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

MBL
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MONOCLONAL ANTIBODY

# Anti-CD52 (CAMPATH-1) (Mouse) mAb-FITC

| Code No. | Clone | Subclass | Quantity | Concentration |
|---|---|---|---|---|
| D204-4 | BTG-2G | Rat IgG2a κ | 100 µL | 500 µg/mL |

**BACKGROUND:** CAMPATH-1, also known as CD52, is a heavily glycosylated, GPI-anchored protein expressed at high levels on almost all thymocytes, lymphocytes, monocytes, and macrophages. CAMPATH-1 is an exceptionally good target for complement-mediated cell lysis and antibody-mediated cellular cytotoxicity. Humanized CAMPATH-1 antibodies have been used therapeutically to effectively deplete lymphocytes in allogeneic bone marrow transplants, hematologic malignancies, and autoimmune diseases. Clinical trials suggest CAMPATH-1 antibodies are especially promising in the treatment of leukemia, non-Hodgkin lymphomas, and rheumatoid arthritis. The apparent size of CAMPATH-1 by SDS-PAGE is 25-29 kDa; however, the actual molecule is much smaller, ~ 8-9 kDa as confirmed by total structure analysis and mass spectrometry.

**SOURCE:** This antibody was purified from hybridoma (clone BTG-2G) supernatant using protein G agarose. This hybridoma was established by fusion of mouse myeloma cell P3U1 with Wister rat splenocyte immunized with mouse IL-2Rα-transgenic mouse splenocyte.

**FORMULATION:** 50 µg IgG in 100 µL volume of PBS containing 1% BSA and 0.1% ProClin150.

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

**REACTIVITY:** This antibody reacts with mouse CD52 (CAMPATH-1) on Flow cytometry.

**APPLICATION:**
Flow cytometry; 20 µg/mL (final concentration)
*Please refer to the data sheet (MBL, code no. D204-3) for other applications.

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

**INTENDED USE:**
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**SPECIES CROSS REACTIVITY:**

| Species | Human | Mouse | Rat |
|---|---|---|---|
| Cell | Not tested | Splenocyte | Not tested |
| Reactivity on FCM | | + | |

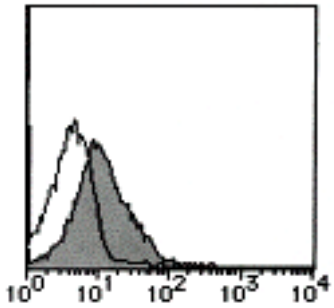
**REFERENCE:**
1) Kubota, H., *et al., J. Immunol*. **145**, 3924-3931 (1990)

Clone BTG-2G is used in this reference.

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

**PROTOCOL:**
**Flow cytometric analysis for floating cells**
We usually use Fisher tubes or equivalents as reaction tubes for all step described below.
1) Wash the cells 3 times with washing buffer [PBS containing 2% fetal calf serum (FCS) 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.
2) Resuspend the cells with washing buffer (5 x $10^6$ cells/mL).
3) Add 50 µL of the cell suspension into each tube, and centrifuge at 500 x g for 1 minute at room temperature (20~25°C). Remove supernatant by careful aspiration.
4) Add 10 µL of Clear Back (human Fc receptor blocking reagent, MBL, code no. MTG-001) to the cell pellet after tapping. Mix well and incubate for 5 minutes at room temperature.
5) Add 30 µL of the primary antibody at the concentration of as suggested in the **APPLICATION** diluted in the washing buffer. Mix well and incubate for 20 minutes at room temperature.
6) 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.
7) Resuspend the cells with 500 µL of the washing buffer and analyze by a flow cytometer.

(Positive control for Flow cytometry; Mouse splenocyte)




***Flow cytometric analysis of mouse CD52/CAMPATH-1 expression on mouse splenocytes.*** *Open histogram indicates the reaction of isotypic control to the cells. Shaded histogram indicates the reaction of D204-4 to the cells.*

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