

Anti-CD16 antibody [MEM-154] - BSA and Azide free ab46679

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Overview

Product name	Anti-CD16 antibody [MEM-154] - BSA and Azide free
Description	Mouse monoclonal [MEM-154] to CD16 - BSA and Azide free
Host species	Mouse
Specificity	The antibody MEM-154 reacts with the epitope on CD16 antigen residing in proximity to FG loop (probably BC or C'E loop). CD16 is a low affinity receptor for aggregated IgG (FcγRIII antigen). MEM-154 recognizes a polymorphism of CD16a (NK cells form), it reacts well with granulocyte form (CD16b) of all subjects. The antibody blocks binding of human IgG to FcγRIII.
Tested applications	Suitable for: Flow Cyt
Species reactivity	Reacts with: Human
Immunogen	Tissue, cells or virus corresponding to Human CD16. Human granulocytes
Positive control	Peripheral blood lymphocytes
General notes	Preserved by filter sterilization. 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 long term.
Storage buffer	pH: 7.40 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified

Purification notes	Purified from hybridoma culture supernatant. Purity >95% by SDS-PAGE.
Clonality	Monoclonal
Clone number	MEM-154
Isotype	IgG1

Applications

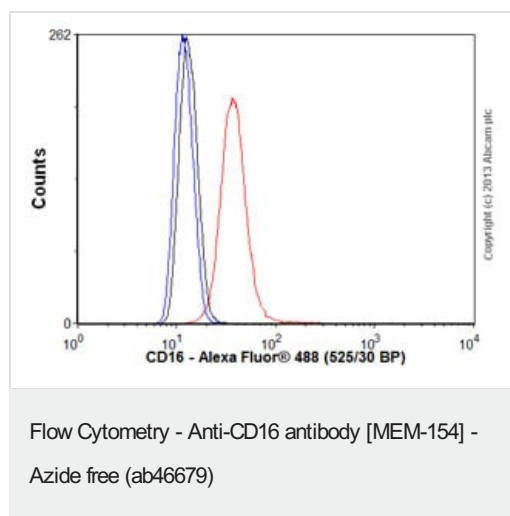
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab46679 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		Use 1µg for 10 ⁶ cells. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target

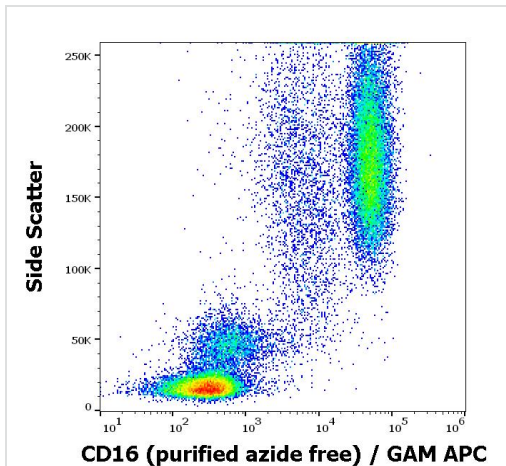
Function	Receptor for the Fc region of IgG. Binds complexed or aggregated IgG and also monomeric IgG. Mediates antibody-dependent cellular cytotoxicity (ADCC) and other antibody-dependent responses, such as phagocytosis.
Tissue specificity	Expressed on natural killer cells, macrophages, subpopulation of T-cells, immature thymocytes and placental trophoblasts.
Sequence similarities	Contains 2 Ig-like C2-type (immunoglobulin-like) domains.
Post-translational modifications	Glycosylated. Contains high mannose- and complex-type oligosaccharides. The soluble form is produced by a proteolytic cleavage.
Cellular localization	Cell membrane. Secreted. Exists also as a soluble receptor.

Images



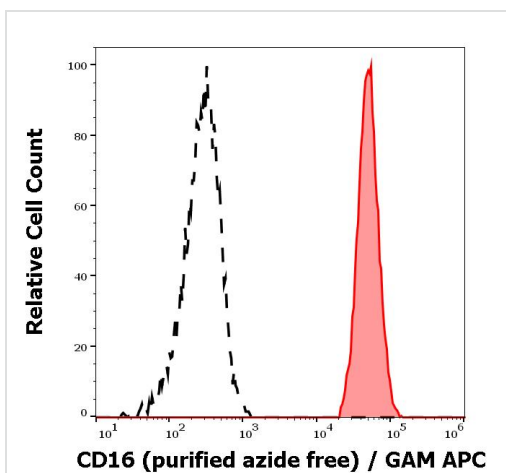
Human peripheral blood granulocytes stained with ab46679 (red line). Human whole blood was processed using a modified protocol based on Chow *et al*, 2005 (PMID: 16080188). In brief, human whole blood was fixed in 4% formaldehyde (methanol-free) for 10 min at 22°C. Red blood cells were then lysed by the addition of Triton X-100 (final concentration - 0.1%) for 15 min at 37°C. For experimentation, cells were treated with 50% methanol (-20°C) for 15 min at 4°C. Cells were then incubated with the antibody (ab46679, 1µg/1x10⁶ 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/1x10⁶ 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 granulocytes.



Flow Cytometry - Anti-CD16 antibody [MEM-154] - BSA and Azide free (ab46679)

Flow cytometry surface staining pattern of human peripheral blood stained using ab46679 at 2 µg/ml) GAM APC.



Flow Cytometry - Anti-CD16 antibody [MEM-154] - BSA and Azide free (ab46679)

Separation of human neutrophil granulocytes (red-filled) from CD16 negative lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using ab46679 at 2 µg/ml.

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