

Monoclonal Antibody to CD40 - PE

Alternate names: B-cell surface antigen CD40, Bp50, CD40L receptor, CDw40, TNFRSF5, Tumor necrosis

factor receptor superfamily member 5

Catalog No.: SM008R

Quantity: 100 Tests

Concentration: 1.0 mg/ml

Background: CD40 is a costimulatory molecule of the TNF receptor superfamily and is expressed on

many cell types, such as B cells, monocytes/macrophages, dendritic cells, endothelial cells, fibroblasts or vascular smooth muscle cells. Interaction of CD40 and its ligand CD154 (CD40L) is required for the generation of antibody responses to T-dependent antigens as

well as for the development of germinal centers and memory B cells. In

monocytes/macrophages CD40 engagement induces production of pro-inflammatory cytokines and chemokines. CD40-CD154 interactions are also critical for development of CD4 T cell-dependent effector functions. CD40 links innate and adaptive immune responses to bacterial stimuli and serves as an important regulator affecting functions of

other costimulatory molecules.

Uniprot ID: P27512

NCBI: <u>NP 035741.2</u>

GenelD: <u>21939</u>

Host / Isotype: Rat / IgG2a

Clone: 3/23

Immunogen: Extracellular Domain of Mouse CD40 and the Fc portion of Human IgG1. Spleen cells from

immunised LOU/c rats were fused with cells of the Ag8 mouse myeloma cell line.

Format: State: Lyophilized purified IgG fraction.

Purification: Affinity Chromatography on Protein G.

Buffer System: PBS, pH 7.4 containing 0.09% Sodium Azide as preservative and 1% BSA as

stabilizer.

Label: PE – R. Phycoerythrin (RPE)

Reconstitution: Restore with distilled water:

SM008R with 1.0 ml. SM008RT with 0.25 ml SM008RX with 5.0 ml

Applications: Flow Cytometry: Use 10 µl of diluted antibody to label 10e6 cells in 100 µl.

The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low

affinity fc receptors.

Other applications not tested. Optimal dilutions are dependent on conditions and should

be determined by the user.

For research and in vitro use only. Not for diagnostic or therapeutic work.

Material Safety Datasheets are available at www.acris-antibodies.com or on request.



SM008R: Monoclonal Antibody to CD40 - PE

Specificity: This antibody recognises CD40 and stains most mature mouse B cells. T cells are

unlabelled.

Species: Mouse.

Other species not tested.

Storage: Prior to and following reconstitution store the antibody undiluted at 2-8°C.

DO NOT FREEZE!

This product is photosensitive and should be protected from light.

Shelf life: one year from despatch.

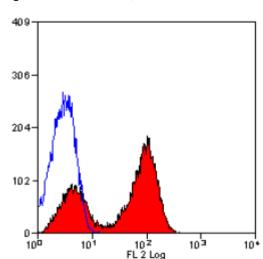
General References: 1. Parry, S.L. et al. (1994) Plastic-immobilized anti-mu or anti-delta antibodies induce

apoptosis in mature murine B lymphocytes. Eur. J. Immunol. 24: 974-979.

2. Hasbold, J. et al. (1994) Properties of mouse CD40: cellular distribution of CD40 and B cell activation by monoclonal anti-mouse CD40 antibodies. Eur. J. Immunol. 24: 1835-1842. 3. Hasbold, J. and Klaus, G.G.B. (1994) B cells from CBA/N mice do not proliferate following

ligation of CD40. Eur. J. Immunol. 24: 152-157.

Pictures:



Staining of Mouse spleen with Rat Anti Mouse CD40-RPE.