



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

SPECIFICITY

The CD8 molecule is a disulfide-linked dimer composed by an α - and a β -chain. Both α and β subunits have a molecular weight (MW) of 30-34 kDa.^{1,2} The CD8 antigen is expressed by the "cytotoxic/suppressor" T lymphocytes subpopulation (Tc cells) and with a lower density by a subset of natural killer cells (NK).³ The majority of Tc lymphocytes express the CD8 molecule as an α/β heterodimer whereas NK cells are essentially CD8 α + β - (or CD8 α +/ α +).^{3,4,5}

CD8 acts as an accessory molecule to the T cell receptor (TcR) complex during T-cell-activation restricted to the Class I major histocompatibility complex (MHC).^{6,7} The CD8 α chain reacts with the α 3 domain of the MHC stabilizing then the "TcR/MHC-peptide" complex.^{8,9} Several in vitro studies suggest that the CD8 α chain contributes to the transmembrane signaling of the "CD3-TcR-CD8/MHC-peptide" complex.^{1,2,8,9,10} Approximately 30% of peripheral blood lymphocytes (PBL)^{6,11}, 80% of thymocytes^{3,6} and a subset representing 15 to 30% of bone marrow lymphocytes¹² are CD8+.

REAGENTS

IOtest CD8-PC7 Conjugated Antibodies
PN 6607102 - 100 tests - 10 μ L/test

CLONE: SFC121Thy2D3

ISOTYPE: IgG1

IMMUNOGEN: Peripheral blood lymphocytes

HYBRIDOMA: NS1 x BALB/c

SOURCE: Conditioned media

PURIFICATION: Affinity chromatography

CONJUGATION: PC7 is conjugated at a Molar Ratio PC7/Ig: 0.5-1.5.

Excitation wavelength at 486-580 nm
Emission wavelength at 710-800 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

Each 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.

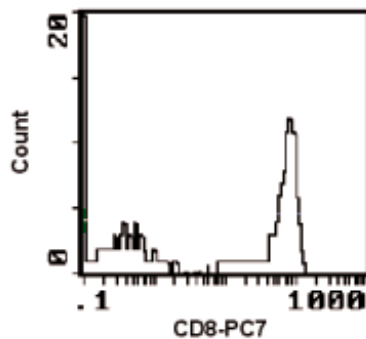
PROCEDURE

This reagent is designed for flow cytometry. Assay volume; 10 μ L per 5 x 10⁵ cells in one test, or per 100 μ L 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 CD8-PC7 monoclonal antibody (PN 6607102) and gated on lymphocytes.

Figure 1:
Acquisition with a COULTER® EPICS® XL™ and XL-MCL™ flow cytometer.



SELECTED RESEARCH REFERENCES

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TRADEMARKS

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