

Product datasheet

Anti-CD38 antibody [HB-7] ab235118

Recombinant

5 Images

Overview

Product name	Anti-CD38 antibody [HB-7]
Description	Mouse monoclonal [HB-7] to CD38
Host species	Mouse
Tested applications	Suitable for: ICC/IF, Flow Cyt
Species reactivity	Reacts with: Human
Immunogen	Tissue, cells or virus corresponding to Human CD38. Human BJAB cell line
Positive control	ICC/IF: Raji cells. Human PBMC. Flow Cyt: Raji cells. Human PBMC.
General notes	<p>This antibody clone is manufactured by Abcam. If you require a different buffer formulation or a particular conjugate for your experiments, please contact orders@abcam.com.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.</p> <p>Please check that this product meets your needs before purchasing. If you have any questions,</p>

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, as well as 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. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 0.05% BSA, 40% Glycerol (glycerin, glycerine)
Purity	Protein A purified
Clonality	Monoclonal
Clone number	HB-7
Isotype	IgG1

Applications

Our [Abpromise guarantee](#) covers the use of **ab235118** in the following tested applications.

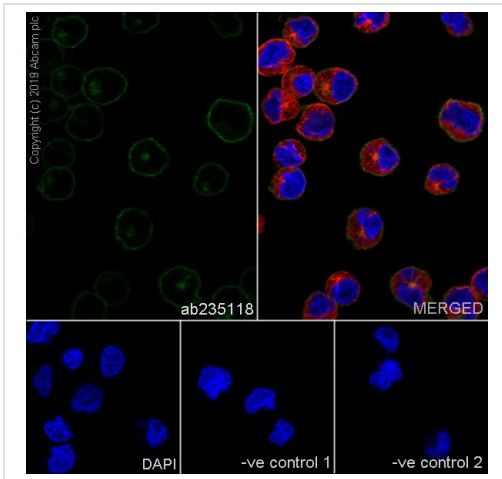
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use a concentration of 5.6 µg/ml.
Flow Cyt		Use a concentration of 1.12 µg/ml.

Target

Function	Synthesizes cyclic ADP-ribose, a second messenger for glucose-induced insulin secretion. Also has cADPr hydrolase activity. Also moonlights as a receptor in cells of the immune system.
Tissue specificity	Expressed at high levels in pancreas, liver, kidney, brain, testis, ovary, placenta, malignant lymphoma and neuroblastoma.
Sequence similarities	Belongs to the ADP-ribosyl cyclase family.
Developmental stage	Preferentially expressed at both early and late stages of the B and T-cell maturation. It is also detected on erythroid and myeloid progenitors in bone marrow, where the level of surface expression was shown to decrease during differentiation of blast-forming unit E to colony-forming unit E.
Cellular localization	Membrane.
Form	There are 2 isoforms produced by alternative splicing.

Images



Flow Cytometry - Anti-CD38 antibody [HB-7]
(ab235118)

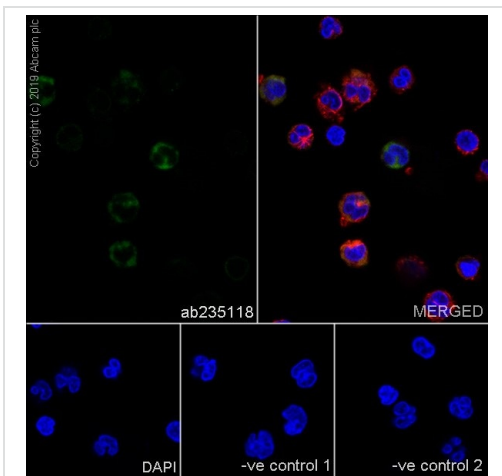
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized Raji (human Burkitt's lymphoma B lymphocyte) cells labeling CD38 with ab235118 at 5.6µg/ml, followed by ab150113 AlexaFluor®488 Goat anti-Mouse secondary at 1/1000 dilution (green). Confocal image showing cytoplasmic and membranous staining in Raji cell line. The nuclear counterstain is DAPI (blue).

Tubulin is detected with ab179504 Anti-beta IV Tubulin antibody - Microtubule Marker at a 1/200 dilution, followed by ab150080 AlexaFluor®594 Goat anti-Rabbit secondary at 1/1000 dilution (red).

The negative controls are as follows:

-ve control 1: ab235118 at 1/200 dilution, followed by ab150080 AlexaFluor®594 Goat anti-Rabbit secondary antibody at 1/1000 dilution.

-ve control 2: ab179504 at 1/200 dilution, followed by ab150113 AlexaFluor®488 Goat anti-Mouse secondary antibody at 1/1000 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-CD38 antibody [HB-7] (ab235118)

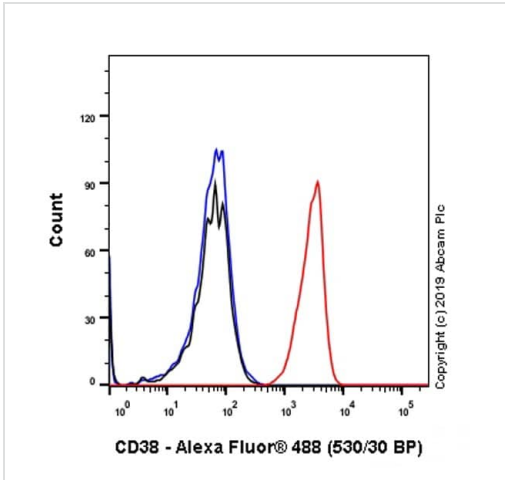
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized human PBMC (human primary peripheral blood mononuclear cell) cells labeling CD38 with ab235118 at 5.6µg/ml, followed by ab150113 AlexaFluor®488 Goat anti-Mouse secondary at 1/1000 dilution (green). Confocal image showing cytoplasmic and membranous staining in subsets of human PBMC. The nuclear counterstain is DAPI (blue).

Tubulin is detected with ab179504 Anti-beta IV Tubulin antibody - Microtubule Marker at a 1/200 dilution, followed by ab150080 AlexaFluor®594 Goat anti-Rabbit secondary at 1/1000 dilution (red).

The negative controls are as follows:

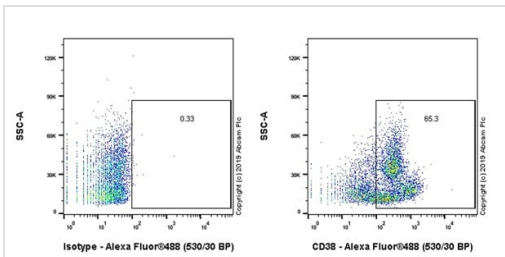
-ve control 1: ab235118 at 1/200 dilution, followed by ab150080 AlexaFluor®594 Goat anti-Rabbit secondary antibody at 1/1000 dilution.

-ve control 2: ab179504 at 1/200 dilution, followed by ab150113 AlexaFluor®488 Goat anti-Mouse secondary antibody at 1/1000 dilution.



Flow cytometric analysis of Raji (Human Burkitt's lymphoma B lymphocyte) cell line labeling CD38 with ab235118 at 1.12µg/ml (red) compared with a Mouse IgG, monoclonal - Isotype Control (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Mouse IgG (Alexa Fluor® 488) (ab150113) at 1/2000 dilution was used as the secondary antibody. Gated on viable cells.

Flow Cytometry - Anti-CD38 antibody [HB-7] (ab235118)





Flow cytometric analysis of human peripheral blood mononuclear cell (PBMC) (right) labeling CD38 with ab235118 at 1.12µg/ml compared with Mouse monoclonal IgG Isotype Control (left). Goat Anti-Mouse IgG (Alexa Fluor® 488) (ab150113) at 1/2000 dilution was used as the secondary antibody.

Gated on viable cells.

Flow Cytometry - Anti-CD38 antibody [HB-7] (ab235118)

Why choose a recombinant antibody?

 Research with confidence Consistent and reproducible results	 Long-term and scalable supply Recombinant technology
 Success from the first experiment Confirmed specificity	 Ethical standards compliant Animal-free production

Anti-CD38 antibody [HB-7] (ab235118)

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- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
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