Monoclonal Antibody IOTest® CD8-APC-Alexa Fluor® 700

PN A66332 - 50 tests - Liquid - 10 µL/test* - Clone B9.11

Analyte Specific Reagent.
Analytical and performance characteristics are not established.

SPECIFICITY

The CD8 antigen is a disulfide-linked dimer, which exists either as a CD8α homodimer or as a CD8αβ heterodimer. CD8β is required for surface expression of CD8α. The molecular weight of each monomer α and β is approximatively 32-34 kDa (1, 2). CD8 binds to a non polymorphic domain (α3 domain) of the MHC Class I molecules (3). The CD8 molecule is found on a T cell subset of human peripheral blood lymphocytes. A subset of NK cells expresses the CD8 antigen but with low to medium density of expression (4). CD8α homodimer is expressed by NK cells on γδ+ T cells. CD8 is also present on most thymocytes where it is frequently co-expressed with CD4, and on a subpopulation of bone marrow cells. The CD8 molecule acts with the T Cell Receptor (TCR) as a co-receptor for MHC class I restricted antigen recognition (5, 6). CD8 is widely used as a marker of cytotoxic T lymphocytes.
The B9.11 monoclonal antibody (mAb) reacts with the α subunit of the CD8 heterodimer.
The B9.11 mAb has been assigned to the CD8 cluster of differentiation during the first International Workshop on Human Leucocyte Differentiation Antigens held in Paris, France in 1982 (8).

REAGENT

IOTest CD8-APC-Alexa Fluor 700 Conjugated Antibody
PN A66332 - 50 tests - Liquid - 10 µL/test*

Clone	B9.11
Isotype	IgG1 kappa, Mouse
Immunogen	Cytotoxic HLA A2 T clone
Hybridoma	NS1 x Balb/c
Source	Ascites fluid
Purification	Ion exchange or affinity chromatography
Conjugation	Allophycocyanin - Alexa Fluor 700 (APC-Alexa Fluor 700)
Molar Ratio	APC-Alexa Fluor 700 / Ig : 0.5 - 1.5
Fluorescence	Excites at 633 nm Emits at 783 nm

REAGENT CONTENTS

This antibody is provided in phosphate-buffered saline, containing 0.1% sodium azide and 2 mg/mL bovine serum albumin.

STATEMENTS OF WARNING

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.
7. Use good laboratory practices when handling this reagent.

STORAGE CONDITIONS AND STABILITY

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

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.

PRECAUTIONS

Due to the tandem structure of the fluorochrome, APC-Alexa Fluor 700 also emits light at 660 nm. This secondary emission peak varies from lot-to-lot of APC-Alexa Fluor 700. Therefore, for multi-color analysis, the compensation matrix should be carefully checked when changing the lot of a APC-Alexa Fluor 700-conjugate.

SELECTED RESEARCH REFERENCES

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4. 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.
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8. Bernard, A., Brottier, P., Georget, E., Lepage, V., Boumsell, L., "Joint report of the first international workshop on human leucocyte differentiation antigens by the investigators of the participating laboratories", 1984, Leucocyte Typing I, Bernard, A. et al., Springer Verlag, 9-135.

TRADEMARKS AND PATENT

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Outside the USA, contact your local Beckman Coulter representative.

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Printed in France.
Made in France.

(*): 10 µL is the quantity of product sufficient to stain 5×10^5 cells in a standard immunofluorescence assay

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