

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

CD18 Antibody - Product Information

Application	IF, WB, IHC
Primary Accession	P05107
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: 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). Involved in leukocyte adhesion and transmigration of leukocytes including T-cells and neutrophils (PubMed: 11812992, PubMed: 28807980). Triggers neutrophil transmigration during lung injury through PTK2B/PYK2-mediated activation (PubMed: 18587400). Integrin ITGAL/ITGB2 in association with ICAM3, contributes to apoptotic neutrophil phagocytosis by macrophages (PubMed: 23775590). In association with alpha subunit ITGAM/CD11b, required for CD177-PRTN3- mediated activation of TNF primed neutrophils (PubMed: 21193407).

Cellular Location

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

Tissue Location

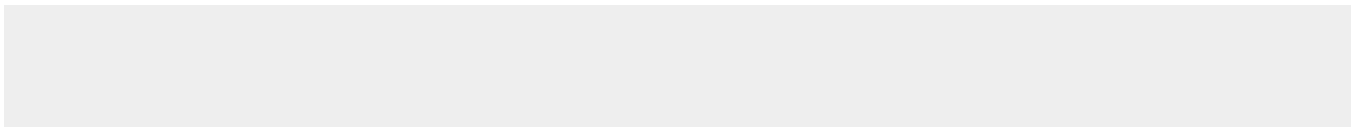
Leukocytes (PubMed:23775590). Expressed in neutrophils (at protein level) (PubMed:21193407, PubMed:28807980)

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



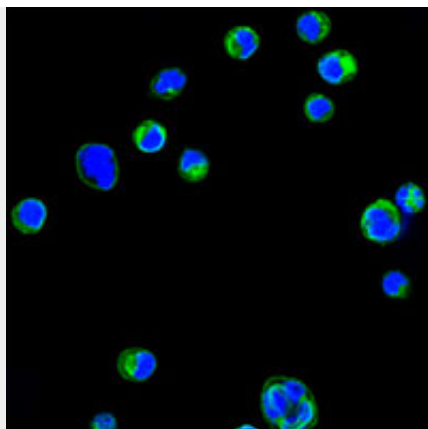


Figure 1: Confocal immunofluorescence analysis of HL60 cells using CD18 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.

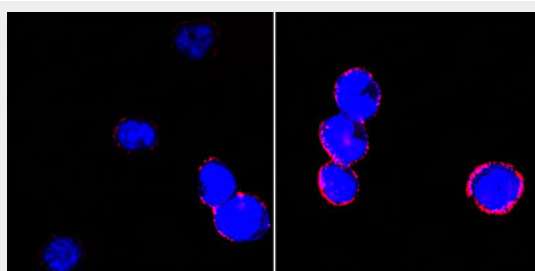


Figure 2: Confocal immunofluorescence analysis of BCBL-1 cells (left) and L1210 cells (right) using CD18 mouse mAb (red). Blue: DRAQ5 fluorescent DNA dye.

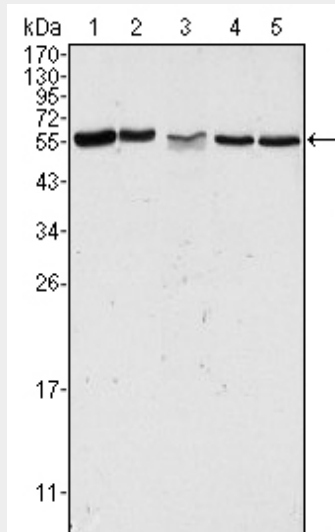


Figure 1: Western blot analysis using PAK2 mouse mAb against HeLa (1), Jurkat (2), A549 (3), HEK293 (4) and K562 (5) cell lysate.

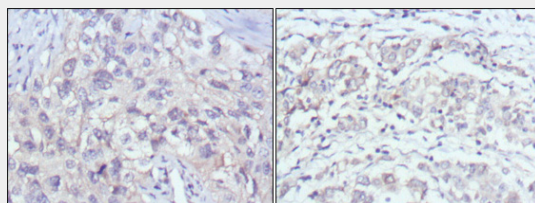


Figure 2: Immunohistochemical analysis of paraffin-embedded human lung cancer (left) and

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.