Monoclonal Antibody CD154 (CD40L)  
PN IM1842 – Purified – Freeze-dried – 0.2 mg – Clone TRAP1

For Research Use Only. Not for use in diagnostic procedures.

SPECIFICITY
The ligand for CD40 (CD154 or CD40L), also called TRAP (TNF Related Activation Protein), is a 33 kDa membrane glycoprotein, belonging to the TNF / NGF ligand family (1, 2). Like TNF, it potentially exists both in a membrane-anchored and a soluble form (1). CD154 is undetectable on freshly isolated peripheral blood mononuclear cells (3, 4). It is predominantly expressed by activated CD4+ T cells, although a proportion of CD8+ cells also expresses the protein (4). CD154 induces B cell proliferation and immunoglobulin secretion (4, 5). CD40 / CD154 system is predicted to function in the process of B cell selection in the germinal centre (6). CD154 is also expressed on activated platelets and triggers an inflammatory reaction of endothelial cells (7).

The TRAP-1 monoclonal antibody was assigned to the CD154 cluster of differentiation at the 6th International Workshop on Human Leucocyte Differentiation Antigens in Kobe, Japan, in 1996 (2).

REAGENT CONTENTS
This reagent is provided in freeze-dried form from phosphate-buffered saline (PBS: 0.008 M sodium phosphate, 0.15 M sodium chloride, pH 7.2), with 1 mg/mL bovine serum albumin (BSA).

STATEMENT OF WARNINGS
1. Specimens, samples and all material coming in contact with them should be handled as if capable of transmitting infection and disposed of with proper precautions.
2. Never pipet by mouth and avoid contact of samples with skin and mucous membranes.
3. Do not use reagent beyond the expiration date on the vial label.
4. Avoid microbial contamination of reagent or erroneous results may occur.
5. Use Good Laboratory Practices (GLP) when handling this reagent.

STORAGE CONDITIONS AND STABILITY
This reagent is stable up to the expiration date on the vial label when stored at 2 – 8°C. The reconstituted form may be stored at -20°C until the expiration date. Aliquoting is suggested to avoid multiple freeze-thaw cycles. The addition of sodium azide at 0.1% (w/v) is recommended for storage of the reconstituted form for up to one month at 2-8°C. Minimize exposure to light and warmth.

REAGENT PREPARATION
Reconstitute with 1 mL of distilled water. No preservative has been added.

PROCEDURE
Flow Cytometry: Suggested working dilution: 1:20. Use 10 µL of that dilution to label 5 x 10^6 cells.

For other applications it is recommended that the user titrates the antibody for use in her / his own system using appropriate negative / positive controls.

SELECTED RESEARCH REFERENCES


OTHER FORMS AVAILABLE
CD154-PE (IM2216)
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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