

## Product datasheet for **AM03135AF-N**

### CD40 Mouse Monoclonal Antibody [Clone ID: HI40a]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	HI40a
Applications:	FC
Recommended Dilution:	Flow Cytometry (effective for indirect immunofluorescence staining flow cytometry analysis using 0.25 µg/test).
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Human CD40a
Specificity:	This antibody 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.
Formulation:	Azide free phosphate buffered saline (PBS), preserved by filter sterilization, approx. pH 7.4 State: Azide Free State: Liquid Ig fraction
Concentration:	lot specific
Purification:	Protein G chromatography (purity > 95% by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store the antibody at 2 - 8 °C up to one month or (in aliquots) at -20 °C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	CD40 molecule
Database Link:	<a href="#">Entrez Gene 958 Human P25942</a>



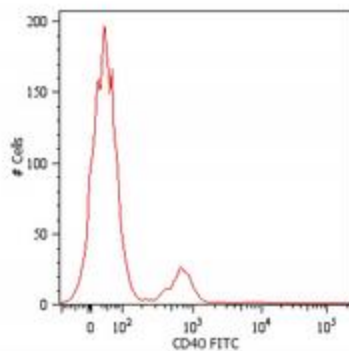
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**Background:**

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.

**Synonyms:**

TNFRSF5, CDw40, Bp50

**Product images:**

Surface staining of human peripheral blood cells with anti-human CD40 (HI40a) FITC. Cells in the lymphocyte gate were used for analysis.