IOTest® Anti-TCR Vα24-PE

PN IM2283 – 50 tests – 20 µL / test – Clone C15

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

SPECIFICITY

Human variable α24 chain of the T cell receptor is also called TCRAV24S1 according to the nomenclature from Arden et al (1).
Vα24 is the only described member of the subfamily of the T cell receptor (2). The monoclonal antibody C15 recognizes the IGRa02 sequence (3, 4). It stains 0.4 to 1% of peripheral CD3 positive lymphocytes from normal donors. Vα24 has been shown to be expanded in a clonal fashion in the CD3+ CD8- CD4- cell population in PBL of several donors (3, 4).
The IGRa02 sequence is also referred to as TRAV10 (based on the IMGT gene nomenclature) (5, 6).
The specificity of this antibody has been confirmed at the first Human TcR Monoclonal Antibody Workshop in San Francisco in 1995 (7).

REAGENT

IOTest Anti-TCR Vα24-PE Conjugated Antibody
PN IM2283 – 1 mL Liquid – 50 tests – 20 µL / test.

Clone	C15
Isotype	IgG1, mouse
Immunogen	Human T-cell clone
Hybridoma	PAI x Balb/c spleen cells
Source	Ascites fluid
Purification	ion exchange chromatography
Conjugation	R-phycoerythrin (PE) is conjugated at 0.5 – 1.5 moles 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

Studies of TCR Vα24 positive cells by 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.
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 in the dark. Do not freeze.

EVIDENCE OF DETERIORATION

Any change in the physical appearance of this PE-labeled reagent (clear colorless to pinkish liquid) or any major variation in values obtained for control samples may indicate deterioration and the reagent should not be used.

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.
A wash is required to yield optimal results
Assay volume: 20 µL per 5 x 10^5 cells in one test, or per 100 µL whole blood.
It is preferable to double stain the sample with another T-cell marker (CD3, CD4, CD8).

SELECTED RESEARCH REFERENCES

1. Arden, B., Clark, S.P., Mak, T.W., "Human T cell receptor variable gene segment families", 1995, Immunogenetics, 42, 455-500.
2. Ferradini, L., Roman-Roman, S., Azocar, J., Michalaki, H., Triebel, F., Hercend, T., "Studies on the human TCR α/βvariable region genes II. Identification of four additional V beta subfamilies", 1991, Eur.J. Immunol., 21, 935-942.
3. Padovan, E., Casorati, G., Dellabona, P., Meyer, S., Brockhaus, M., Lanzavecchia, A., "Expression of two T-cell receptor α chains: Dual receptor Tcells", 1993, Science, 262, 422-424.
4. Dellabona, P., Padovan, E., Casorati, G., Brockhaus, M., Lanzavecchia, A., "An invariant Vα24-JαQ/Vβ11 T-cell receptor is expressed in all individuals by clonally expanded $CD4^-8^-$ Tcells", 1994, J. Exp. Med., 180, 1171-1176.
5. Lefranc,M.P., Giudicelli, V., Ginestoux, C., Bodmer, J., Muller, W., Bontrop, R., Lemaitre, M., Malik, A., Barbie, V., Chaume D., " IMGT, the international ImMunoGeneTics database", 1999, Nucleic Acids Res., 27, 209-212.
6. Lefranc,M.P., " IMGT, the international ImMunoGeneTics database", 2003, Nucleic Acids Res., 31, 307-310.
7. Posnett, D.N., Romagné, F., Necker, A., Kotzin, B.L., Sekaly, R.-P., "First Human TcR Monoclonal Antibody Workshop", 1996, The Immunologist., 4, 5-8.

PRODUCT AVAILABILITY

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PE is licensed under patent 4,520,110

For additional information in the USA, call 800-526-7694.
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