

## **CD18 Monoclonal Antibody**

Catalog No: YM0107

Reactivity: Human; Mouse

**Applications:** IF;ELISA

Target: Integrin β2

Fields: >>Rap1 signaling pathway;>>Phagosome;>>Hippo signaling pathway;>>Cell

adhesion molecules;>>Complement and coagulation cascades;>>Neutrophil

extracellular trap formation;>>Natural killer cell mediated

cytotoxicity;>>Leukocyte transendothelial migration;>>Regulation of actin cytoske leton;>>Pertussis;>>Legionellosis;>>Leishmaniasis;>>Malaria;>>Amoebiasis;>> Staphylococcus aureus infection;>>Tuberculosis;>>Human T-cell leukemia virus

1 infection;>>Rheumatoid arthritis;>>Viral myocarditis

Gene Name: ITGB2

Protein Name: Integrin beta-2

Human Gene Id: 3689

**Human Swiss Prot** P05107

No:

Mouse Gene Id: 16414

**Mouse Swiss Prot** 

No:

**Immunogen:** Purified recombinant fragment of CD18 expressed in E. Coli.

**Specificity:** CD18 Monoclonal Antibody detects endogenous levels of CD18 protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Source:** Monoclonal, Mouse

P11835

**Dilution:** IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other applications.

1/3



**Purification :** Affinity purification

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Cell Pathway: Cell adhesion molecules (CAMs);Natural killer cell mediated

cytotoxicity; Leukocyte transendothelial migration; Regulates Actin and

Cytoskeleton; Viral myocarditis;

P 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.

**Background:** This gene encodes an integrin beta chain, which combines with multiple different

alpha chains to form different integrin heterodimers. Integrins are integral cellsurface proteins that participate in cell adhesion as well as cell-surface mediated signalling. The encoded protein plays an important role in immune response and defects in this gene cause leukocyte adhesion deficiency. Alternative splicing

results in multiple transcript variants. [provided by RefSeq, Dec 2014],

**Function:** disease:Defects in ITGB2 are the cause of leukocyte adhesion deficiency type I

(LAD1) [MIM:116920]. LAD1 patients have recurrent bacterial infections and their

leukocytes are deficient in a wide range of adhesion-dependent

functions.,function:Integrin alpha-L/beta-2 is a receptor for ICAM1, ICAM2, ICAM3 and ICAM4. Integrins alpha-M/beta-2 and alpha-X/beta-2 are receptors for the iC3b fragment of the third complement component and for fibrinogen. Integrin alpha-X/beta-2 recognizes the sequence G-P-R in fibrinogen alpha-chain. Integrin alpha-M/beta-2 recognizes P1 and P2 peptides of fibrinogen gamma chain. Integrin alpha-M/beta-2 is also a receptor for factor X. Integrin alpha-D/beta-2 is a receptor for ICAM3 and VCAM1.,online information:ITGB2 mutation db,PTM:Both Ser-745 and Ser-756 become phosphorylated when T-cells are

exposed to phorbol esters. Phosphorylation on Thr-758 (but not on S

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

**Location:** pass type I membrane protein.

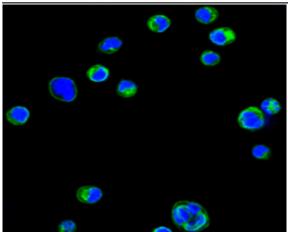
**Expression:** Leukocytes (PubMed:23775590). Expressed in neutrophils (at protein level)

(PubMed:21193407, PubMed:28807980).

## **Products Images**

2/3





Confocal immunofluorescence analysis of HL60 cells using CD18 Monoclonal Antibody (green). Blue: DRAQ5 fluorescent DNA dye.