

**CD18 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1286a****Specification**

---

**CD18 Antibody - Product Information**

Application	IF, WB, IHC
Primary Accession	<a href="#">P05107</a>
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Calculated MW	85kDa KDa

**Description**

CD18, also known as ITGB2 (integrin beta chain beta 2). Integrins are integral cell-surface proteins composed of an alpha chain and a beta chain. A given chain may combine with multiple partners resulting in different integrins. For example, beta 2 combines with the alpha L chain to form the integrin LFA-1, and combines with the alpha M chain to form the integrin Mac-1. Integrins are known to participate in cell adhesion as well as cell-surface mediated signalling. CD18 is expressed by most leucocytes. Defects in this gene are the cause of leukocyte adhesion deficiency type I (LAD1). Two transcript variants encoding the same protein have been identified for this gene.

**Immunogen**

Purified recombinant fragment of CD18 expressed in E. Coli.

**Formulation**

Ascitic fluid containing 0.03% sodium azide.

**CD18 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

**Dilution**

IF~~1/200 - 1/1000

WB~~1:500~~2000

IHC~~1:200~~1000

**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**

CD18 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## CD18 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:<a href="http://www.uniprot.org/citations/29100055" target="\_blank">29100055</a>). 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:<a href="http://www.uniprot.org/citations/15356110" target="\_blank">15356110</a>). Involved in leukocyte adhesion and transmigration of leukocytes including T-cells and neutrophils (PubMed:<a href="http://www.uniprot.org/citations/11812992" target="\_blank">11812992</a>, PubMed:<a href="http://www.uniprot.org/citations/28807980" target="\_blank">28807980</a>). Triggers neutrophil transmigration during lung injury through PTK2B/PYK2-mediated activation (PubMed:<a href="http://www.uniprot.org/citations/18587400" target="\_blank">18587400</a>). Integrin ITGAL/ITGB2 in association with ICAM3, contributes to apoptotic neutrophil phagocytosis by macrophages (PubMed:<a href="http://www.uniprot.org/citations/23775590" target="\_blank">23775590</a>). In association with alpha subunit ITGAM/CD11b, required for CD177-PRTN3- mediated activation of TNF primed neutrophils (PubMed:<a href="http://www.uniprot.org/citations/21193407" target="\_blank">21193407</a>).

### Cellular Location

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

### Tissue Location

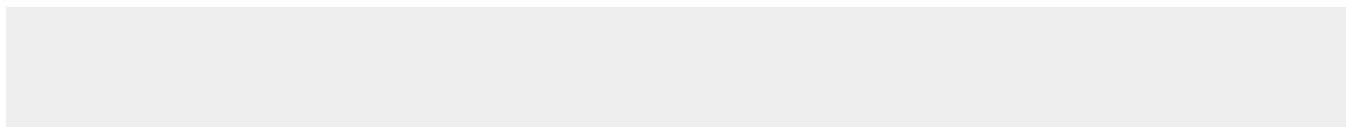
Leukocytes (PubMed:23775590). Expressed in neutrophils (at protein level) (PubMed:21193407, PubMed:28807980)

## CD18 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](#)

## CD18 Antibody - Images



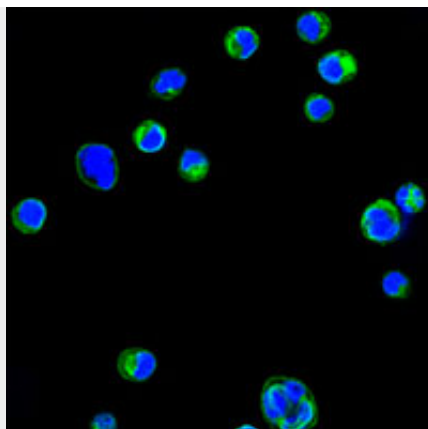


Figure 1: Confocal immunofluorescence analysis of HL60 cells using CD18 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.

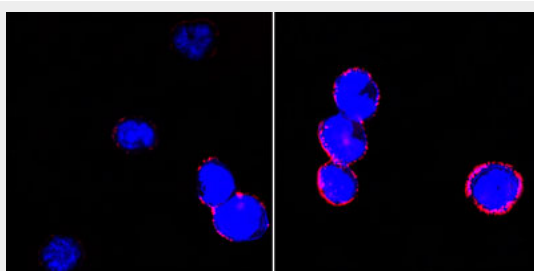


Figure 2: Confocal immunofluorescence analysis of BCBL-1 cells (left) and L1210 cells (right) using CD18 mouse mAb (red). Blue: DRAQ5 fluorescent DNA dye.

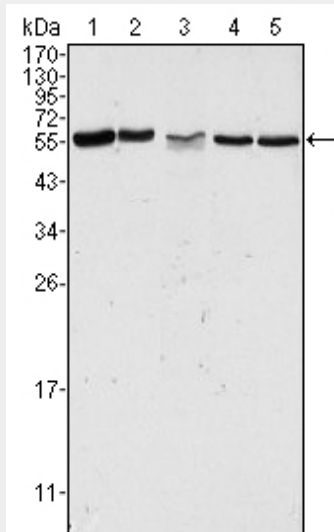


Figure 1: Western blot analysis using PAK2 mouse mAb against Hela (1), Jurkat (2), A549 (3), HEK293 (4) and K562 (5) cell lysate.

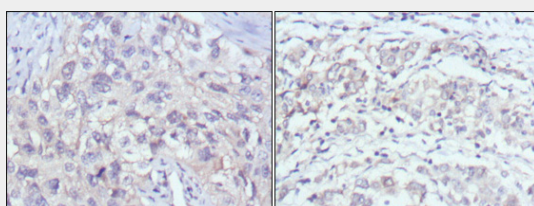


Figure 2: Immunohistochemical analysis of paraffin-embedded human lung cancer (left) and

gastric cancer (right) using PAK2 mouse mAb with DAB staining.

**CD18 Antibody - References**

1. Microcirculation. 2008 Aug;15(6):555-67. 2. Mol Immunol. 2008 Feb;45(3):709-18. 3. J Biol Chem. 2007 Aug 17;282(33):24310-9.