

## Anti-Integrin $\beta$ 1 (Extracellular region) Antibody

Catalog # AN1819

### Specification

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#### Anti-Integrin $\beta$ 1 (Extracellular region) Antibody - Product Information

Application	WB, IHC
Primary Accession	<a href="#">P05556</a>
Host	Mouse
Clonality	Mouse Monoclonal
Isotype	IgG1
Calculated MW	88415

#### Anti-Integrin $\beta$ 1 (Extracellular region) Antibody - Additional Information

Gene ID 3688

##### Other Names

Integrin beta-1, Fibronectin receptor subunit beta, Glycoprotein IIa, GPIIA, VLA-4 subunit beta, CD29, TGB1, FNRB, MDF2, MSK12, ITGB1

##### Target/Specificity

Integrins are cell adhesion molecules that can mediate bidirectional transfer of signals across the plasma membrane. The cytoplasmic domains of integrin family members interact with components of the signal transduction apparatus within cells. Integrin receptors contain noncovalently associated  $\alpha$  and  $\beta$  subunits that consist of a large extracellular region (the ligand-binding domain), a short transmembrane region, and a cytoplasmic domain of varying length. In mammals, at least 17  $\alpha$  subunits and 8  $\beta$  subunits have been identified and these proteins can heterodimerize to form at least 22 different receptors. The integrin  $\beta$ 2 subunit associates with integrin  $\alpha$ L to form a receptor for ICAM family members. Integrin  $\beta$ 2/ $\alpha$ L is involved in a variety of immune phenomena including leukocyte-endothelial cell interaction, cytotoxic T-cell mediated killing, and antibody dependent killing by granulocytes and monocytes.

##### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

##### Precautions

Anti-Integrin  $\beta$ 1 (Extracellular region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

##### Shipping

Blue Ice

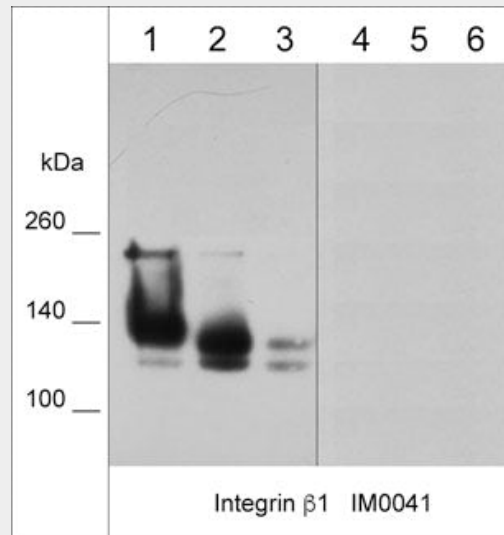
#### Anti-Integrin $\beta$ 1 (Extracellular region) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

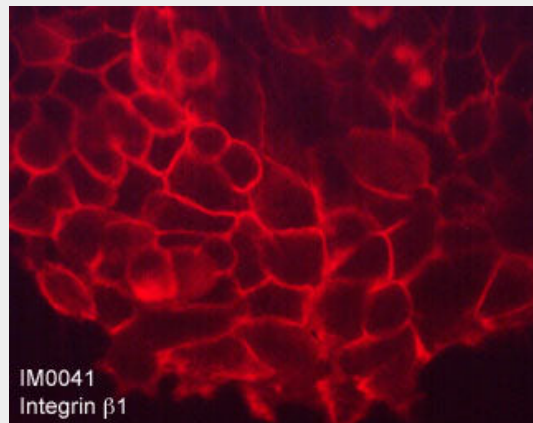
- [Western Blot](#)
- [Blocking Peptides](#)

- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

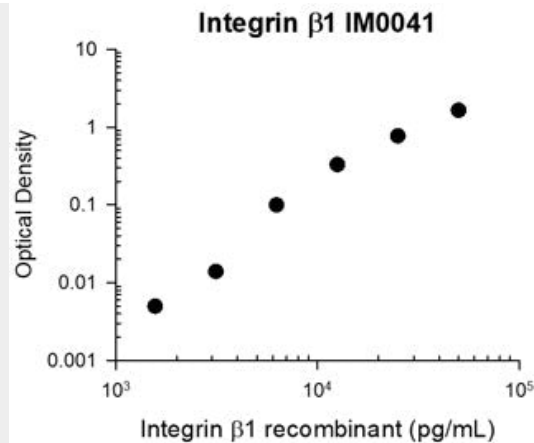
### Anti-Integrin $\beta 1$ (Extracellular region) Antibody - Images



Western blot analysis of native (lanes 1-3) and denatured (lanes 4-6) cell lysates from human A431 (lane 1 & 4), A549 (lane 2 & 5), and LNCaP (lane 3 & 6). The blots were probed with mouse monoclonal anti-Integrin  $\beta 1$  (IM0041) at 1:1000 dilution.



Immunocytochemical labeling of Integrin  $\beta 1$  in paraformaldehyde fixed human A431 cells. The cells were labeled with mouse monoclonal anti-Integrin  $\beta 1$  (clone M004). The antibody was detected using goat anti-mouse DyLight<sup>®</sup> 594.



Representative Standard Curve using mouse monoclonal anti-integrin  $\beta$ 1 (IM0041) for ELISA capture of human recombinant integrin  $\beta$ 1 extracellular region. Capture was detected by mouse monoclonal anti-integrin  $\beta$ 1 (IM0411) followed by appropriate secondary antibody conjugated to HRP.

### **Anti-Integrin $\beta$ 1 (Extracellular region) Antibody - Background**

Integrins are cell adhesion molecules that can mediate bidirectional transfer of signals across the plasma membrane. The cytoplasmic domains of integrin family members interact with components of the signal transduction apparatus within cells. Integrin receptors contain noncovalently associated  $\alpha$  and  $\beta$  subunits that consist of a large extracellular region (the ligand-binding domain), a short transmembrane region, and a cytoplasmic domain of varying length. In mammals, at least 17  $\alpha$  subunits and 8  $\beta$  subunits have been identified and these proteins can heterodimerize to form at least 22 different receptors. The integrin  $\beta$ 2 subunit associates with integrin  $\alpha$ L to form a receptor for ICAM family members. Integrin  $\beta$ 2/ $\alpha$ L is involved in a variety of immune phenomena including leukocyte-endothelial cell interaction, cytotoxic T-cell mediated killing, and antibody dependent killing by granulocytes and monocytes.