

Anti-CD18 Antibody
Catalog # ABO10937**Specification**

Anti-CD18 Antibody - Product Information

Application	WB, IHC-P
Primary Accession	P05107
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

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

Reconstitution

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

Anti-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

Calculated MW

84782 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

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 Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human CD18(732-748aa LREYRRFEKEKLKSQWN), identical to the related mouse sequence, and different from the related rat sequence by one amino acid.

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 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)

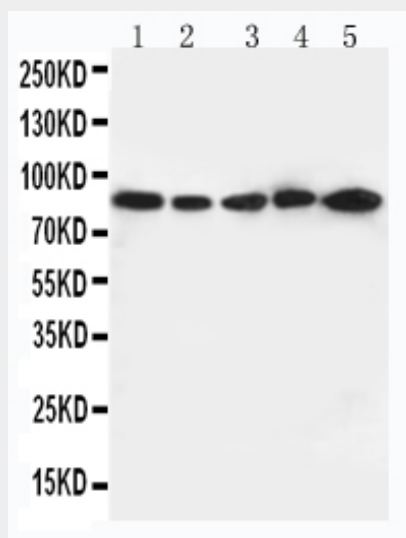
Anti-CD18 Antibody - Protocols

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

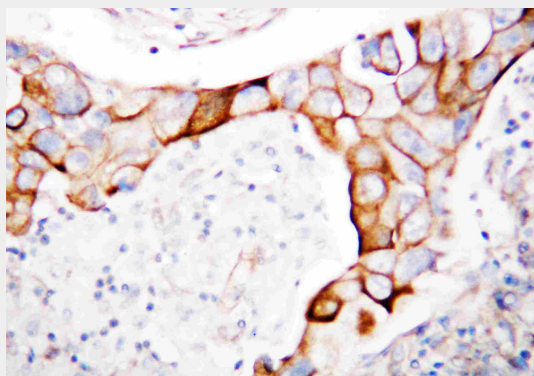
- [Western Blot](#)
- [Blocking Peptides](#)

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

Anti-CD18 Antibody - Images



Anti-CD18 antibody, ABO10937, Western blotting
Lane 1: JURKAT Cell Lysate Lane 2: CEM Cell Lysate
Lane 3: HT1080 Cell Lysate Lane 4: SMMC Cell Lysate
Lane 5: HELA Cell Lysate



Anti-CD18 antibody, ABO10937, IHC(P)IHC(P): Human Mammary Cancer Tissue

Anti-CD18 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."