Conjugation

CD86, the B7-2 (B7.2) or B7-2 (B70) costimulatory molecule, is constitutively expressed by monocytes and activated B cells, as well as on peripheral blood dendritic cells. CD86 is preferentially expressed by memory B cells and germinal B-cell activation antigens. It is preferentially expressed by B cells in a standard immunofluorescence assay

IOTest

REAGENT CONTENTS

PN IM2729U – 2 mL Liquid – 20 μL / test* – Clone HA5.2B7

ANALYTE SPECIFIC REAGENT.
Analysed and performance characteristics are not established.

SPECIFICITY

The CD86 antigen (B7.2, B70) is a single-chain transmembrane glycoprotein, structurally similar to CD80 (B7.1) (1). Its molecular weight is 80 kDa, under reducing conditions. The extracellular region is composed of one V-type and one C-type Ig-like domains. There are 8 potential sites for N-glycosylation. The cytoplasmic tail has 3 potential sites for protein kinase C phosphorylation (3, 4). CD86 shares with CD80 the same co-receptors on T cells, CD28 and CD152 (CTLA-4). CD86 binds to CD152 with a 20 to 100-fold higher affinity than to CD28 (5). CD86 and CD80 have a critical role in one costimulatory pathway involved in the prevention of antigen-specific T-cell tolerance (anergy), mediated by ligation of CD28 on T cells by its ligands, CD80 and CD86 on antigen-presenting cells (6).

CD86 is constituently expressed by interdigitating dendritic cells, peripheral blood monocytes, activated B cells, and, at a lower level, by peripheral blood dendritic cells (1, 2). On lymphocytes, CD86 appears as a B-cell activation antigen. It is preferentially expressed by memory B cells and germinal B center cells, but not on plasma cells (3). Its expression can be up-regulated by activation through surface immuno-globulin, MHC-class II molecules, and CD40 triggering, or by PMA through surface immuno-globulin, MHC-class II molecules, and CD40 triggering, or by PMA treatment with ionomycin. Also, PHA activated T cells show a weak expression of CD86 on CD4-positive cells, and a constant one on CD8-positive cells (4).

REAGENT

IOTest CD86-PE Conjugated Antibody
PN IM2729U – 2 mL Liquid – 20 μL / test*.

Clone

HA5.2B7

Isotype

IgG2b, κ, mouse

Source

Ascites fluid

Immunogen

B7.2 transfected CHO cells

Purification

Ion exchange or affinity chromatography

Conjugation

R-phycocerythrin (PE) is conjugated at 0.5 – 1.5 moles of PE per mole of Ig.

Fluorescence

PE (orange-red)

Exits at 486 – 580 nm

Emits at 568 – 590 nm

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 pipetting 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 the reagent 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 PE-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 REFERENCES


PRODUCT AVAILABILITY

IOTest CD86-PE Conjugated Antibody
PN IM2729U – 2 mL Liquid – 20 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

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