

**Analyte Specific Reagent.**

Analytical and performance characteristics are not established.

**SPECIFICITY**

The CD13 antigen is a transmembrane glycoprotein with a large extracellular region and a small intracellular NH2-terminal tail. It has a molecular weight of 150 kDa and is expressed on the cell surface as a non-covalently linked homodimer. It is found on most cells of myeloid origin including neutrophils, eosinophils, basophils and monocytes from normal peripheral blood. It is absent from B and T lymphocytes as well as from red blood cells and platelets. This molecule is found on the surface of committed progenitor cells defined as the Granulocyte-Monocyte Colony Forming Units (CFU-GM) in normal bone marrow. There are up to five subpopulations of CD13 molecules possessing different levels of glycosylation, which may explain the different binding patterns of various CD13 antibodies.

The Immu103.44 monoclonal antibody has been assigned to the CD13 cluster of differentiation during the fifth International Workshop on Human Leucocyte Differentiation Antigens held in Boston, USA (1993) (1).

**REAGENT**

IOTest CD13-PC7 Conjugated Antibody  
PN A46528 – 1 mL Liquid – 10 µL/test\*.

<b>Clone</b>	Immu103.44
<b>Isotype</b>	IgG1, mouse
<b>Immunogen</b>	Cells from KG1a and TF1 cell lines
<b>Hybridoma Source</b>	X63-Ag8.653 x Balb/c Ascites fluid
<b>Purification</b>	Ion exchange or affinity chromatography
<b>Conjugation</b>	PC7 (Phycoerythrin-Cyanine 7)
<b>Molar Ratio</b>	PC7 / protein: 0.5 – 1.5
<b>Fluorescence</b>	PC7 (far red) Excites at 486 – 580 nm Emits at 750 – 810 nm
<b>Buffer</b>	2 mg/mL bovine serum albumin in phosphate-buffered saline containing 0.1% sodium azide.

**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. All specimens and samples must be considered as potentially infectious and must be handled with care (in particular: the wearing of protective gloves, gowns and goggles).
3. Do not expose reagents to strong light during storage or incubation.
4. Avoid microbial contamination of reagents or incorrect results might occur.
5. Avoid contact of samples with skin mucosa and eyes. Never pipet by mouth.
6. Do not use reagent beyond the expiration date on the vial label.
7. Let it come to room temperature (18 – 25°C) before use.
8. Use general 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 PC7-labeled reagent (clear, slightly pink to redish liquid) or any major variation in values obtained for control samples may indicate deterioration and the reagent should not be used.

**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.

**PRECAUTIONS**

Due to the tandem structure of the fluorochrome, PC7 also emits light at 575 nm. This secondary emission peak varies from lot-to-lot of PC7. Therefore, for multi-color analysis, the compensation matrix should be carefully checked when changing the lot of a PC7-conjugate.

**SELECTED RESEARCH REFERENCES**

1. Ashmun, R.A., Holmes, K.V., Shapiro, L.H., Favalaro, E.J., Razak, K., De Crom, R.P.G., Howard, C.J., Look, A.T., "CD13 cluster workshop report", 1995, Leucocyte Typing V; Schlossman, S.F., et al. Eds, Oxford University Press, p 771-775.

**PRODUCT AVAILABILITY**

IOTest CD13-PC7 Conjugated Antibody  
PN A46528 – 1 mL Liquid – 10 µL/test\*.

PE is licensed under patent 4,520,110

For additional information in the USA, call 800-526-7694.

Outside the USA, contact your local Beckman Coulter representative.

[www.beckmancoulter.com](http://www.beckmancoulter.com).

**TRADEMARKS**

The BECKMAN COULTER logo, BECKMAN COULTER, IOTest are registered trademarks of Beckman Coulter, Inc.

Cy7 is a trademark of Amersham Biosciences, a GE Healthcare company

Manufactured by:  
Immunotech SAS, a Beckman Coulter Company  
130, avenue de Lattre de Tassigny, B.P. 177  
13276 Marseille Cedex 9, France

©2007 Beckman Coulter, Inc.  
All Rights Reserved

(\*): 10 µL is the quantity of product sufficient to stain 5 x 10<sup>5</sup> cells in a standard immunofluorescence assay

