CD10-FITC / CD5-PE / CD19-PECy5
Ref: CYT-10F1-5PE4-19C2

Product: Anti-Human CALLA cells monoclonal antibody / Anti-Human CD5 Monoclonal Antibody/ anti-human B lymphocytes monoclonal antibody.

Description: CD10 antibody reacts with the CD10 antigen (common acute lymphoblastic leukaemia associated antigen, CALLA) which is a glycoprotein of 95-100 kDa molecular weight. The antigen has been identified on early lymphoid progenitor cells within bone marrow and foetal liver. The antigen is a neutral endopeptidase and is also found on immature thymocytes and a variety of normal and neoplastic cell types

CD5 antibody identifies a 67 kDa lymphocyte surface antigen belonging to the CD5 cluster on peripheral blood T lymphocytes, 70 % of thymocytes and a limited number of malignancies of T cell origin. The CD5 antigen is expressed on the majority of malignant B CLL, T CLL and T ALL cells and a proportion of B lymphoma cells.

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 IgG1 / Mouse IgG2b / Mouse IgG1 respectively.

Clone Number: SN5c/ MCD5/ 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: The antibody can be used to define malignant cells designated as common acute lymphoblastic leukaemia cells.
Lysis of CD10 positive cells in the presence of complement.
Identification of CD19 positive B lymphocytes and malignant B cells by direct immunofluorescence staining.
Leukaemia and lymphoma phenotyping.

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 ligth.
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. Barclay A N, et al. The Leucocyte Antigen Facts Book, CD5 Section, Academic Press Inc., San Diego, California, page 143, 1997
3. Lydyard, P M, et al. CD5+B cells and the immune system. Immunol. Letters 38:159; 1993
4. Lúcio, P., et al. Flow cytometric analysis of normal B cell differentiation: a frame of reference for the detection of minimal residual disease in precursor-B-ALL. Leukemia, 13:419; 1999.
5. Schlossman S., et al. Leucocyte typing V: White cell differentiation antigens. Oxford University Press, New York, 1995.

Lot specific data:

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