IOTest® Anti-TCR Vβ13.6-FITC

PN IM1330 – 50 tests – 20 µL / test – Clone JU74.3

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

SPECIFICITY

Human variable β13.6 of the T-cell receptor called TCRBV13S6 according to the nomenclature from Wei et al (1) also referred to as TRBV6-6 (based on the IMGT gene nomenclature) (2, 3). This antibody recognizes only one member of the Vβ13 family (IGR B16 sequence) (4).
JU74 has been characterized by cell sorting on PBL using this monoclonal antibody, followed by molecular biological analysis of the sorted cells (5).
Analysis of TcRα chain mRNA by PCR, using a panel of specific oligonucleotides, shows transcripts for most Vα sequences.
Analysis of β chain mRNA by anchored-PCR and sequencing only shows transcripts for IGRB16 sequence.
The specificity of this antibody has been confirmed at the the First Human TcR Monoclonal Antibody Workshop in San Francisco in 1995 (6).

REAGENT

IOTest Anti-TCR Vβ13.6-FITC Conjugated Antibody
PN IM1330 – 1 mL Liquid – 50 tests – 20 µL / test.

Clone	JU74.3
Isotype	IgG1, mouse
Immunogen	Human T-cell clone
Hybridoma	NS1 x Balb/c
Source	Ascites fluid
Purification	ion exchange chromatography
Conjugation	FITC (Fluorescein isothiocyanate) is conjugated at 3 – 10 moles of FITC per mole of Ig.
Fluorescence	FITC (Green) Excites at 468 – 509 nm Emits at 504 – 541 nm
Buffer	2 mg/mL bovine serum albumin in phosphate-buffered saline containing 0.1% sodium azide.

APPLICATION

Studies of TCR Vβ13.6 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 FITC-labeled reagent (clear, colorless to yellowish-green 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. Wei, S., Charmley, P., Robinson, M.A., Concannon, P., "The extent of the human germline T-cell receptor V beta gene segment repertoire", 1994, Immunogenetics, 40, 27-36.
2. 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.
3. Lefranc,M.P., " IMGT, the international ImMunoGeneTics database", 2003, Nucleic Acids Res., 31, 307-310.
4. Ferradini, L. Roman-Roman, S., Azocar, J., Michalaki, H., Triebel, F., Hercend, T., "Studies on the human TcR αβ variable region genes. II. Identification of our additional Vβ subfamilies", 1991, Eur. J. Immunol., 21, 935 -942.
5. Diu, A., Romagné, F., Genevée, C., Rocher, C., Bruneau, J.M., David, A., Praz, F., Hercend, T., "Fine specificity of monoclonal antibodies directed at human T cell receptor variable regions: comparison with oligonucleotide driven amplification for evaluation of Vβ expression", 1993, Eur. J. Immunol., 23, 1422-1429.
6. 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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For additional information in the USA, call 800-526-7694.
Outside the USA, contact your local Beckman Coulter representative.

www.beckmancoulter.com

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