PN IM2726 CD55-PE (JS11KSC2.3)

100 tests
20 µL / test

IOTest®
Conjugated Antibodies

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

SPECIFICITY

CD55, also known as decay-accelerating factor (DAF), is a single chain glycosyl-phosphatidylinositol (GPI)-anchored cell surface protein. Its molecular weight ranges between 55 and 80 kDa, due to post-transcriptional and post-translational modifications (1) The CD55 molecule is widely expressed on human cells including leucocytes, erythrocytes and platelets CD55 is weakly expressed on NK cells (2) CD55 plays an important role in the complement system by regulating the deposition of C3 on nucleated cells (1). So is it involved in the regulation of both alternative and classical complement pathways C3b/C3Bb convertase and C4b/C4b2a convertase, as well as echovirus, coxsackie B virus (3) and CD97 have been reported to interact with CD55 (4) Like other GPI-anchored proteins, CD55 is associated in the cytoplasmic compartment with tyrosine kinases allowing signal transduction CD55, like other GPI-anchored proteins (CD59, CD58, acetylcholine esterase), is released in exosomes by reticulocytes undergoing maturation into erythrocytes (5). In paroxysmal nocturnal hemoglobinuria (PNH), impaired transfer of N-acetylglucosamine to phosphatidylinositol leads to a synthetic defect in GPI. As a result, the expression of all GPI-anchored proteins such as CD55 is deficient (6).
JS11KSC2 3 has been assigned to the CD55 cluster of differentiation at the VIth International Workshop on Human Leucocyte Differentiation Antigens in Kobe (1996) under the name JS 11 (2)

REAGENT

Clone	JS11KSC2 3
Isotype	IgG1, mouse
Hybridoma	X63 x Balb/c spleen cells
Source	Ascites fluid
Purification	Ion exchange or affinity chromatography
Conjugation	R-phycoerythrin (PE) is conjugated at 0.7-1 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.

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

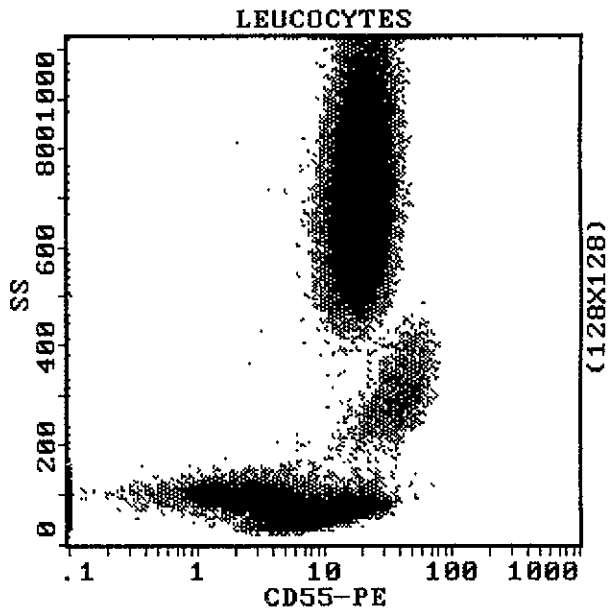
PROCEDURE

This reagent is designed for Flow Cytometry
Assay volume. 20 µL per 5 x 10^5 cells in one test, or per 100 µL whole blood
A wash is required to yield optimal results.

EXAMPLE DATA

The histograms below are biparametric representations (Side Scatter versus Fluorescence Intensity) of a lyzed normal whole blood sample gated on leucocytes. Staining is with CD55-PE monoclonal antibody (PN IM2726). Isotypic control labeling (PN IM0670) is not shown

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



COULTER®
PARTNERS IN CELL ANALYSIS
IMMUNOTECH
A COULTER COMPANY

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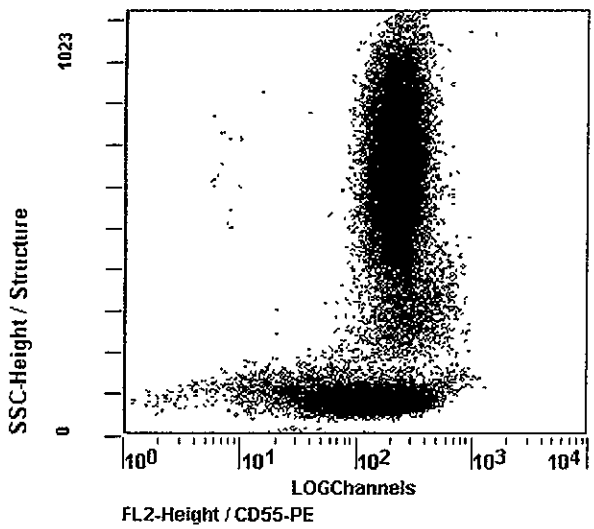
Figure 2:
Acquisition is with a Becton Dickinson FACScan™ flow cytometer equipped with LYSYS II™ software Analysis is with EXPO2™ Cytometer software (Coulter PN 6605334)



SELECTED RESEARCH REFERENCES

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IMMUNOTECH
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130, avenue de Lattre de Tassigny B P. 177 13276 MARSEILLE Cedex 9 (FRANCE)
Tel : (33) 4 91 17 27 00 - Fax : (33) 4 91 41 43 58 - e-mail abmarket@immunotech.fr