

# anti-human CD33

## Monoclonal Antibody HIM3-4 to CD33 (Human)

Cat-No: **21270331**

100 µg in 100 µl

**Clone:** HIM3-4

**Specificity:** The antibody HIM3-4 reacts with CD33, a 67 kDa type I transmembrane glycoprotein (immunoglobulin 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:** Purified from cell culture supernatant by protein-G affinity chromatography.

**Purity:** > 95% (by SDS-PAGE).

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

**Physical state:** Liquid

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

**Storage conditions:** Store at 4 °C. For long-term storage aliquot and store at -20°C. Avoid freeze/thaw cycles.

**Application:** Flow Cytometry

**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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