

Anti-Human CD40 Antibody, Clone 5C3

Antibodies

Mouse monoclonal IgG1 antibody
against human, rhesus, cynomolgus
CD40, unconjugated

Catalog #60113
#60113.1

500 µg 1 mg/mL
50 µg 1 mg/mL



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Product Description

The 5C3 antibody reacts with CD40, a 45 - 50 kDa type I transmembrane glycoprotein that is a member of the tumor necrosis factor receptor (TNFR) superfamily. CD40 plays an important role in B cell development and is also involved in the process of B cell selection in germinal centers. It facilitates T cell-B cell interactions for co-stimulation and immune regulation through engagement with CD154 (gp39), the CD40 ligand expressed on T cells. In the presence of IL-4 or other stimuli, CD40 promotes B cell proliferation, induces immunoglobulin-(Ig) isotype class switching, and rescues B cells from surface Ig-induced apoptosis. CD40 is expressed on the surface of B cells, follicular dendritic cells, macrophages, fibroblasts, keratinocytes, endothelial cells, basal epithelial cells, CD34+ hematopoietic progenitor cells, and primary carcinomas. It is expressed at low levels, or not at all, on plasma cells. The 5C3 antibody has been used for the activation of B cells in in vitro functional assays, or, if in the presence of IL-4 or phorbol esters, for the induction of B cell proliferation.

Target Antigen Name:	CD40
Alternative Names:	B cell surface antigen CD40, Bp50, CD40L receptor, CDw40, HIGM1, IGM, IMD3, Nerve growth factor receptor-related B lymphocyte activation molecule, p50, TBAM, TNFRSF5, TRAP, Tumor necrosis factor receptor superfamily member 5
Gene ID:	958
Species Reactivity:	Human, Rhesus, Cynomolgus, Baboon, Chimpanzee, Squirrel Monkey
Host Species:	Mouse
Clonality:	Monoclonal
Clone:	5C3
Isotype:	IgG1, kappa
Immunogen:	Recombinant full length human CD40
Conjugate:	Unconjugated

Applications

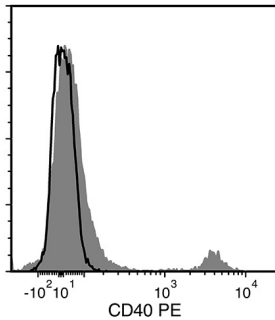
Verified:	FC
Reported:	FA, FC, IHC

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

Formulation:	Phosphate-buffered solution, pH 7.2. Contains no preservative. Endotoxin level is < 0.1 EU/µg of the protein (< 0.01 ng/µg of the protein) as determined by the Limulus amoebocyte lysate (LAL) test.
Purification:	The antibody was purified by affinity chromatography.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. For product expiry date, please contact techsupport@stemcell.com.
Directions for Use:	For flow cytometry the suggested use of this antibody is ≤ 0.5 µg per 1 x 10 ⁶ cells in 100 µL. It is recommended that the antibody be titrated for optimal performance for each application.

Data



Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs; gated on lymphocytes) labeled with Anti-Human CD40 Antibody, Clone 5C3, followed by a rat anti-mouse IgG1 antibody, PE (filled histogram) or Mouse IgG1, kappa Isotype Control Antibody, Clone MOPC-21 (Catalog #60070), followed by a rat anti-mouse IgG1 antibody, PE (solid line histogram).

Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

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