

IOTest[®] Anti-TCR Vβ5.2-FITC

PN IM1482 – 50 tests – 20 μL / test – Clone 36213

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

SPECIFICITY

Human variable β5.2 chain of human Tcell receptor also called TCRBV5S2 according to the nomenclature from Wei et al (1) also referred to as TRBV5-6 (based on the IMGT gene nomenclature) (2, 3).

This antibody recognizes only the PL2.5 sequence (4). It does not recognize the Vβ5.1 (HPB51 sequence) (5) and the Vβ5.3 (IGRb08 sequence) (6). Recognition of other members of the Vβ5 family has not been detected but cannot be formally excluded.

36213 stains from 0.5 to 1.5% of CD3 positive lymphocytes from peripheral normal blood

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 Vβ5.2-FITC Conjugated Antibody
PN IM1482 – 1 mL Liquid – 50 tests – 20 μL / test.

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| Clone | 36213 |
| Isotype | IgG1, mouse |
| Immunogen | 1C1 Vβ5.2 positive cell line |
| Hybridoma | Myeloma NS1xBiozzi spleen cells |
| 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 Vβ5.2 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 10⁵ 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., Charnley, 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. Concannon, P., Pickering, L., Kung, P., Hood, L., "Diversity and structure of human T-cell receptor beta-chain variable region genes", 1986, Proc. Natl. Acad. Sci. USA, 83, 6598-6602.
5. Kimura, N., Toyonaga, B., Yoshikai, Y., Triebel, F., Debré, P., Minden, M.D., Mak, T.W., "Sequences and diversity of human T cell receptor beta-chain variable region genes", 1986, J. Exp. Med., 164, 739-750.
6. 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 four additional V beta subfamilies", Eur. J. Immunol., 21, 935-942.
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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For additional information in the USA, call 800-526-7694.
Outside the USA, contact your local Beckman Coulter representative.

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