For Research Use Only.
Not for use in diagnostic procedures.

A JSR Life Sciences Company

MONOCLONAL ANTIBODY

Anti-CD66c (KOR-SA3544) (Human) mAb-PE

Code No.	Clone	Subclass	Quantity
D028-5	KOR-SA3544	Mouse IgG1	1 mL (50 tests)

BACKGROUND: This monoclonal antibody (clone KOR-SA3544) was reactive with a surface antigen expressed on Philadelphia chromosome (Ph1)-positive acute lymphoblastic leukemia (ALL) without exception (26/26 cases). The recognized antigen is a nonspecific cross-reacting antigen (NCA)-50/90 (CD66c), one of the carcinoembryonic antigen (CEA)-related glycoproteins encoded by a member of the CEA gene family.

The Philadelphia chromosome (Ph1) has been implicated as the causative factor in greater than 90% of chronic myelogenous leukemia (CML), in 25–30% of adult and 2–10% of childhood acute lymphoblastic leukemia (ALL) and in rare cases of acute myelogenous leukemia (AML). The presence of the Ph in leukemic cells of ALL patients usually indicates poor prognosis and high risk. Sequential monitoring of the Ph in ALL correlates with the activity of malignant clones and predicts impending clinical relapse, and therefore is useful in guiding clinical therapeutic decisions.

SOURCE: This antibody was purified from ascites fluid (clone KOR-SA3544) using protein A agarose. This hybridoma was established by fusion of mouse myeloma cell 63.Ag8.653/NS1 with Balb/c mouse splenocyte immunized with a cell line (KOCL-22) established from bone marrow blood of patient with congenital leukemia.

FORMULATION: 50 tests in 1 mL volume of PBS containing 1% BSA and 0.09% NaN_3.

*Azide may react with copper or lead in plumbing system to form explosive metal azides. Therefore, always flush plenty of water when disposing materials containing azide into drain.

STORAGE: This antibody solution is stable for one year from the date of purchase when stored at 4°C.

REACTIVITY: The reactivity of this antibody has been reported as follows.

Common ALL[a]	5/38 (13.2%)
Early B precursor ALL[b]	1[c]/21 (4.8%)
T-ALL	0/19
B-ALL	0/6
B-CLL/HCL	0/3
Multiple myeloma	0/2
ANLL	16/56 (28.6%)
Ph1-ALL	26/26[d] (100%)
CML blastic crisis	0/9
T-NHL	0/5
B-NHL	0/4
Hodgkin's disease	0/1

CLL, chronic lymphocytic leukemia
HCL, hairy cell leukemia
NHL, non-Hodgkin's lymphoma
[a]$CD10^+$, $CD19^+$, $HLA\text{-}DR^+$
[b]$CD10^-$, $CD19^+$, $HLA\text{-}DR^+$
[c]One patient with 11q23 translocation.
[d]Eighteen patients with m-bcr, eight patients with M-bcr

APPLICATION:

Flow cytometry; 20 µL (Ready for use)

*Please refer to the data sheet (MBL code no. D028-3) for other applications.

Detailed procedure is provided in the following **PROTOCOL**.

INTENDED USE:

For Research Use Only. Not for use in diagnostic procedures.

REFERENCES:

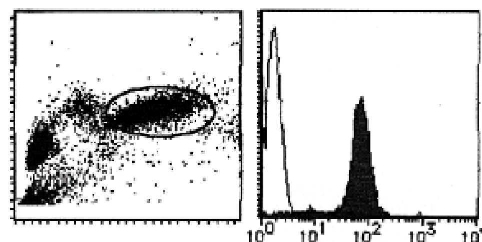
1) Sugita, K., *et al., Leukemia* **13**, 779-785 (1999)
2) Mori, T., *et al., Leukemia* **9**, 1233-1239 (1995)

Clone KOR-SA3544 is used in these references.

RELATED PRODUCTS:

Please visit our web site https://ruo.mbl.co.jp/.

The descriptions of the following protocols are examples. Each user should determine the appropriate condition.



Flow cytometric analysis of KOR-SA3544 expression on Granulocyte. *Open histogram indicates the reaction of isotypic control to the cells. Shadd histogram indicates the reaction of D028-5 to the cells.*

PROTOCOL:

Flow cytometric analysis for whole blood cells

We usually use Falcon tubes or equivalents as reaction tubes for all step described below.

1) Add the primary antibody as suggest in the **APPLICATIONS** into each tube.
2) Add 50 μL of whole blood into each tube. Mix well, and incubate for 30 minutes at room temperature (20~25°C).
3) Add 1 mL of washing buffer [PBS containing 2% fetal calf serum (FCS) and 0.09% NaN_3*] followed by centrifugation at 500 x g for 1 minute at room temperature. Remove supernatant by careful aspiration.
   *Azide may react with copper or lead in plumbing system to form explosive metal azides. Therefore, always flush plenty of water when disposing materials containing azide into drain.
4) Lyse with OptiLyse C (for analysis on Beckman Coulter instruments) or OptiLyse B (for analysis on BD instruments), using the procedure recommended in the respective package inserts.
5) Add 1 mL of H_2O to each tube and incubate for 10 minutes at room temperature.
6) Centrifuge at 500 x g for 1 minute at room temperature.
7) Add 1 mL of the washing buffer followed by centrifugation at 500 x g for 1 minute at room temperature. Remove supernatant by careful aspiration.
8) Resuspend the cells with 500 μL of the washing buffer and analyze by a flow cytometer.