

## Product datasheet

# Anti-CD18 antibody [MEM148] - Low endotoxin, Azide free ab176540

1 Image

### Overview

<b>Product name</b>	Anti-CD18 antibody [MEM148] - Low endotoxin, Azide free
<b>Description</b>	Mouse monoclonal [MEM148] to CD18 - Low endotoxin, Azide free
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> IP, WB, Functional Studies, Flow Cyt
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Does not react with:</b> Pig
<b>Immunogen</b>	Tissue, cells or virus corresponding to Human CD18. Peripheral blood mononuclear cells. Database link: <a href="#">P05107</a>
<b>Epitope</b>	ab176540 recognizes an epitope on CD18 which is essentially inaccessible in intact integrin molecules on resting leukocytes, but is exposed on high-affinity state of LFA-1 or on unassociated CD18.
<b>General notes</b>	Endotoxin level is less than 0.01 EU/μg of the protein, as determined by the LAL test.  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

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.40 Constituent: 100% PBS  Buffer is 0.2 μm filter sterilized.
<b>Carrier free</b>	Yes

<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	MEM148
<b>Isotype</b>	IgG1

## Applications

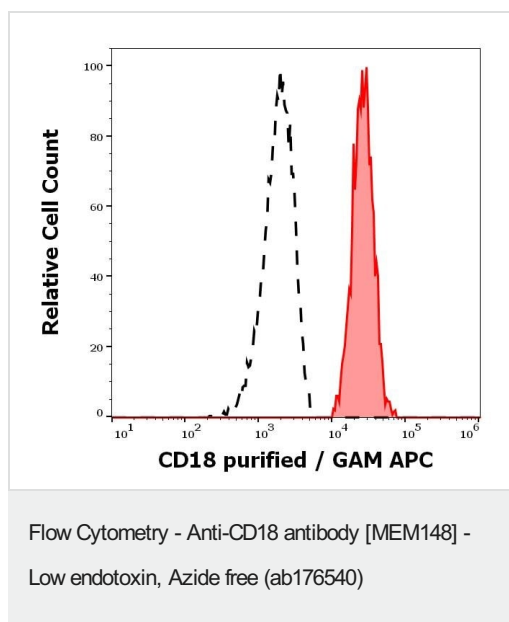
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab176540 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
<b>IP</b>		Use at an assay dependent concentration.
<b>WB</b>		Use at an assay dependent concentration. Predicted molecular weight: 84 kDa. Non-reducing conditions.
<b>Functional Studies</b>		Use at an assay dependent concentration. ab176540 induces homotypic cell aggregation and high-affinity LFA-1 conformation in resting leukocytes.
<b>Flow Cyt</b>		Use at an assay dependent concentration. <b>ab170190</b> - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

## Target

<b>Function</b>	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.
<b>Involvement in disease</b>	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.
<b>Sequence similarities</b>	Belongs to the integrin beta chain family. Contains 1 VWFA domain.
<b>Post-translational modifications</b>	Both Ser-745 and Ser-756 become phosphorylated when T-cells are exposed to phorbol esters. Phosphorylation on Thr-758 (but not on Ser-756) allows interaction with 14-3-3 proteins.
<b>Cellular localization</b>	Membrane.

## Images



This data was developed using **ab8220**, the same antibody clone in a different buffer formulation.

Flow cytometry analysis of human peripheral whole blood cells using **ab8220** at 1.67 µg/ml showing separation of human monocytes (red-filled) from CD18 negative blood debris (black-dashed).

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

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