Conjugation

5 x 10

(*): 20 µL is the quantity of product sufficient to stain

Fluorescence

REAGENT

1996 (2).

International Workshop on Human Leucocyte
cluster of differentiation at the 6th

The MAB89 mAb was assigned to the CD40

CD40 (8).

The MAB89 mAb reacts specifically with
reaction of endothelial cells (7).

platelets and triggers an inflammatory

(5, 6). CD154 is also expressed on activated

activated T cells that induces B cell

ligand) is a membrane glycoprotein on

cells and secrete large amounts of

presence of IL-10 differentiate into plasma

Activated B cells via CD40 antigen in the

can promote the switch to IgE secretion (3).

B marker, absent only from terminally

present on macrophages, some endothelial

cells, and follicular dendritic cells. It is a pan-

B marker, absent only from terminally
differentiated plasma cells (2).

CD40 is implicated in the process of B cell

selection in the germinal centre. Studies
demonstrated that CD40 monoclonal
antibodies (mAbs) induce strong homotypic
adhensions in resting B cells and, together
with interleukin (IL) 4, maintain the cell

cycle of blasts of the B lineage. They also
can promote the switch to IgE secretion (3).

Activated B cells via CD40 antigen in the

presence of IL-10 differentiate into plasma

cells and secrete large amounts of

immunoglobulins (4). The CD154, (CD40

ligand) is a membrane glycoprotein on

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proliferation and immunoglobulin secretion

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International Workshop on Human Leucocyte

Differentiation Antigens in Kobe, Japan, in

1996 (2).

REAGENT

IOTest® CD40-PE Conjugated Antibody

PN IM1936U – 2 mL Liquid – 20 µL / test* – Clone MAB89

Analyte Specific Reagent.

Analytical and performance characteristics are not established.

SPECIFICITY

The CD40 antigen is a 44-48 kDa type I

integral membrane protein of the tumor

necrosis factor receptor (TNFR) superfamily

(1, 2). This antigen is found on B cell lines, is

strongly expressed by interdigitating cells

(IDC), basal epithelial cells, and is also

present on macrophages, some endothelial

cells, and follicular dendritic cells. It is a pan-

B marker, absent only from terminally
differentiated plasma cells (2).

CD40 is implicated in the process of B cell

selection in the germinal centre. Studies
demonstrated that CD40 monoclonal
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REAGENT

IOTest® CD40-PE Conjugated Antibody

PN IM1936U – 2 mL Liquid – 20 µL / test*.

Clone

MAB89

Type

IgG1, mouse

Immunogen

Anti-µ activated tonsillar

human B cells

Hybridoma

NS1 X Balb/c

Source

Ascites fluid

Purification

Ion exchange or affinity

chromatography

Conjugation

R-phycoerythrin (PE) is

conjugated at 0.5 – 1.5

moles of PE per mole of Ig.

Fluorescence

PE (orange-red)

Excites at 486 – 580 nm

Emits at 568 – 590 nm

REAGENT CONTENTS

This reagent is provided in phosphate-

buffered saline, with 0.1% sodium azide

(NaNS) 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

with 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.

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PRODUCT AVAILABILITY

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For additional information in the USA, call
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Beckman Coulter representative.

www.beckmancoulter.com

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