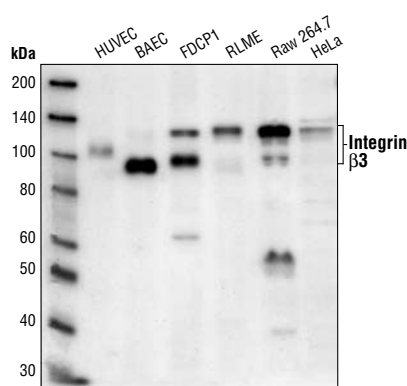
Entrez-Gene ID #3690
Swiss-Prot Acc. #P05106

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	H, M, R, Mk, B	97, 110, 130 kDa	Rabbit**

Background: Integrins are 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 the extracellular environment (inside-out signaling) (1,2). α II β 3 and α V β 3 are the two β 3 containing integrins which are prominently expressed in hematopoietic cells and angiogenic endothelial cells and perform adhesive functions in hemostasis, wound healing and angiogenesis (1,4). Tyr773 and Tyr785 (usually referred to as Tyr747 and Tyr759 based on the chicken sequence) are phosphorylated upon ligand binding (5). Phosphorylation of these tyrosine residues is required for certain ligand-induced signaling (6). Thr779 (corresponding to Thr753 of the chicken sequence) of integrin β 3 in the platelet specific α II β 3 is phosphorylated by PKD and/or Akt, which may modulate integrin association with other signaling molecules (7).

Specificity/Sensitivity: Integrin β 3 Antibody detects endogenous levels of total integrin β 3. This antibody does not cross-react with other integrin isoforms.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with synthetic peptides corresponding to human and mouse integrin beta3. Antibodies are purified by protein A and peptide affinity chromatography.



Western blot analysis of extracts from HUVEC, BAEC, FDCP1, RLME, Raw and HeLa cells using Integrin β 3 Antibody.

Background References:

- (1) Liu, S. et al. (2000) *J. Cell Sci.* 113, 3563–3571.
- (2) Hood, J.D. and Cheresh, D.A. (2002) *Nat. Rev. Cancer* 2, 91–100.
- (3) van der Flier, A. and Sonnenberg, A. (2001) *Cell Tissue Res.* 305, 285–298.
- (4) Shattil, S.J. et al. (1995) *Thromb. Haemost.* 74, 149–155.
- (5) Blystone, S.D. (2002) *J. Biol. Chem.* 277, 46886–46890.
- (6) Butler, B. et al. (2003) *J. Biol. Chem.* 278, 5264–5270.
- (7) Kirk, R.I. et al. (2000) *J. Biol. Chem.* 275, 30901–30906.

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.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting 1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

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

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
 Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.