anti-human CD33 APC-conjugated

APC - conjugated monoclonal antibody to human CD33

Cat-No: **21270336** 500 µl

Clone: HIM3-4

Specifity: The antibody HIM3-4 reacts with CD33, a 67 kDa type I transmembrane glycoprotein (immuno-globulin superfamily) expressed on myeloid progenitors, monocytes, granulocytes, dendritic cells and mast cells; it is absent on platelets, lymphocytes, erythrocytes and hematopoietic stem cells.

Isotype subclass: Mouse IgG1

Form: The purified antibody is conjugated with Allophycocyanin (APC) under optimum conditions. The reagent is adjusted for direct use. No reconstitution is necessary.

Physical state: Liquid

Buffer/Additives/Preservative: PBS containing 1 % BSA and 0.09 % sodium azide (pH 7.2).

Expiration date: The reagent is stable until the expiry date stated on the vial label.

Storage conditions: Store at 4 °C. Avoid prolonged exposure to light.

Application: The reagent is designed for Flow Cytometry analysis of human blood cells.

Background: CD33 is a transmembrane protein of the sialic acid-binding immunoglobulin-like lectin (Siglec) family. It belongs to the immunoreceptor tyrosine-based inhibitory motif (ITIM)-containing molecules able of recruiting protein tyrosine phosphatases SHP-1 and SHP-2 to signal assemblies; these ITIMs are also used for ubiquitin-mediated removal of the receptor from the cell surface. CD33 is expressed on cells of myelomonocytic lineage, binds sialic acid residues in N- and O-glycans on cell surfaces, and is a therapeutic target for acute myeloid leukemia.

References:

- *Leukocyte Typing V., Schlossman S. et al. (Eds.), Oxford University Press (1995).
- *Leukocyte Typing VI., Kishimoto T. et al. (Eds.), Garland Publishing Inc. (1997).
- *Ulyanova T, Blasioli J, Woodford-Thomas TA, Thomas ML: The sialoadhesin CD33 is a myeloid-specific inhibitory receptor. Eur J Immunol. 1999 Nov;29(11):3440-9.

Warning: Sodium azide is harmful if swallowed (R22). Keep out of reach of children (S2). Keep away from food, drink and animal feeding stuff (S13). Wear suitable protective clothing (S36). If swallowed, seek medical advice immediately and show this container or label (S46). Contact with acids liberates very toxic gas (R32). Azide compounds should be flushed with large volumes of water during disposal to avoid deposits in lead or copper plumbing where explosive conditions can develop.

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