Leinco Technologies, Inc.
excellence in early discovery research™

Anti-Human CD11c (Clone 3.9)
Purified *in vivo* GOLD™ Functional Grade
Monoclonal Antibody

Product Information
Product No.: C369
Clone: 3.9
RRID: AB_2829681
Isotype: Mouse IgG1 κ
Storage: Sterile 2-8°C

Product Description
Specificity:
Clone 3.9 recognizes the α-chain (CD11c) of the CD11c/CD18 complex. It is specific for the I domain of CD11c. Clone 3.9 binds the activated form of CD11c and partially blocks the binding of CD11c with ICAM-4.

Antigen Distribution:
CD11c is primarily expressed on dendritic cells, NK cells, a subset of intestinal intraepithelial lymphocytes (IEL), and some activated T cells.

Background:
LFA-1α (CD11a) and CD18 are the Integrin alpha-L and beta-2 chains respectively that combine to form LFA-1, a glycoprotein and a member of the Integrin family. Integrin alpha-L/beta-2 is a receptor for ICAM1, ICAM2, ICAM3, ICAM4 and for F11R. LFA-1 participates in the immunological synapses between CD8+ T lymphocytes and antigen-presenting cells. The absence of LFA-1α or ß may induce LAD. The antigen contributes to natural killer cell cytotoxicity, and is involved in various immune phenomena such as leukocyte-endothelial cell interaction, cytotoxic T-cell mediated killing, and antibody dependent killing by granulocytes and monocytes. The CD11b/CD18 antigen is a heterodimeric surface glycoprotein on leukocytes and belongs to the ß2 integrin family. CD11b functions as a receptor for C3bi complement, clotting factor X, fibrinogen and ICAM-1. CD11c forms an α/ß heterodimeric glycoprotein (CD11c/CD18 complex) which belongs to the ß2 integrin family. The complex binds fibrinogen and reportedly serves as a receptor for iC3b and ICAM-1. During inflammatory responses, it mediates cell to cell interaction and is important in both monocyte adhesion and chemotaxis.

Known Reactivity Species:
Human

Format:
in vivo GOLD™, Purified in vivo Functional Grade

Immunogen:
Rheumatoid synovial fluid cells and fibronectin purified human monocytes

Formulation
This monoclonal antibody is aseptically packaged and formulated in 0.01 M phosphate buffered saline (150 mM NaCl) PBS pH 7.2 - 7.4 with no carrier protein, potassium, calcium or preservatives added. Due to inherent biochemical properties of antibodies, certain products may be prone to precipitation over time. Precipitation may be removed by aseptic centrifugation and/or filtration.

Purity
≥95% monomer by analytical SEC, >95% by SDS Page

Endotoxin
< 1.0 EU/mg as determined by the LAL method

Storage and Stability
Functional grade preclinical antibodies may be stored sterile as received at 2-8°C for up to one month. For longer term storage, aseptically aliquot in working volumes without diluting and store at ≤ -70°C. **Avoid Repeated Freeze Thaw Cycles.**

Product Preparation

Functional grade preclinical antibodies are manufactured in an animal free facility using *in vitro* cell culture techniques and are purified by a multi-step process including the use of protein A or G to assure extremely low levels of endotoxins, leachable protein A or aggregates.

Applications

Applications and Recommended Usage (Quality Tested By Leinco):

FC The suggested concentration for this 3.9 antibody for staining cells in flow cytometry is ≤ 2.0 µg per 10^6 cells in a volume of 100 µl or 100µl of whole blood. Titration of the reagent is recommended for optimal performance for each application.>

WB The suggested concentration for this 3.9 antibody for use in western blotting is 1-10 µg/ml.

Other Applications Reported in Literature:

CyTOF®

B

Country of Origin

USA

References

1. Leukocyte Typing V (1995) Oxford University Press 2. Leukocyte Typing IV (1989) Oxford University Press 3. Leukocyte Typing III (1987) Oxford University Press 4. Hogg, N. *et al.* (1986) *Eur. J. Immunol.* **16**:240 5. Malhotra, V. *et al.* (1986) *Eur. J. Immunol.* **16**:1117

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