# abcam

## Product datasheet

## Anti-CD18 antibody [MEM-48] ab657

## \* ★ ★ ★ ★ 1 Abreviews 10 References 1 Image

#### Overview

Product name Anti-CD18 antibody [MEM-48]

**Description** Mouse monoclonal [MEM-48] to CD18

Host species Mouse

**Specificity** Human CD18 antigen. This antibody recognizes all three leucocyte integrins.

Tested applications Suitable for: Flow Cyt
Species reactivity Reacts with: Human

Immunogen Tissue, cells or virus corresponding to Human CD18. Leucocytes of a patient suffering from a

LGL-type leukaemia

**General notes**This product was changed from ascites to tissue culture supernatant on 24th January 2018.

Please note that the dilutions may need to be adjusted accordingly. If you have any questions,

please do not hesitate to contact our scientific support team.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

### **Properties**

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

**Storage buffer** pH: 7.40

Preservative: 0.097% Sodium azide

Constituent: PBS

Purity Multi-step Chromatography

**Purification notes** Purified from TCS. Purity >95% by SDS-PAGE.

**Clonality** Monoclonal

1

Clone number MEM-48

Isotype lgG1

#### **Applications**

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab657 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt	<b>★★★★☆ (1)</b>	Use $0.1$ -1 $\mu$ g for $10^6$ cells. <b>ab170190</b> - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.

## **Target**

**Function** Integrin alpha-L/beta-2 is a receptor for ICAM1, ICAM2, ICAM3 and ICAM4. Integrins alpha-

> M/beta-2 and alpha-X/beta-2 are receptors for the iC3b fragment of the third complement component and for fibrinogen. Integrin alpha-X/beta-2 recognizes the sequence G-P-R in fibrinogen alpha-chain. Integrin alpha-M/beta-2 recognizes P1 and P2 peptides of fibrinogen gamma chain. Integrin alpha-M/beta-2 is also a receptor for factor X. Integrin alpha-D/beta-2 is a

receptor for ICAM3 and VCAM1.

Involvement in disease Defects in ITGB2 are the cause of leukocyte adhesion deficiency type 1 (LAD1) [MIM:116920].

LAD1 patients have recurrent bacterial infections and their leukocytes are deficient in a wide

range of adhesion-dependent functions.

Sequence similarities Belongs to the integrin beta chain family.

Contains 1 VWFA domain.

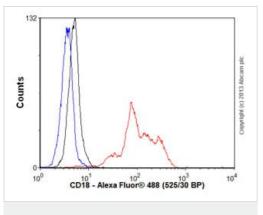
Post-translational

Both Ser-745 and Ser-756 become phosphorylated when T-cells are exposed to phorbol esters. modifications

Phosphorylation on Thr-758 (but not on Ser-756) allows interaction with 14-3-3 proteins.

**Cellular localization** Membrane.

## **Images**



Flow Cytometry - Anti-CD18 antibody [MEM-48] (ab657)

Human peripheral blood lymphocytes stained with ab657 (red line). Human whole blood was processed using a modified protocol based on Chow et al, 2005 (PMID: 16080188). In brief, human whole blood was fixed in 4% formaldehyde (methanol-free) for 10 min at 22°C. Red blood cells were then lyzed by the addition of Triton X-100 (final concentration - 0.1%) for 15 min at 37℃. For experimentation, cells were treated with 50% methanol (-20°C) for 15 min at 4°C. Cells were then incubated with the antibody (ab657, 1µg/1x10<sup>6</sup> cells) for 30 min at 4°C. The secondary antibody used was Alexa Fluor® 488 goat anti-mouse IgG (H&L) (ab150113) at 1/2000 dilution for 30 min at 4°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 1µg/1x10<sup>6</sup> cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >30,000 total events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. Gating strategy - peripheral blood lymphocytes.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

#### Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors