

# IOTest<sup>®</sup> Anti-TCR Vδ2-FITC

PN IM1464 – 50 tests – 20 µL / test – Clone IMMU 389

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

## SPECIFICITY

Vδ2 is the human variable δ2 gene of the γ/δ T-cell receptor (1). This sequence is also referred to as TRDV2 (based on the IMGT gene nomenclature) (2, 3).

The specificity of IMMU 389 monoclonal antibody (mAb) has been confirmed by immunofluorescence on polyclonal γ/δ T-cell lines as well as Vδ2 T-cell clones. It gives excellent results in immunofluorescence and frozen sections. This mAb works on Western blot: it recognizes the γ/δ complex from the Vδ2<sup>+</sup> soluble T-cell receptor (non reducing conditions), and the isolated δ chain under reducing conditions. The IMMU 389 mAb immunoprecipitates the γ/δ complex from Vδ2<sup>+</sup> T-cell clones. It stains from 0.5% to 10% of PBL in normal blood (4-7).

## REAGENT

IOTest Anti-TCR Vδ2-FITC Conjugated Antibody  
PN IM1464 – 1 mL Liquid – 50 tests – 20 µL / test.

<b>Clone</b>	IMMU 389
<b>Isotype</b>	IgG1, mouse
<b>Immunogen</b>	Soluble γ/δ T-cell receptor
<b>Hybridoma</b>	X63.Ag8.653 x Balb/c spleen cells
<b>Source</b>	Ascites fluid
<b>Purification</b>	ion exchange chromatography
<b>Conjugation</b>	FITC (Fluorescein isothiocyanate) is conjugated at 3 – 10 moles of FITC per mole of Ig.
<b>Fluorescence</b>	FITC (Green) Excites at 468 – 509 nm Emits at 504 – 541 nm
<b>Buffer</b>	2 mg/mL bovine serum albumin in phosphate-buffered saline containing 0.1% sodium azide.

## APPLICATION

Studies of TCR Vδ2 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<sup>5</sup> 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. Porcelli, S., Brenner, M.B., Band, H., "Biology of the human γδ T-cell receptor", 1991, Immunological Reviews, 120, 137-183
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. Davodeau, F., Houde, I., Boulot, G., Romagné, F., Necker, A., Canavo, N., Peyrat, M.A., Hallet, M.M., Vie, H., Jacques, Y., Mariuzza, R., Bonneville, M., "Secretion of disulfide linked human TCR γδ heterodimers", 1993, J. Biol. Chem., 268, 15455-15460.
5. Triebel, F., Faure, F., Graziani, M., Jitsukawa, S., Lefranc, M.P., Hercend, T., "A unique V-J-C-rearranged gene encodes a γ protein expressed on the majority of CD3<sup>+</sup> T cell receptor-α/β-circulating lymphocytes", 1988, J. Exp. Med., 167, 2, 694-699.
6. Casorati, G., De Libero, G., Lanzavecchia, A., Migone, N., "Molecular analysis of human γδ+ clones from thymus and peripheral blood", 1989, J. Exp. Med., 170, 5, 1521-1535.
7. Constant, P., Davodeau, F., Peyrat, M.A., Poquet, Y., Puzo, G., Bonneville, M., Fournié, J.-J., "Stimulation of human γδ T cells by nonpeptidic mycobacterial ligands", 1994, Science, 264, 267-270.

## 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.

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