

## anti-human CD40

The antibody HI40a recognizes CD40 (BP50), a 48 kDa type I single chain transmembrane glycoprotein expressed on normal and neoplastic B cells, but not on terminally differentiated plasma cells. CD40 antigen is also present on Hodgkin's and Reed-Sternberg cells, follicular dendritic cells, some macrophages, basal epithelial cells and endothelial cells.

**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.

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| <b>Clone:</b>               | HI40a  |
| <b>Isotype:</b>             | Mouse IgG1   |
| <b>Physical state:</b>      | Purified from ascites by protein-G affinity chromatography                                 |
| <b>Purity:</b>              | > 95% (by SDS-PAGE)  |
| <b>Buffer:</b>              | PBS with 15 mM sodium azide (pH 7.4)   |
| <b>Storage Instruction:</b> | Store at 4 °C. For long-term storage aliquot and store at -20°C. Avoid freeze/thaw cycles. |
| <b>Application:</b>         | Flow Cytometry   |
| <b>Reference:</b>           | Pearson LL, Castle BE, Kehry MR: Int Immunol. 2001 Mar;13(3):273-83                        |
| <b>Quantity:</b>            | 0.1 mg   |
| <b>Order N°:</b>            | H12170   |

**Warning:** Sodium azide is harmful if swallowed (R22). Keep out of reach of children (S2). Keep away from food, drink and animal feeding stuff (S13). Wear suitable protective clothing (S36). If swallowed, seek medical advice immediately and show this container or label (S46). Contact with acids liberates very toxic gas (R32).

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