IOTest®
CD8β-ECD

6607123 - 100 tests

PN 4238123-B

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

SPECIFICITY

2ST8.5H7 antibody recognizes an epitope of the CD8β molecule that depends upon the expression of both CD8α and CD8β chains.[1-3] CD8 is composed of two polypeptide chains α and β which form homodimeric (CD8 α/α) or heterodimeric (CD8 α/β) cell surface complexes.

Four distinct subpopulations of $CD8^+$ cells have been identified based on the expression of CD8 α/α or CD8 α/β complexes:[1]

TCR $\alpha\beta^+$ T cells, which are CD8 α^+/β^+
TCR $\alpha\beta^+$ T cells, which are CD8 α^+/β^-
TCR $\gamma\delta^+$ T cells, which are CD8 α^+/β^-
NK cells, which are CD8 α^+/β^-

Moreover, both CD8 α/α and CD8 α/β complexes may coexist on the cell surface.

2ST8.5H7 immunoprecipitates the human complex CD8 α/β (30-32 kDa) from cell lines expressing the α and β cDNA.[2] 2ST8.5H7 antibody has been studied at the fifth International Workshop on Human Leukocyte Differentiation Antigens.[3,4]

REAGENTS

IOTest CD8ß-ECD Conjugated Antibodies
PN 6607123 - 100 tests - 10 µL/test

CLONE:	2ST8.5H7
ISOTYPE:	IgG2a
IMMUNOGEN:	Normal human T cells
HYBRIDOMA:	Myeloma NS1 x BALB/c spleen cells
SOURCE:	Ascites fluid
PURIFICATION:	Ion exchange or affinity chromatography
CONJUGATION:	ECD is conjugated at a Molar Ratio ECD/Ig: 0.5-1.5 Excitation wavelength at 486-575 nm Emission wavelength at 610-635 nm
BUFFER:	2 mg/mL bovine serum albumin in phosphate-buffered saline containing 0.1% sodium azide

STATEMENT OF WARNINGS

1. This reagent contains 0.1% sodium azide. Sodium azide under acid conditions yields hydrazoic acid, an extremely toxic compound. Azide compounds should be flushed with running water while being discarded. These precautions are recommended to avoid deposits in metal piping in which explosive conditions can develop. If skin or eye contact occurs, wash excessively with water.
2. Specimens, samples and all material coming in contact with them should be handled as if capable of transmitting infection and disposed of with proper precautions.
3. Never pipet by mouth and avoid contact of samples with skin and mucous membranes.
4. Do not use antibody beyond the expiration date on the label.
5. Do not expose reagents to strong light during storage or incubation.
6. Use Good Laboratory Practices (GLP) when handling reagent.
7. Harmful if swallowed.
8. After contact with skin, wash immediately with plenty of water.

STORAGE CONDITIONS AND STABILITY

This reagent is stable up to the expiration date when stored at 2-8°C. Do not freeze. Minimize exposure to light.

REAGENT PREPARATION

No reconstitution is necessary. This monoclonal antibody may be used directly from the vial. Bring reagent to 18-25°C prior to use.

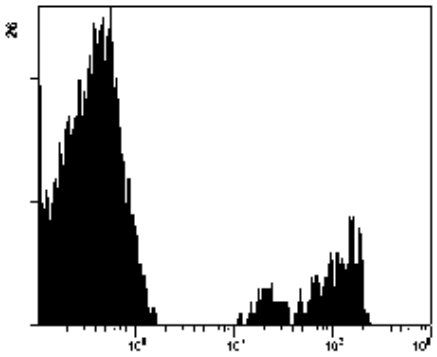
PROCEDURE

This reagent is designed for flow cytometry. Assay volume: 10 µL per 5 x 10^5 cells in one test, or per 100 µL whole blood. A wash is required to yield optimal results.

EXAMPLE DATA

The histogram shown is a monoparametric representation (Count versus Fluorescence Intensity) of lysed normal whole blood sample stained with CD8ß-ECD monoclonal antibody (PN 6607123) and gated on lymphocytes.

Figure 1:
Acquisition with a COULTER® EPICS® XL™/XL-MCL™ flow cytometer. Data analysis with Cytomics RXP software.



SELECTED RESEARCH REFERENCES

1. Terry, L.A., DiSanto, J.P., Small, T.N., Flomenberg, N., "Differential expression and regulation of the human CD8α and CD8β chains", 1990, Tissue Antigens, 35, 82-91.
2. DiSanto, J.P., Terry, L.A., Flomenberg, N., "Generation of anti-human CD8β-specific antibodies using transfectants expressing mixed-species CD8 heterodimers", 1991, J. Immunol. Methods, 141, 123-131.
3. Alcover, A., "CD8 cluster report", 1995, in Leucocyte Typing V, White Cell Differentiation Antigens, Schlossman, S.F., et al., Eds., Oxford Univ. Press, p. 353-354.
4. Knowles, R.W., "Immunochemical analysis of the T cell-specific antigens", 1985, in Leucocyte Typing II, 1, Human T lymphocytes, Reinherz, E.L., et al., Eds., Springer-Verlag New York inc., 1985, p. 260-288.

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