Leinco Technologies, Inc.
excellence in early discovery research™

Anti-Human CD11a
Purified *in vivo* PLATINUM™ Functional Grade
Monoclonal Antibody

Product Information
Product No.: C673
Clone: 38
RRID: AB_2829815
Isotype: Mouse IgG2a
Storage: Sterile 2-8°C

Product Description
Specificity:
Clone 38 recognizes an epitope on human CD11a.
Antigen Distribution:
CD11a is present on thymocytes, blood lymphocytes, bone marrow cells and certain lymphoma and macrophage-like cell lines.
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:
Purified in vivo Functional Grade, in vivo PLATINUM™
Immunogen:
Fibronectin purified 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
≥98% monomer by analytical SEC, >95% by SDS Page
Endotoxin
<0.5 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.

Pathogen Testing

To protect mouse colonies from infection by pathogens and to assure that experimental preclinical data is not affected by such pathogens, all of Leinco's Purified Functional PLATINUM™ antibodies are tested and guaranteed to be negative for all pathogens in the IDEXX IMPACT I Mouse Profile.

Applications

Applications and Recommended Usage (Quality Tested By Leinco):

FC The suggested concentration for this 38 antibody for staining cells in flow cytometry is ≤ 1 µg per 10^6 cells in a volume of 100 µl or 100µl of whole blood followed by PN:A104. Titration of the reagent is recommended for optimal performance for each application.

WB This antibody can be used to detect Human, Mouse and Rat SHP2 by Western blot analysis at a concentration of 0.5-1.0 µg/ml when used in conjunction with compatible secondary reagents, such as PN:M1364, under either reducing or non-reducing conditions. The positive control for Western blotting is PN:M1019.

Other Applications Reported in Literature:

Costim

Country of Origin

USA

References

1. Stern, LJ. *et al.* (2005) *Proc Natl Acad Sci U S A.***102**(10):3744-9 PubMed
2. Taher, A. *et al.* (2008) *Haematologica.* **93**(6):941-2. Article Link
3. Fliedner, TM *et al.* (1996) *Cytometry.***25**(1):46-57. Article Link
4. Dransfield, I. *et al.* (1989) *The EMBO Journal* **8**:3759

410 Axminister Dr, St. Louis, MO 63026 (800) 538-1145 leincoglobal@leinco.com