10320 Camino Santa Fe, Suite G
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CD11b FITC Monoclonal Antibody (Clone ICRF44)

Mouse Monoclonal Antibody
Catalog # ABV11469

Specification

CD11b FITC Monoclonal Antibody (Clone ICRF44) - Product Information

Application	**FC**
Primary Accession	P11215
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse IgG1, Kappa**

CD11b FITC Monoclonal Antibody (Clone ICRF44) - Additional Information

Gene ID 3684

Positive Control Application & Usage	**FACS: Human PMBCs Flow (Cell Surface): 5 µl/1x10^6 cells, Volume per test: 5 µl (1 µg).**

Other Names
CD11b

Target/Specificity
CD11b

Antibody Form
Liquid

Appearance
Colorless liquid

Formulation
Phosphate-buffered aqueous solution pH 7.2, ≤0.09% Sodium azide, may contain carrier protein/stabilizer.

Handling
The antibody solution should be gently mixed before use.

Reconstitution & Storage
4°C

Background Descriptions

Precautions
CD11b FITC Monoclonal Antibody (Clone ICRF44) is for research use only and not for use in diagnostic or therapeutic procedures.

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CD11b FITC Monoclonal Antibody (Clone ICRF44) - Protein Information

Name ITGAM

Synonyms CD11B, CR3A

Function
Integrin ITGAM/ITGB2 is implicated in various adhesive interactions of monocytes, macrophages and granulocytes as well as in mediating the uptake of complement-coated particles and pathogens (PubMed:9558116, PubMed:20008295). It is identical with CR-3, the receptor for the iC3b fragment of the third complement component. It probably recognizes the R-G-D peptide in C3b. Integrin ITGAM/ITGB2 is also a receptor for fibrinogen, factor X and ICAM1. It recognizes P1 and P2 peptides of fibrinogen gamma chain. Regulates neutrophil migration (PubMed:28807980). In association with beta subunit ITGB2/CD18, required for CD177-PRTN3-mediated activation of TNF primed neutrophils (PubMed:21193407). May regulate phagocytosis-induced apoptosis in extravasated neutrophils (By similarity). May play a role in mast cell development (By similarity). Required with TYROBP/DAP12 in microglia to control production of microglial superoxide ions which promote the neuronal apoptosis that occurs during brain development (By similarity).

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

Tissue Location
Predominantly expressed in monocytes and granulocytes (PubMed:1346576). Expressed in neutrophils (at protein level) (PubMed:21193407).

CD11b FITC Monoclonal Antibody (Clone ICRF44) - 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

CD11b FITC Monoclonal Antibody (Clone ICRF44) - Images

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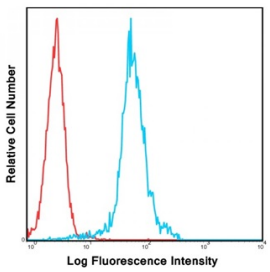

Human peripheral blood monocytes were stained with FITC ICRF44 with relevant isotype control in Red.

Human peripheral blood lymphocytes were stained with FITC ICRF44 with relevant isotype control in Red.

CD11b FITC Monoclonal Antibody (Clone ICRF44) - Background

CD3 (T3), a complex T cell marker, is known to associate noncovalently with the a/b or g/z heterodimer of the T cell antigen receptor (TCR) to form the most complex transmembrane (TM) receptor structures. CD3 is specially engaged in antigen recognition and is known to play an important role in mediating signals that are critical for T cell development in the thymus, proliferation, and induction of T cell-mediated immune responses against infectious agents and also in the differentiation of T cells into effector and memory populations. CD3 usually expresses in the cytoplasm of prothymocytes, and on the surface of about 95% of thymocytes, but cytoplasmic CD3 is lost as the cells differentiate into medullary thymocytes. Apart from its role as an important marker in the classification of malignant lymphomas and lymphoid leukemia, CD3 can also be useful for the identification of T cells in celiac disease, lymphocytic colitis and colorectal carcinomas associated with loss of a mismatch repair protein. CD3 indirectly plays an important role in immunomodulation whereas the anti-CD3 antibody may be used in in vitro Treg assays to generate effector T cells. The CD3 complex contains γ, δ, and ε chains, and it is part of the TCR complex, expressed by all mature T lymphocytes and by the thymocyte lineage. The OKT3 monoclonal antibody specifically reacts with the ε chain of the CD3/T lymphocyte antigen receptor complex. CD3 enhances the antigen recognition by signal transduction. The OKT3 antibody is an immunosuppressive, which has proven to be an effective therapeutic agent in liver, heart, and renal allograft rejection.