

Anti-human CD38 Monoclonal Antibody Unconjugated, Flow Validated

Catalog Number: FC00193

Introduction

CD38 is a type II transmembrane glycoprotein of 45 kDa with a protein core of 35 kDa. The CD38 antigen is expressed on essentially all pre-B lymphocytes, plasma cells, and thymocytes. It is also present on activated T lymphocytes, natural killer (NK) lymphocytes, myeloblasts, and erythroblasts. The antigen is expressed during the early stages of T- and B-lymphocyte differentiation, is lost during the intermediate stages of maturation, and then reappears during the final stages of maturation. The CD38 antigen is expressed on 90% of CD34+ cells, and is not expressed on pluripotent stem cells. Coexpression of CD38 antigen on CD34+ cells indicates lineage commitment of those cells. CD38 is a counter-receptor of CD31. It is also expressed in T- and B-acute lymphoblastic leukemia (ALL), Burkitts lymphoma, multiple myeloma, acute myeloid leukemia (AML), and chronic lymphocytic leukemia (CLL). The OKT10 antibody directed against human CD38 antigen.

This antibody is routinely tested by flow cytometric analysis. Flow cytometry and other applications were tested during antibody development by CapricoBio or are reported in the literature.

Application Information

Each lot of this antibody has been quality control tested by flow cytometric analysis of human PBMCs. For flow cytometric staining, the recommended use of this antibody is 0.5ug per 1x10⁶ cells in 100ul of staining volume or 0.1ml whole blood followed by a secondary florescent conjugated anti-mouse antibody. However, it is strongly suggested that the antibody reactivity be empirically titrated for optimal performance in the application of interest.

About CD38

ITGAM (Integrin Alpha-M), also called CD11B or Mo1 ALPHA SUBUNIT (MO1A), is one protein subunit that forms the heterodimeric integrin alpha-M beta-2 (alphaMbeta2) molecule. A major surface antigen family on human leukocytes includes complement receptor type 3 (CR3A; also called ITGAM, Mac1, or Mo1), lymphocyte function-associated (LFA) antigen type 1 (ITGAL), and p150, 95 (ITGAX). By in situ hybridization, Corbi et al. (1988) demonstrated that the genes encoding the alpha subunits of LFA1 (ITGAL), Mac1, and p150, 95 (ITGAX), all of which are involved in leukocyte adhesion, constitute a cluster on 16p13.1-p11. Callen et al. (1991) narrowed the assignment to 16p11.2. Inflammation plays an essential role in the initiation and progression of atherosclerosis. Simon et al. (2000) presented evidence that it also has a role in vascular repair after mechanical arterial injury (i.e., percutaneous transluminal coronary angioplasty, or PTCA).

Overview

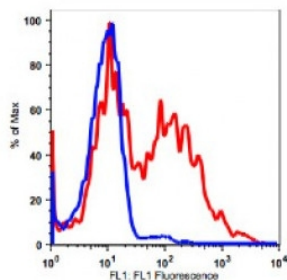
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|------------------|---|
| Product Name | Anti-human CD38 Monoclonal Antibody Unconjugated, Flow Validated |
| Reactive Species | Cynomolgus monkey, Human, Baboon, Rhesus monkey |
| Description | Boster Bio Anti-human CD38 Monoclonal Antibody Unconjugated, Flow Validated (Catalog# FC00193). Tested in Flow Cytometry application(s). This antibody reacts with Human, Rhesus monkey, Cynomolgus monkey, Baboon. |
| Application | Flow Cytometry |
| Clonality | Monoclonal Clone: OKT10 |

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| Formulation | PBS pH 7.2, 0.1% (w/v) BSA, 0.09% (w/v) sodium azide |
| Storage Instructions | Store at 2-8°C. Avoid repeated freeze-thaw cycles. |
| Host | Mouse |
| Uniprot ID | P28907 |

Technical Details

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|----------------------------|---|
| Immunogen | Human acute lymphoblastic leukaemia cells |
| Predicted Reactive Species | Bovine, Chicken, Xenopus Laevis, Xenopus Tropicalis, Zebrafish |
| Isotype | IgG1,k |
| Form | Liquid |
| Concentration | 0.5-1mg/ml, actual concentration vary by lot. Use suggested dilution ratio to decide dilution procedure. |
| Purification | Protein A purified |
| Suggested Dilutions | <p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>User needs to optimize the dilution ratio for this antibody.</p> |

Anti-human CD38 Monoclonal Antibody Unconjugated, Flow Validated (FC00193) Images



Lymphocytes gated PBMCs stained with purified anti-human CD38 (clone OKT-10) followed by Goat anti-mouse IgG (H+L) Alexa Fluor 488 (red histogram). PBMCs monocytes stained with only Goat antimouse IgG (H+L) Alexa Fluor 488 (Blue histogram).

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