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CD18 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1286a

Specification

CD18 Antibody - Product Information

Application	**ICC, E**
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
ICC~~N/A
E~~N/A

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 Cytomety
- Cell Culture

CD18 Antibody - Images

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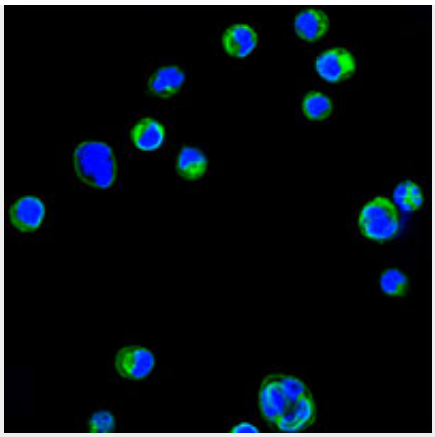

Figure 1: Confocal immunofluorescence analysis of HL60 cells using CD18 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.

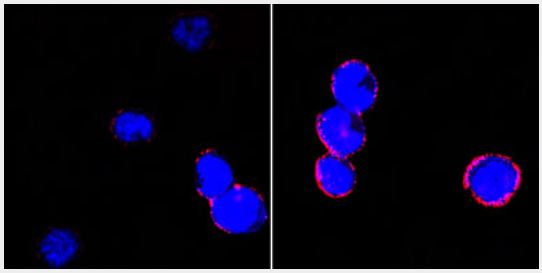

Figure 2: Confocal immunofluorescence analysis of BCBL-1 cells (left) and L1210 cells (right) using CD18 mouse mAb (red). Blue: DRAQ5 fluorescent DNA dye.

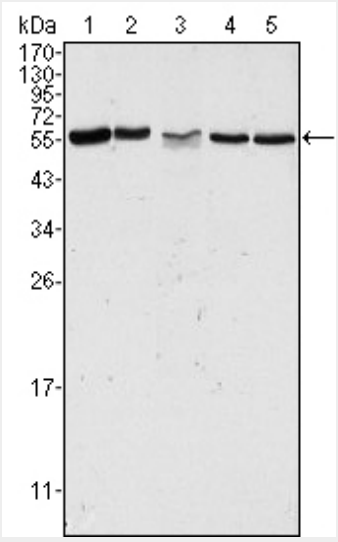

Figure 1: Western blot analysis using PAK2 mouse mAb against Hela (1), Jurkat (2), A549 (3), HEK293 (4) and K562 (5) cell lysate.

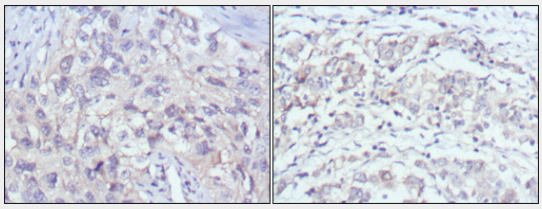

Figure 2: Immunohistochemical analysis of paraffin-embedded human lung cancer (left) and

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.