cytognos

FMC7-FITC / CD23-PE / CD19-PECy5
Ref: CYT-FMC7F-23PE3-19C2

Product: Anti-Human B-cells monoclonal antibody / anti-human B-cells monoclonal antibody / anti-human B lymphocytes monoclonal antibody.

Description: The FMC7 antibody was not clustered at the 5th Leucocyte Typing Workshop held in Boston, USA, 1993. This antibody detects a glycoprotein of 105 kD found on circulating B-lymphocytes. Studies on normal lymphocytes, leukaemic cells and cell lines indicate that FMC7 is marker for a limited segment of the B cell maturation pathway.This glycoprotein is expressed in varying degrees on normal circulating B-cells, chronic B-cell leukaemia (B-CLL), prolymphocytic leukaemia (PLL) and other B cell neoplasias. It labels the same population as CD22 antibodies but reacts with a different antigen. Stains peripheral blood B lymphocytes and tonsil B lymphocytes. No reaction with granulocytes, monocytes, platelets, erythrocytes, T lymphocytes or null cells. Reacts with HRIK and Raji cell lines.

CD23 reacts with a B cell differentiation antigen, a 45 kDa type II integral membrane glycoprotein. The antigen acts as a low affinity IgE receptor ($FcER^2$). It is expressed mainly on mature B cells, mantle zone B cells, and follicular dendritic cells, but not on proliferating cells in the germinal centres. CD23 is also expressed by monocytes and eosinophyls.

The CD19 antigen (90 kDa) is expressed from the earliest stages of B-progenitor development, on all peripheral B cells including germinal centre B cells and all B cell lines and B cell leukaemias tested. T cell and monocytic cell lines are negative. The antigen is a type I integral membrane glycoprotein whose in vitro inhibition will influence B cell activation and proliferation.

Isotype: Mouse IgM / Mouse IgG1 / IgG1 respectively.

Clone Number: FMC7 / B-G6 / J4.119 respectively

Volume / Quantity: 1.5 ml / 100 test

Buffer: Phosphate buffered saline.

Preservatives 0.1% Sodium Azide (NaN_3)

Stabilisers: 0.2% Bovine Serum Albumin (BSA)

Applications: This antibody can be used for the differentiation of PLL from B-CLL. It is also useful in confirmation of the diagnosis of other disorders such as HCL, HCL-V and SLVL. Useful for the detection of residual disease in patients undergoing treatment for these disorders.
Identification of CD23 positive B cells by indirect immunofluorescence staining.
Leukaemia and lymphoma phenotyping.
Identification of CD19 positive B lymphocytes and malignant B cells by direct immunofluorescence staining.

Flow Cytometry: Add 15 µl of MAB/100 µl of whole blood. Mix gently and incubate for 10 minutes at room temperature 20° C in dark.
Add 2 ml of Lysing solution QUICKLYSIS in each tube. Mix and cover the tubes with Parafilm, and left them in the dark during 10 minutes at room temperature. It is recommended maintain the tubes in horizontal and shake from time to time during incubation time.
Read in a flow cytometer in the following three hours after their preparation. When the samples are not going to be read immediately after their preparation, it is recommended maintain the samples at 4° C in the dark until their processed.

Storage Conditions: Store at + 4° C. DO NOT FREEZE.
This product is photosensitive and should be protected from light.
Reagents are stable for the period shown on the vial label when stored properly.

Health and Safety Information: This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

References:

1. Knapp W., et al. Leucocyte Typing IV: White Cell Differentiation Antigens, Oxford University Press, New York, 1989.
2. Collins RJ et al., Pathology 15: 350, 1992

3. Matutes E et al., Blood 83(6): 1558-1562, 1994.
4. Kaiserlian D et al., Immunology 80: 90-95, 1993.
5. Tedder, T.F. et al Immunol Today 15: 437-442, 1994.
6. Tedder, T.F. & Isaacs, C.M. J. Immunol 143: 712-717, 1989.

Lot specific data:

For research purposes only. Not for therapeutic or diagnostic use.