



PN IM3291

NKG2A-PE

(Z199)

50 tests

20 µL / test

IO Test®

Conjugated Antibodies

For Research Use Only. Not For Use In Diagnostic Procedures.

SPECIFICITY

NKG2A is a type II transmembrane glycoprotein of 43 kDa, belonging to the Ca⁺⁺-dependent (C-type) lectin family, like CD94 (1-3). NKG2A associates with CD94 to form a disulphide-linked, inhibitory NK cell receptor for MHC class I molecules, with a broader specificity than the human killer cell inhibitory (KIR) / activatory (KAR) receptors of the Ig-superfamily type (4, 5). The intracellular portion of NKG2A contains two characteristic immunoreceptor tyrosine-based inhibition motifs (ITIM) involved in the transduction of the inhibitory signal (4, 5). Recent studies strongly indicate that the NKG2A / CD94 inhibitory receptor complex was involved in NK cell-mediated recognition of cells expressing HLA-E, another non-classical MHC class I molecule (6, 7). The NKG2A / CD94 complex is expressed on subsets of NK cells, T cells and thymocytes (3, 8).

The Z199 monoclonal antibody (mAb) usually reacts with CD94^{bright} NK cells, expressing the NKG2A / CD94 inhibitory receptor complex (4, 5). It does not recognize the activatory form of CD94 which corresponds to the association of CD94 with another member of the NKG2 gene family.

REAGENT

Clone Z199
Isotype IgG2b, mouse
Immunogen NK clone
Hybridoma P3U1 x Balb/c
Source Ascites fluid
Purification Ion exchange or affinity chromatography
Conjugation R-phycoerythrin (PE) is conjugated at 0.5 - 1.5 mole of PE per mole of Ig.
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 (4, 5, 8 - 10)

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.

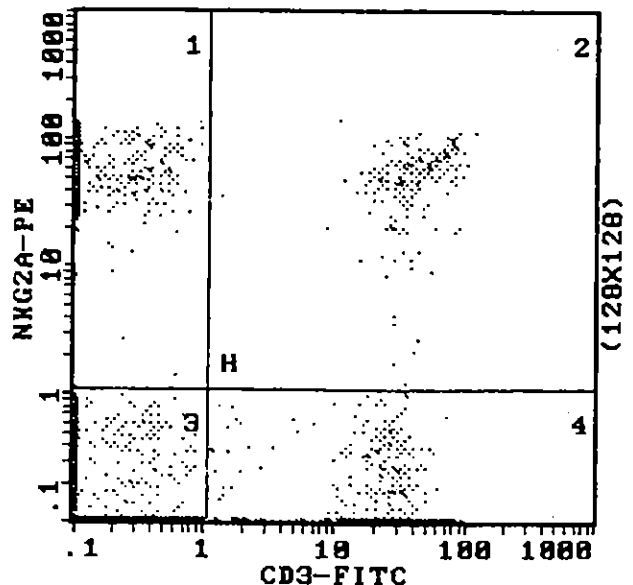
PROCEDURE

This reagent is designed for flow cytometry.
Assay volume: 20 µL per 5 x 10⁵ cells in one test, or per 100 µL 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 lyzed normal whole blood sample. Staining is with a combination of 2 reagents CD3-FITC and NKG2A-PE (PN IM1281 and PN IM3291, respectively). The gating is done on lymphocytes.

Figure 1: Acquisition with a COULTER® EPICS® XL™ flow cytometer. Analysis with the XL SYSTEM II™ software.



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PARTNERS IN CELL ANALYSIS

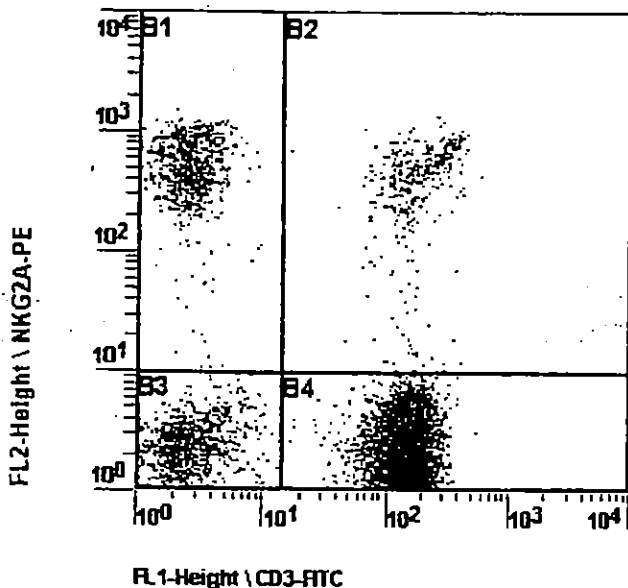


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Figure 2: Acquisition is with a Becton Dickinson FACScan™ flow cytometer equipped with the LYSYS II™ software. Analysis is with EXPO™ (v 2.0) Cytometer software (Coulter PN 6605434).



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SELECTED RESEARCH REFERENCES

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