IOTest® CD45-PC5

PN IM2652U – 1 mL Liquid – 10 µL / test* – Clone Immu19.2

Analyte Specific Reagent.

Analytical and performance characteristics are not established.

SPECIFICITY

The CD45 molecules are single chain integral membrane proteins, comprising at least 5 isoforms, ranging from 180 to 220 kDa. They are generated by alternative splicing combinations of three exons (A, B, and C) of the genomic sequence. The non-restricted CD45 antigen, Leucocyte Common Antigen (LCA) consists of an extracellular sequence, proximal to the membrane, which is common to all CD45 isoforms. All the monoclonal antibodies that belong to the CD45 cluster react with this part of the antigen and are able to recognize all CD45 isoforms. These isoforms have extracytoplasmic sequences ranging from 391 to 552 amino acids long, with numerous N-linked carbohydrate attachment sites. The cytoplasmic portion contains two phospho-tyrosine-phosphatase domains. The non-restricted CD45 epitope is present on the surface of all human leucocytes; lymphocytes, eosinophils monocytes, basophils and neutrophils, by order of decreasing level of expression. CD45 is a major component of the lymphocyte membrane. It is absent from erythrocytes and platelets. It is lost during maturation of erythroid cells in the bone marrow.

CD45 antibodies react with leucocyte progenitors in bone marrow.

The Immu19.2 monoclonal antibody reacts with a common determinant of all isoforms of the LCA structure present on the surface of lymphocytes, monocytes and granulocytes. It has been assigned to the CD45 cluster of differentiation at the 6th International Workshop on Human Leucocyte Differentiation Antigens in Kobe (1996) (WS Code: N-L103).

REAGENT

IOTest CD45-PC5 Conjugated Antibody
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Clone	Immu19.2
Isotype	IgG1, mouse
Hybridoma	P3-X636Ag.8.653 x Balb/c
Immunogen	EBV-transformed cell line FU 7.57
Source	Ascites fluid
Purification	Ion exchange or affinity chromatography

Conjugation PC5: The Ig is conjugated to a tandem dye constituted of R-phycoerythrin covalently linked to Cy5 at 0.5 – 1.5 mole of PC5 per mole of Ig.

Fluorescence PC5 (Deep Red)
Excites at 486–580 nm
Emits at 660–680 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 PC5-labeled reagent (clear colorless to pinkish 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. Serra-Pages, C., Morimoto, C., Schlossman, S.F., Saito, H., Streuli, M., "Characterization of CD45 mAb", 1995, Leucocyte Typing V, White Cell Differentiation Antigens. Schlossman, S.F., et al., Eds., Oxford University Press, 389-391.
2. Sewell, W.A., Cooley, M.A., Hegen, M., "CD45 workshop panel report", 1997, in Leucocyte Typing VI, White Cell Differentiation Antigens. Kishimoto, T., et al., Eds., Garland Publishing Inc., 499-502.

PRODUCT AVAILABILITY

IOTest CD45-PC5 Conjugated Antibodies
PN IM2652U – 1 mL Liquid – 10 µL / test*.

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