Monoclonal Antibody IOTest® CD50-PE

PN IM1601- 100 tests – Liquid - 20 µL/test - Clone HP2/19

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

SPECIFICITY

The antibody HP2/19 reacts specifically with extracellular part of the ICAM-3 molecule.
ICAMs (Intercellular Adhesion Molecules) are the adhesion counter-receptors for the Leukocyte Function associated molecule 1 (LFA-1). The 3 known ICAMs of the Immunoglobulin superfamily are involved in inflammation and immunity but they have distinct biochemical characteristics, pattern of expression and functional properties (see table).
The immunoprecipitated ICAM-3 antigen has a molecular weight of 120 kDa as determinated by gel electrophoresis.
Antibody binding shows that the antigen is expressed on the cell surface of leucocytes and of variety of cells but not of endothelial cells, platelets and erythrocytes. It is by far the most functionnaly important ICAM.
The monoclonal antibody HP2/19 blocks cellular adhesion which is mediated by ICAM-3.

REAGENT

IOTest CD50-PE Monoclonal Antibody
PN IM1601 - 100 tests - Liquid - 20µL/test

Clone	HP2/19
Isotype	IgG2a, Mouse
Immunogen	JMT cell leukemia cells
Hybridoma	SP2 x Balb/c spleen cells
Source	Ascites fluid
Purification	Protein A affinity or affinity chromatography
Conjugation	R Phycoerythrin (PE)
Molar Ratio	PE / Ig : 0.5 - 1.5
Fluorescence	Excites at 486-509 nm Emits at 568-590 nm

REAGENT CONTENTS

This antibody is provided in phosphate-buffered saline, containing 0.1% sodium azide and 2 mg/mL bovine serum albumin.

APPLICATION

Flow cytometry.

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 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. Do not freeze.

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.
Assay volume: 20 µL per 5 x 10^5 cells in one test, or per 100 µL whole blood.
It is recommended to establish the right range of antibody dilutions to be used for the experiment.

SELECTED RESEARCH REFERENCES

1) This antibody has been assigned to the CD50 cluster of differentiation at fifth International Workshop on human leukocyte differentiation antigen in Boston (1993)
2) Makgoba M.W., Sanders M.E., Ginther Luce G.E., Dustin M.L., Springer T.A., Clark E.A., Mannoni P. and Shaw S. "ICAM-1 a ligand for LFA-1-dependent adhesion of B, T and myeloid cells." (1988) Nature **331**, 86-88.
3) Damle N.K., Klussman K. and Aruffo A. "Intercellular adhesion molecule 2, a second counter-receptor for CD11a/CD18 (Leucocyte Function-associated Antigen 1) provides a costimulatory signal for T-cell receptor-initiated activation of human T cells", (1992) Journal of Immunology **148** (3), 665-671.
4) de Fougerolles A.R. and Springer T.A. "Intercellular adhesion molecule 3, a third adhesion counter-receptor for lymphocyte function associated molecule 1 on resting lymphocytes", (1992) J. Exp. Med. **175**, 185-190.
5) Campanero M.R., del Pozo M.A., Arroyo A.G., Sanchez-Mateos P, and Sanchez-madrid F. "ICAM-3 interacts with LFA-1 and regulates the LFA-1/ICAM-1 cell adhesion pathway", (1993), Tissue Antigens **42** (4) Abstract AS013 p.261
6) Sanchez-Mateos P, Campanero M.R., del Pozo M.A., Arroyo A.G., and Sanchez-madrid F.(1994) "ICAM-3 regulates intercellular adhesion and T cell interactions with extracellular matrix and endothelial cells", (1994), Abstract No W23-17 12th European Immunology Meeting 1-17 June 1994 Barcelona

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