

## Monoclonal Antibody to CD40 - PE

<b>Alternate names:</b>	B-cell surface antigen CD40, Bp50, CD40L receptor, CDw40, TNFRSF5, Tumor necrosis factor receptor superfamily member 5
<b>Catalog No.:</b>	SM008RT
<b>Quantity:</b>	25 Tests
<b>Concentration:</b>	1.0 mg/ml
<b>Background:</b>	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.
<b>Uniprot ID:</b>	<a href="#">P27512</a>
<b>NCBI:</b>	<a href="#">NP_035741.2</a>
<b>GeneID:</b>	<a href="#">21939</a>
<b>Host / Isotype:</b>	Rat / IgG2a
<b>Clone:</b>	3/23
<b>Immunogen:</b>	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.
<b>Format:</b>	<b>State:</b> Lyophilized purified IgG fraction. <b>Purification:</b> Affinity Chromatography on Protein G. <b>Buffer System:</b> PBS, pH 7.4 containing 0.09% Sodium Azide as preservative and 1% BSA as stabilizer. <b>Label:</b> PE – R. Phycoerythrin (RPE) <b>Reconstitution:</b> Restore with distilled water: SM008R with 1.0 ml. SM008RT with 0.25 ml SM008RX with 5.0 ml
<b>Applications:</b>	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.

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Material Safety Datasheets are available at [www.acris-antibodies.com](http://www.acris-antibodies.com) or on request.

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**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.

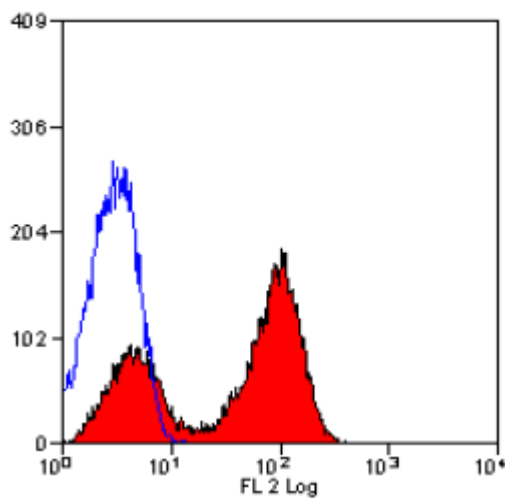
**DO NOT FREEZE!**

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.

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