abcam

Product datasheet

Anti-CD33 antibody [WM53] - BSA and Azide free ab252263

Recombinant

8 References 3 Images

Overview

Product name	Anti-CD33 antibody [WM53] - BSA and Azide free
Description	Mouse monoclonal [WM53] to CD33 - BSA and Azide free
Host species	Mouse
Tested applications	**Suitable for:** ICC/IF, Flow Cyt **Unsuitable for:** WB
Species reactivity	**Reacts with:** Human
Immunogen	Tissue, cells or virus. This information is proprietary to Abcam and/or its suppliers.
Positive control	Flow Cyt: Human peripheral blood mononuclear cells (PBMC). ICC: HL-60 cells
General notes	ab252263 is the carrier-free version of **ab30371**. This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact **orders@abcam.com**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	WM53
Isotype	IgG1

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab252263 in the following tested applications.

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

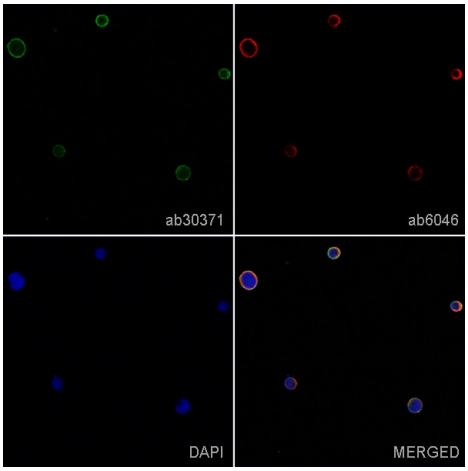
Application	Abreviews	Notes
ICC/IF		Use a concentration of 5 µg/ml. Works in both 4% PFA fixed cells (10mins) and 100% MeOH fixed cells (5mins)
Flow Cyt		1/500.

Application notes Is unsuitable for WB.

Target

Function	Putative adhesion molecule of myelomonocytic-derived cells that mediates sialic-acid dependent binding to cells. Preferentially binds to alpha-2,6-linked sialic acid. The sialic acid recognition site may be masked by cis interactions with sialic acids on the same cell surface. In the immune response, may act as an inhibitory receptor upon ligand induced tyrosine phosphorylation by recruiting cytoplasmic phosphatase(s) via their SH2 domain(s) that block signal transduction through dephosphorylation of signaling molecules. Induces apoptosis in acute myeloid leukemia (in vitro).
Tissue specificity	Monocytic/myeloid lineage cells.
Sequence similarities	Belongs to the immunoglobulin superfamily. SIGLEC (sialic acid binding Ig-like lectin) family. Contains 1 Ig-like C2-type (immunoglobulin-like) domain. Contains 1 Ig-like V-type (immunoglobulin-like) domain.
Domain	Contains 2 copies of a cytoplasmic motif that is referred to as the immunoreceptor tyrosine-based inhibitor motif (ITIM). This motif is involved in modulation of cellular responses. The phosphorylated ITIM motif can bind the SH2 domain of several SH2-containing phosphatases.
Post-translational modifications	Phosphorylation of Tyr-340 is involved in binding to PTPN6 and PTPN11. Phosphorylation of Tyr-358 is involved in binding to PTPN6.
Cellular localization	Cell membrane.

Images

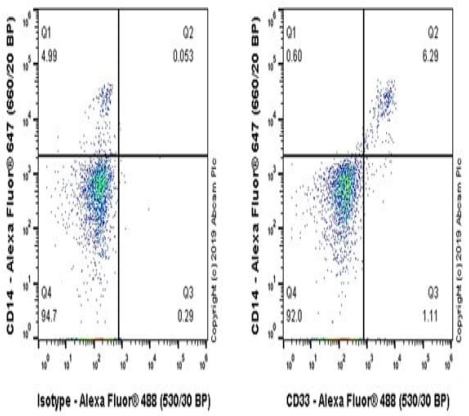


Immunocytochemistry/ Immunofluorescence - Anti-CD33 antibody [WM53] - BSA and Azide free (ab252263)

This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (**ab30371**)

ab30371 staining CD33 in HL-60 cells. The cells were fixed with 100% MeOH (5min), permeabilized with 0.1%PBS-Tween for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at +4°C with **ab30371** at 5µg/ml and **ab6046**, Rabbit polyclonal to beta Tubulin - Loading Control, at 1/1000 dilution. Cells were then incubated with **ab150117**, Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) at 1/1000 dilution (shown in green) and **ab150080**, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 594) at 1/1000 dilution (shown in pseudocolor red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



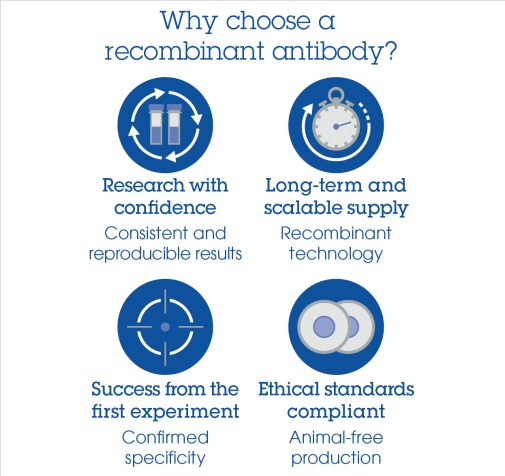
Flow Cytometry - Anti-CD33 antibody [WM53] - BSA and Azide free (ab252263)

Flow cytometric analysis of human peripheral blood mononuclear cell (PBMC) (right) labeling CD33 with **ab30371** at 1/40 dilution 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.

Cells were stained with mouse IgG (Left) or **ab30371** (Right). Then stained with anti-CD14 conjugated to Alexa Fluor® 647.

Gated on viable cells.

This image was produced using the same antibody clone but in a different formulation containing PBS, sodium azide, glycerol and BSA (**ab30371**).



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(ab252263)

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