

Mouse Anti-CD33 [HIM3-4]: MC0205, MC0205RTU7

Intended Use: For Research Use Only

Description: 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. This CD33 antibody 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. All cases of myeloid sarcoma in this study showed anti-CD33 positivity in the myeloid and monocytic subsets, allowing for easy interpretation. The excellent sensitivity and specificity for myelomonocytic lineage makes this anti-CD33 a useful diagnostic marker for myeloid sarcoma. In addition, this anti-CD33 may be useful in determining CD33 expression on previous paraffin-embedded material if flow cytometry studies were not initially performed in patients with acute leukemia. Analysis of CD33 expression in paraffin-embedded bone marrow biopsy specimens provides another alternative when evaluating acute leukemias.

Specifications

Clone: HIM3-4
 Source: Mouse
 Isotype: IgG1k
 Reactivity: Human
 Localization: Cytoplasm
 Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC, Flow Cyt.
 Package:

Description	Catalog No.	Size
CD33 [HIM3-4] Concentrated	MC0205	1 ml
CD33 [HIM3-4] Prediluted	MC0205RTU7	7 ml

IHC Procedure*

Positive Control Tissue: Tonsil, myeloid leukemia
 Concentrated Dilution: 10-50
 Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.

References:

1. CD33-specific chimeric antigen receptor T cells exhibit potent preclinical activity against human acute myeloid leukemia. Kenderian SS, et al. *Leukemia*. Aug;29(8):1637-47, 2015.
2. Association of CD33 polymorphism rs3865444 with Alzheimer's disease pathology and CD33 expression in human cerebral cortex. Walker DG, et al. *Neurobiol Aging*. Feb;36(2):571-82, 2015.
3. Indolent T-lymphoblastic proliferation with disseminated multinodal involvement and partial CD33 expression. Ohgami RS, et al. *Am J Surg Pathol*. Sep;38(9):1298-304, 2014.