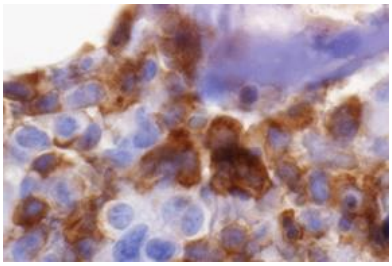
CD 33
clone PWS44

Instructions for Use

Specification:
CD33 (gp67, or siglec-3) is a 67 kDa glycosylated transmembrane protein that is a member of the sialic acid–binding immunoglobulin-like lectin (siglec) family. The genomic locus of this protein has been mapped to chromosome 19q13.1-3.5. In maturing granulocytic cells, there is progressive downregulation of CD33 from the blast stage to mature neutrophils. However, in monocytes and macrophages/histiocytes, strong expression of CD33 is maintained throughout maturation. Therefore, the positive control tissue should be bone marrow myeloid cells (especially myeloid precursors), liver Kupffer cells, lung alveolar macrophages, or placental syncytiotrophoblasts. Detection of CD33 using monoclonal antibodies has been a critical component in immunophenotyping acute leukemias, particularly acute myeloid leukemias. This anti-CD33 may be particularly advantageous for cases of acute myeloid leukemia, minimally differentiated (AML-M0) and acute monocytic leukemia (AML-M5), in which other paraffin section markers of myeloid differentiation (such as anti-myeloperoxidase) may be negative. However, anti-CD33 staining cannot be used in isolation and must be correlated with other myeloid and lymphoid markers because cases of myeloid antigen–positive acute lymphoblastic leukemia may show bona fide CD33 expression.

Availability:

Catalog No.	Contents	Volume
ILM1303-C01	CD33	0,1 ml concentrate
ILM1303-C05	CD33	0,5 ml concentrate
ILM1303-C1	CD33	1,0 ml concentrate



Intended use: For Research Use Only

Reactivity: Human

Clone: PWS44

Species of origin: Mouse

Isotype: IgG_{2b}

Control Tissue: Acute myeloid leukemia with monocytic differentiation, placenta

Staining: Membranous

Presentation: Antibody diluted in Tris Buffer, pH 7.3-7.7, with 1% BSA and <0.1% Sodium Azide

Application and suggested dilutions:
Pretreatment: Heat induced epitope retrieval in 10 mM citrate buffer, pH6.0, or in 50 mM Tris buffer pH9.5, for 20 minutes is required for IHC staining on formalin-fixed, paraffin embedded tissue sections.

- Immunohistochemical staining of formalin-fixed, paraffin embedded tissue section (dilution up to 1:50-1:100)

The optimal dilution for a specific application should be determined by the investigator.

Note: Dilution of the antibody in 10% normal goat serum followed by a goat anti-mouse secondary antibody-based detection is recommended.

Storage & Stability: Store at 2-8 °C. Do not use after expiration date printed on the vial.

References:

1) Crocker, PR et al. New I-type lectins of the CD33-related siglec subgroup identified through genomics. Biochem Soc Symp 2002; 69:83-96.
2) Braylan, RC et al. Optimal number of reagents required to evaluate hematolymphoid neoplasias: results of an international consensus meeting. Cytometry 2001; 46:23-27.
3) Chang, H et al. Prognostic relevance of immunophenotyping in 379 patients with acute myeloid leukemia. Leuk Res 2004; 28:43-48.
4) Mason, KD et al. The immunophenotype of acute myeloid leukemia: is there a relationship with prognosis? Blood Rev 2006; 20:71-78.