

Analyte Specific Reagent.

Analytical and performance characteristics are not established.

SPECIFICITY

Human T cells recognize foreign antigens, in the context of host HLA molecules through the T-cell receptor for antigen (TcR) (1-3). The TcRs are molecular complexes which comprise two units: a recognition unit, composed of either α - β or γ - δ heterodimer, which are present on the cell surface in a mutually exclusive manner, and, a transducing unit, the CD3 complex, common to α - β and γ - δ heterodimers, which triggers the T cell when the recognition unit is occupied by the antigen. The recognition units recognize any possible foreign antigen and the diversity necessary for this function of recognition is generated by somatic recombination the TcR genes. There are four TcR gene loci (α , β , γ and δ). Each of them is composed of several V (for variable) segments, coding for about 90 amino acids, very short D (for diversity) segments (α and δ loci only), and short J (for joining) segments (about 15 amino acids), and one or two C (for constant) segments (4-7). The IP26A antibody recognizes a monomorphic determinant of the human α/β chain of the TcR complex (8, 9).

REAGENT

IOTest Anti-TCR PAN α/β -APC
Conjugated antibody
PN B13981 - 0.5 mL - Liquid - 10 μ L/test

Clone	IP26A
Isotype	IgG1, Mouse
Immunogen	T cell clone
Hybridoma	NS1 x balb/c
Source	Ascites fluid or supernatant of in vitro cultured hybridoma cells.
Purification	Affinity chromatography
Conjugation	Allphycocyanin (APC)
Molar Ratio	APC / Ig : 0.5 - 1.5
Fluorescence	Excites at 633/638 nm Emits at 670 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 considered potentially infectious 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 AND HANDLING CONDITIONS AND STABILITY

This reagent is stable up to the expiration date when stored at 2 – 8°C. Do not freeze. No reconstitution is necessary. This monoclonal antibody may be used directly from the vial. Bring reagent to 18 – 25°C prior to use.

SELECTED RESEARCH REFERENCES

1. Allison, J.P., "Structure, function, and serology of the T-cell antigen receptor complex", 1987, *Annu. Rev. Immunol.*, 5, 503-539.
2. Clevers, H., Alarcon, B., Wileman, T., Terhorst, C., "The T cell receptor / CD3 complex: A dynamic protein ensemble", 1988, *Annu. Rev. Immunol.*, 6, 629-662.
3. Porcelli, S., Brenner, M.B., Band, H., "Biology of the human $\gamma\delta$ T-cell receptor", 1991, *Immunol. Rev.*, 120, 137-183.
4. Wei, S., Charmley, P., Robinson, M.A., Concannon, P., "The extent of the human germline T-cell receptor V β gene segment repertoire", 1994, *Immunogenetics*, 40, 27-36.
5. Arden, B., Clark, S.P., Mak, T.W., "Human T cell receptor variable gene segment families", 1995, *Immunogenetics*, 42, 455-500.
6. Peyrat, M.A., Davodeau, F., Houde, I., Romagné, F., Necker, A., Leget, C., Cervoni, J.P., Cerf-Bensoussan, N., Vié, H., Bonneville, M., Hallet, M.M., "Repertoire analysis of human PBL using a human V δ 3 region specific mAb. Characterization of dual TCR δ chain expressors and $\alpha\beta$ T cells expressing V δ 3/J α /C α -encoded TCR chains", 1995, *J. Immunol.*, 155, 3060-3067.

7. Thibault, G., Bardos, P., "Compared TCR and CD3 ϵ expression on $\alpha\beta$ and $\gamma\delta$ cells. Evidence for the association of two TCR heterodimers with three CD3 ϵ chains in the TCR/CD3 complex", 1995, *J. Immunol.*, 154, 3814-3820.
8. Agrawal, S.G., Marquet, J., Plumas, J., Rouard, H., Delfau-Larue, M.- H., Gaulard, P., Boumsell, L., Reyes, F., Bensussan, A., Farcet, J.-P., "BY55/CD160 acts as a co-receptor in TCR signal transduction of a human circulating cytotoxic effector T lymphocyte subset lacking CD28 expression", 2000, *International Immunology*, Vol 13, No.4, pp. 441-450
9. Nikolova, M., Cardine, A.M., Boumsell, L., Bensussan, A., "BY55/CD160 acts as a co-receptor in TCR signal transduction of a human circulating cytotoxic effector T lymphocyte subset lacking CD28 expression", 2002, *International Immunology*, Vol 14, No.5, pp. 445-451

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