

Anti-Human CD11b (activation epitope) Purified

Catalog Number: 14-0113

Also Known As: Integrin alpha M, Mac-1 alpha, Complement Receptor 3 alpha (CR3A)

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Contents: Anti-Human CD11b (activation epitope) Purified

REF **Catalog Number:** 14-0113

Clone: CBRM1/5

Concentration: 0.5 mg/mL

Host/Isotype: Mouse IgG1, kappa

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer



Temperature Limitation: Store at 2-8°C.



Batch Code: Refer to Vial



Use By: Refer to Vial



Caution, contains Azide

Description

The CBRM1/5 monoclonal antibody reacts with an activation-specific epitope of human Mac-1. CBRM1/5 binds a subset of Mac-1 molecules on neutrophils and monocytes after stimulation with chemoattractants or phorbol esters but does not recognize Mac-1 on resting myeloid cells. Through interactions with its ligands, Mac-1 participates in adhesive cell interactions. The epitope recognized by this mAb localizes to the I domain on the α chain of Mac-1 very close to the ligand binding site in a region that is widely exposed. CBRM1/5 blocks Mac-1 dependent adhesion to fibrinogen and ICAM-1 and inhibits chemoattractant-stimulated adhesion of eosinophils to the Intercellular Adhesion Molecule-1 (ICAM-1). It should be noted that low level activation may occur during processing of freshly drawn blood. Therefore the CBRM1.5 antibody may exhibit some binding to Mac-1 in these unstimulated samples. However, higher levels of Mac-1 expression are observed in activated samples when compared to unstimulated cells.

Applications Reported

The CBRM1/5 antibody has been reported for use in flow cytometric analysis, and immunoprecipitation. CBRM1/5 has also been reported in blocking of CD11b function. (Please use Functional Grade purified CBRM1/5, cat. 16-0113, in functional assays.)

Applications Tested

The CBRM1/5 antibody has been tested by flow cytometric analysis of resting and activated human peripheral leukocytes. This can be used at less than or equal to 1 μ g per test. A test is defined as the amount (μ g) of antibody that will stain a cell sample in a final volume of 100 μ L. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Oxvig C, Lu C, Springer TA. Conformational changes in tertiary structure near the ligand binding site of an integrin I domain. Proc Natl Acad Sci U S A. 1999 Mar 2;96(5):2215-20.

Weber C, Kitayama J, Springer TA. Differential regulation of beta 1 and beta 2 integrin avidity by chemoattractants in eosinophils Proc Natl Acad Sci U S A. 1996 Oct 1;93(20):10939-44.

Diamond MS, Springer TA. A subpopulation of Mac-1 (CD11b/CD18) molecules mediates neutrophil adhesion to ICAM-1 and fibrinogen. J Cell Biol. 1993 Jan;120(2):545-56.

Related Products

11-4011 Anti-Mouse IgG FITC

11-4317 Streptavidin FITC

12-4317 Streptavidin PE

13-4013 Anti-Mouse IgG Biotin (Polyclonal)

14-4714 Mouse IgG1 K Isotype Control Purified (P3.6.2.8.1)

17-4317 Streptavidin APC

Not for further distribution without written consent.

Copyright © 2000-2012 eBioscience, Inc.

Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • www.eBioscience.com • info@eBioscience.com