

**Anti-CD18 Picoband Antibody**  
Catalog # ABO11840**Specification**

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**Anti-CD18 Picoband Antibody - Product Information**

Application	<b>WB, IHC, ICC</b>
Primary Accession	<a href="#">P05107</a>
Host	<b>Rabbit</b>
Reactivity	<b>Human</b>
Clonality	<b>Polyclonal</b>
Format	<b>Lyophilized</b>

**Description**

Rabbit IgG polyclonal antibody for Integrin beta-2(ITGB2) detection. Tested with WB, IHC-P, ICC in Human.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-CD18 Picoband Antibody - Additional Information**

**Gene ID** 3689

**Other Names**

Integrin beta-2, Cell surface adhesion glycoproteins LFA-1/CR3/p150, 95 subunit beta, Complement receptor C3 subunit beta, CD18, ITGB2, CD18, MFI7

**Calculated MW**

84782 MW KDa

**Application Details**

Immunocytochemistry , 0.5-1 µg/ml, Human, -<br>Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human<br>

**Subcellular Localization**

Membrane; Single-pass type I membrane protein.

**Protein Name**

Integrin beta-2

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>.

**Immunogen**

E.coli-derived human CD18 recombinant protein (Position: Q404-S769). Human CD18 shares 76% amino acid (aa) sequence identity with mouse CD18.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Sequence Similarities**

Belongs to the integrin beta chain family.

**Anti-CD18 Picoband Antibody - Protein Information**

**Name** ITGB2

**Synonyms** CD18, MFI7

**Function**

Integrin ITGAL/ITGB2 is a receptor for ICAM1, ICAM2, ICAM3 and ICAM4. Integrin ITGAL/ITGB2 is also a receptor for the secreted form of ubiquitin-like protein ISG15; the interaction is mediated by ITGAL (PubMed: [29100055](http://www.uniprot.org/citations/29100055)). Integrins ITGAM/ITGB2 and ITGAX/ITGB2 are receptors for the iC3b fragment of the third complement component and for fibrinogen. Integrin ITGAX/ITGB2 recognizes the sequence G-P-R in fibrinogen alpha-chain. Integrin ITGAM/ITGB2 recognizes P1 and P2 peptides of fibrinogen gamma chain. Integrin ITGAM/ITGB2 is also a receptor for factor X. Integrin ITGAD/ITGB2 is a receptor for ICAM3 and VCAM1. Contributes to natural killer cell cytotoxicity (PubMed: [15356110](http://www.uniprot.org/citations/15356110)). Involved in leukocyte adhesion and transmigration of leukocytes including T-cells and neutrophils (PubMed: [11812992](http://www.uniprot.org/citations/11812992), PubMed: [28807980](http://www.uniprot.org/citations/28807980)). Triggers neutrophil transmigration during lung injury through PTK2B/PYK2-mediated activation (PubMed: [18587400](http://www.uniprot.org/citations/18587400)). Integrin ITGAL/ITGB2 in association with ICAM3, contributes to apoptotic neutrophil phagocytosis by macrophages (PubMed: [23775590](http://www.uniprot.org/citations/23775590)). In association with alpha subunit ITGAM/CD11b, required for CD177-PRTN3- mediated activation of TNF primed neutrophils (PubMed: [21193407](http://www.uniprot.org/citations/21193407)).

**Cellular Location**

Cell membrane; Single-pass type I membrane protein. Membrane raft; Single-pass type I membrane protein

**Tissue Location**

Leukocytes (PubMed:23775590). Expressed in neutrophils (at protein level) (PubMed:21193407, PubMed:28807980)

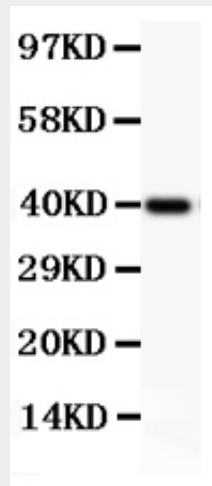
**Anti-CD18 Picoband Antibody - Protocols**

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

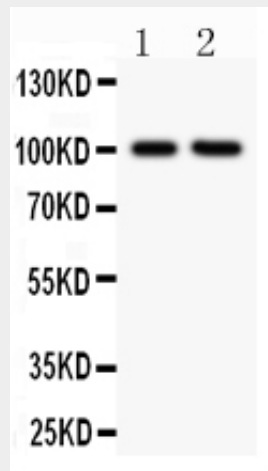
- [Western Blot](#)
- [Blocking Peptides](#)

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

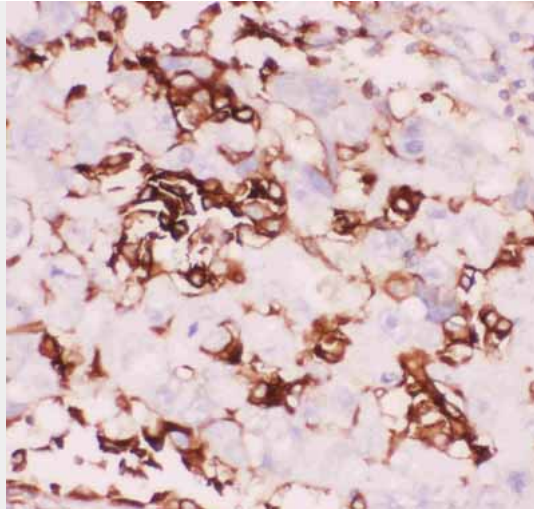
### Anti-CD18 Picoband Antibody - Images



Anti-CD18 Picoband antibody, ABO11840, Western blotting All lanes: Anti CD18 (ABO11840) at 0.5ug/ml WB: Recombinant Human CD18 Protein 0.5ng Predicted bind size: 40KD Observed bind size: 40KD



Anti-CD18 Picoband antibody, ABO11840, IHC(P) All lanes: Anti CD18 (ABO11840) at 0.5ug/ml Lane 1: JURKAT Whole Cell Lysate at 40ug Lane 2: CEM Whole Cell Lysate at 40ug Predicted bind size: 85KD Observed bind size: 100KD



Anti-CD18 Picoband antibody, ABO11840, IHC(P)IHC(P): Human Lung Cancer Tissue



Anti-CD18 Picoband antibody, ABO11840-1, ICCICC: SMMC7721 Cell

### **Anti-CD18 Picoband Antibody - Background**

ITGB2(INTEGRIN, BETA-2), also known as CD18, is a protein that in humans is encoded by the ITGB2 gene. ITGB2 is an integrin protein that belongs to the class of cell membrane glycoproteins. The beta-2 integrin chain gene is designated ITGB2 and the leukocyte antigen has been designated CD18. The ITGB2 gene is mapped to 21q22.3. The expression of CD18 is increased in lymphoblastoid cells from persons with Down syndrome, consistent with the location of the gene on chromosome 21. In humans lack of ITGB2 causes Leukocyte Adhesion Deficiency, a disease defined by a lack of leukocyte extravasation from blood into tissues. Although ITGB2 is expressed on the cell surface at normal levels and is capable of function following extracellular stimulation, it could not be activated via the 'inside-out' signaling pathways.