

PN IM2446 CD95 - PE

(7C11)

100 tests
20 µL/test



IO Test®

Conjugated Antibodies

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

SPECIFICITY

Apoptosis or programmed-cell death is a physiological process essential for the normal development and maintenance of homeostasis in many organisms. This « cellular suicide » can be triggered by the interaction of two cell-surface molecules, the Fas antigen (CD95) and its ligand, the Fas ligand (FasL) expressed on target and cytotoxic effector cells, respectively (1).

The Fas/CD95 (or APO-1) antigen is a 40-50 kDa transmembrane glycoprotein. It belongs to the Nerve Growth Factor Receptor / Tumor Necrosis Factor (NGFR / TNF) superfamily and contains three cysteine-rich repeats. This cell surface molecule mediates apoptosis (programmed cell death) (2). Fas/CD95 antigen is expressed on a substantial proportion of peripheral CD4+ cells, CD8+ cells and B cells but on a minor proportion of Natural Killer (NK) cells. It is also variably expressed on granulocytes and monocytes (3). Fas/CD95 is strongly up-regulated on activated T cells, B cells, NK cells and thymocytes (4,5,6). Moreover it is widely expressed on cell lines of T, B, NK and myeloid lineage (7). Most of the other tissues express Fas/CD95.

7C11 antibody specifically reacts with human Fas/CD95 but crossreactivity with other species has not been tested yet (8).

The purified form of this antibody (Cat No. 2387) induces apoptosis of normal and neoplastic Fas/CD95-expressing cell lines, in vitro (7,9). It is very useful for the study of apoptosis induction pathways (6,7,9,10,11).

7C11 antibody has been assigned to the CD95 cluster of differentiation at the Vth International Workshop on Human Leucocyte Differentiation Antigens in Boston, in 1993 (12).

REAGENT

Clone 7C11
Isotype IgM
Immunogen Activated human natural killer cells
Hybridoma NS1 x Balb/c spleen cells
Source Ascites fluid
Purification Ion exchange or affinity chromatography
Conjugation PE-R-phycoerythrin (PE) is conjugated at 0.7-1 mole of PE per mole of IgG.
Excitation wavelength 488 nm
Maximum emission wavelength 575 nm
Main emission color Orange-red
Buffer 2 mg/mL bovine serum albumin in phosphate-buffered saline containing 0.1% sodium azide

APPLICATION

Flow cytometry

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 Avoid microbial contamination of reagents or incorrect results might occur.

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 20 - 25 °C prior to use.

PROCEDURE

This reagent is designed for Flow Cytometry.

Assay volume: 20 µL/5 x 10⁵ cells / test or 100µL whole blood.

A wash is required to yield optimal results.

EXAMPLE DATA

The graphs below are biparametric representations (Fluorescence Intensity versus Fluorescence Intensity) of a lysed normal whole blood sample. Staining is with CD4-FITC (PN IM0448) and CD95-PE (PN IM2446) gated on lymphocytes.

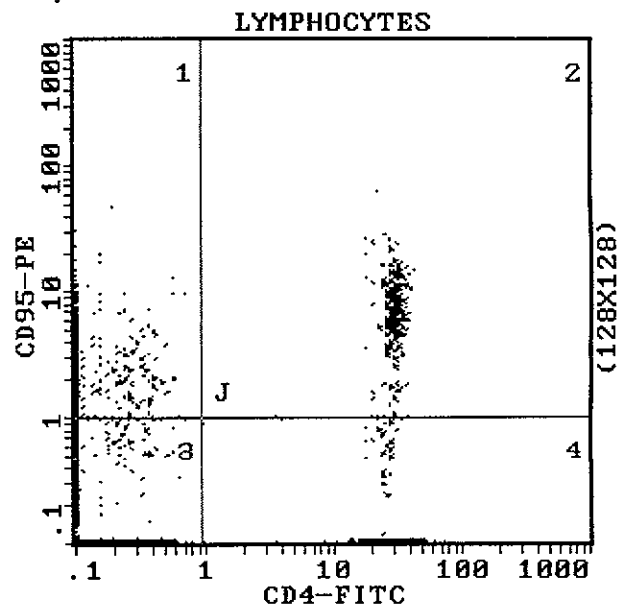
*Upper left quadrant (1) contains CD4- CD95+ lymphocytes.

*Upper right quadrant (2) contains double positive CD4+ CD95+ lymphocytes representing T "helper / inducer" lymphocytes which express CD95 antigen.

*Lower left quadrant (3) contains double negative lymphocytes CD4- CD95-.

*Lower right quadrant (4) contains lymphocytes CD4+ CD95- representing T "helper / inducer" lymphocytes which do not express CD95 antigen.

Acquisition is with a COULTER R EPICS R XL flow cytometer. Analysis is with the XL SYSTEM II™ software.



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COULTER

PARTNERS IN CELL ANALYSIS

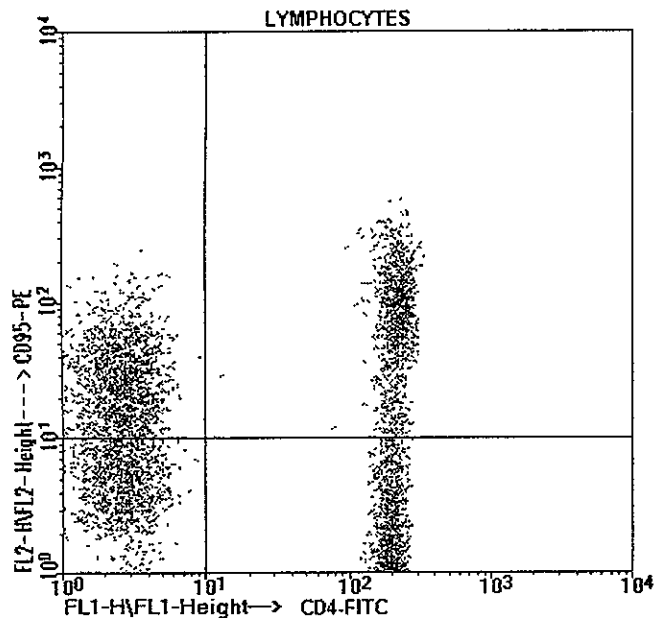

IMMUNOTECH
A COULTER COMPANY

PN IM2446 CD95 - PE (7C11)

100 tests
20 µL/test

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Acquisition is with a Becton Dickinson FACScan™ flow cytometer
Analysis is with the LYSYS II™ software



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