

Analyte Specific Reagent.

Analytical and performance characteristics are not established.

SPECIFICITY

The high affinity IL-2 receptor (IL-2R) is a trimeric complex composed of three polypeptides chains, α (IL-2Rα, Tac, p55, or CD25), β (IL-2Rβ, p75, or CD122), and γ (IL-2Rγ or p64). T lymphocytes express an intermediate-affinity IL-2 receptor that comprises β/γ or α/γ chain complex. IL-2Rβ and IL-2Rγ chains are involved in IL-2-mediated cellular signaling (1 – 3).

The CD25 molecule (known as Tac antigen and interleukine-2 receptor α IL-2Rα) is highly expressed on regulatory CD4-positive T lymphocytes and undetected on resting CD8 positive lymphocytes. However, all activated T lymphocytes express the CD25 protein. A subset of B lymphocytes (CD20 positive) expresses CD25 antigen. Granulocytes, monocytes, NK cells, platelets and erythrocytes do not express CD25 (4).

The B1.49.9 monoclonal antibody (mAb) has been assigned to the CD25 cluster of differentiation during the 2nd International Workshop on Human Leucocyte Differentiation Antigens (HLDA) in Boston, U.S.A., in 1984 (WS Code: T141, Section T) (5).

REAGENT

IOTest CD25-FITC Conjugated Antibody
PN IM0478U – 2 mL Liquid – 20 µL / test*.

Clone	B1.49.9
Isotype	IgG2a, mouse
Immunogen	Human alloactivated T lymphocytes (FC2)
Hybridoma Source	NS1 x Balb/c Ascites fluid
Purification	Ion exchange or affinity chromatography
Conjugation	FITC (Fluorescein isothiocyanate) is conjugated at 5 – 7 moles of FITC per mole of Ig.
Fluorescence	FITC (Green) Excites at 468 – 509 nm Emits at 504 – 541 nm

REAGENT CONTENTS

This reagent is provided in phosphate-buffered saline, with 0.1% sodium azide

(NaN₃) as preservative, and 2.0 mg / mL bovine serum albumin (BSA).

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. Do not use antibody beyond the expiration date on the label.
3. Samples and all material coming in contact with them should be handled as if capable of transmitting infection and disposed of with proper precautions.
4. Never pipet by mouth and avoid contact of samples with skin and mucous membranes
5. Minimize exposure of reagent to 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. Do not freeze. Minimize exposure to light.

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 preparation 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. Sasaki, Y., Sugamura, K., "CD25 workshop panel report", 1996, Leucocyte

Typing VI, White cell Differentiation Antigens, Kishimoto, T., et al, Eds., Garland Publishing, Inc., 802-804.

2. Callard, R.E., Gearing, A.J.H., "The cytokines and their receptors : Interleukins IL-2", 1994, The Cytokine FactsBook, Academic Press, 39-45.
3. Kaplan, D., "Autocrine secretion and the physiological concentration of cytokines", 1996, Immunol. Today, 17, 303-304
4. Sasaki, Y., Sugamura, K., "CD25 Workshop panel report", 1997, Leucocyte Typing VI, White Cell Differentiation Antigens. Kishimoto, T., et al, Eds., Garland Publishing, Inc., 802-804.
5. Haynes, B.F., "Summary of T cell studies performed during the second International Workshop and Conference on Human Leukocytes Differentiation Antigens", 1986, Leucocyte Typing II, Human T lymphocytes, Reinherz, E.L., et al. Eds., Springer-Verlag, 3-30.

PRODUCT AVAILABILITY

IOTest CD25-FITC Conjugated Antibody
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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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(*) : 20 µL is the quantity of product sufficient to stain 5 x 10⁵ cells in a standard immunofluorescence assay

