

Analyte Specific Reagent.

Analytical and performance characteristics are not established.

SPECIFICITY

The CD103 antigen is a heterodimer known as the human mucosal antigen 1 (HML-1) or the $\alpha\beta 7$ integrin. It includes the 150-kDa αE chain and the 105-kDa $\beta 7$ chain, as measured under reducing conditions (1). HML-1 antigen is therefore a member of the integrin family of leucocyte adhesion molecules, belonging to the superfamily of heterodimers containing the $\beta 7$ subunit (2, 3). The 2G5 monoclonal antibody (mAb) stains all the various subsets of human intraepithelial lymphocytes (IEL) as well as subpopulations of lamina propria T cells and mesenteric lymphoblasts. It reacts also with some lymphocytes in other mucosae (2, 3). The 2G5 mAb has been assigned to the CD103 cluster of differentiation during the 5th International Workshop on Human Leucocyte Differentiation Antigens, in Boston, USA, in 1993 (WS Code: A005) (1).

REAGENT

IOTest CD103-FITC Conjugated Antibody
PN IM1856U – 2 mL Liquid – 20 µL / test*.

Clone 2G5

Isotype IgG2a, mouse

Immunogen Human intestinal lymphocytes

Hybridoma Source P3-X63-Ag.8.653 x Balb/c Ascites fluid

Purification Ion exchange or affinity chromatography

Conjugation FITC (Fluorescein isothiocyanate) is conjugated at 15 – 25 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. Cepek, K.L., Wong, D.A., Brenner, M.B., Springer, T.A., "CD103 cluster report", 1995, Leucocyte Typing V, White Cell Differentiation Antigens. Schlossman, S.F., et al., Eds., Oxford University Press, 1666-1667.
2. Cerf-Bensussan, N., Jarry, A., Brousse, N.B., Lisowska-Grosperre, B., Guy-Grand, D., Griscelli, C., "A monoclonal antibody (HML-1) defining a novel membrane molecule present on human intestinal lymphocytes", 1987, Eur. J. Immunol., 17, 1279-1285.
3. Cerf-Bensussan, N., Bègue, B., Gagnon, J., Meo, T., "The human intraepithelial lymphocyte marker HML-1 is an integrin consisting of a beta7 subunit associated with a distinctive alpha chain", 1992, Eur. J. Immunol., 3, 22, 885.

PRODUCT AVAILABILITY

IOTest CD103-FITC Conjugated Antibody
PN IM1856U – 2 mL Liquid – 20 µL / test*.

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