IOTest® CD28-FITC

PN IM1236U – 2 mL Liquid – 20 µL / test* – Clone CD28.2

Analyte Specific Reagent.

Analytical and performance characteristics are not established.

SPECIFICITY

The CD28 antigen is a homodimeric, disulfide-linked molecule, with a molecular weight of 44 kDa (1, 2). This antigen is involved in the interaction of T lymphocytes with B lymphocytes, through its counter-receptors, the B7 / BB-1 (CD80) and B70 / B7-2 (CD86) glycoproteins. It provides a major co-stimulatory signal for T cell activation, proliferation and lymphokine production. CD28 is associated to a PI3 kinase activity (2).

$CD4^+$ T lymphocytes express CD28 more frequently as $CD8^+$ T lymphocytes do (1, 3). The CD28 antigen is also present on plasma cells and thymocytes.

The CD28.2 monoclonal antibody has been assigned to the CD28 cluster of differentiation at the 5th International Workshop on Human Leucocyte Differentiation Antigens in Boston, USA, in 1993 (1).

REAGENT

IOTest CD28-FITC Conjugated Antibody
PN IM1236U – 2 mL Liquid – 20 µL / test*.

Clone	CD28.2
Isotype	IgG1, mouse
Immunogen	Transfected murine cell line
Hybridoma	X63-Ag8.653 x Balb/c
Source	Ascites fluid
Purification	Ion exchange or affinity chromatography
Conjugation	FITC (Fluorescein isothiocyanate) is conjugated at 5 – 9 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 (NaN_3) 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. Olive D., Cerdan . C, Costello R., Sielleur I., Ragueneau M., Pages F., Klasen S., Nunès J., Imbert J., "CD28 and CTLA-4 cluster report", 1995, Leucocyte Typing V, vol 1, White Cell Differentiation Antigens. Schlossman, S.F., et al., Eds., Oxford University Press, 360-370.
2. Ghiotto-Ragueneau, M., Battifora, M., Truneh, A., Waterfield, M.D., Olive, D., "Comparison of CD28-B7.1 and B7.2 functional interaction in resting human T cells: Phosphatidylinositol 3-kinase association to CD28 and cytokine production", 1996, Eur. J. Immunol., 26, 34-41.
3. Bani, L., David, D., Moreau, J.L., Cayota, A., Nakarai, T., Ritz, J., Thèze, J., "Expression of the IL-2 receptor gamma subunit in resting human CD4 T lymphocytes: mRNA is constitutively transcribed and the protein stored as an intracellular component", 1997, Int. Immunol., 4, 9, 573-580.

PRODUCT AVAILABILITY

IOTest CD28-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

TRADEMARKS

Manufactured by:
Immunotech SAS, a Beckman Coulter Company
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13276 Marseille Cedex 9, France

(*): 20 µL is the quantity of product sufficient to stain 5×10^5 cells in a standard immunofluorescence assay