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antibody and ELISA experts

BOSTER BIOLOGICAL TECHNOLOGY
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Anti-human CD59 Monoclonal Antibody Biotin Conjugated, Flow Validated

Catalog Number: FC00914-Biotin

Introduction

The clone BRA-10G binds with human CD59, a 20kDa glycosyl phosphatidyl-inositol (GPI)-anchored cell surface protein. CD59 regulates complement-mediated cell lysis and is a potent inhibitor of the complement membrane attack complex. CD59 is widely distributed on cells in all tissues. The CD59 expression on erythrocytes is important for their survival. Genetic defects in GPI-anchor attachment, that cause a reduction or loss of CD59 and CD55 on erythrocytes produce the symptoms of the disease paroxysmal hemoglobinuria (PNH). This MAb is useful for study on GPI-anchored proteins, PNH and CD59 functions.

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 followed by staining with a fluorescent conjugated Streptavidin. However, it is strongly suggested that the antibody reactivity be empirically titrated for optimal performance in the application of interest.

About CD59

This gene encodes a cell surface glycoprotein that regulates complement-mediated cell lysis, and it is involved in lymphocyte signal transduction. And this protein is a potent inhibitor of the complement membrane attack complex, whereby it binds complement C8 and/or C9 during the assembly of this complex, thereby inhibiting the incorporation of multiple copies of C9 into the complex, which is necessary for osmolytic pore formation. It also plays a role in signal transduction pathways in the activation of T cells. Mutations in this gene cause CD59 deficiency, a disease resulting in hemolytic anemia and thrombosis, and which causes cerebral infarction. Multiple alternatively spliced transcript variants, which encode the same protein, have been identified for this gene.

Overview

Product Name	Anti-human CD59 Monoclonal Antibody Biotin Conjugated, Flow Validated
Reactive Species	Human
Description	Boster Bio Anti-human CD59 Monoclonal Antibody Biotin Conjugated, Flow Validated (Catalog# FC00914-Biotin). Tested in Flow Cytometry application(s). This antibody reacts with Human.
Conjugate	Biotin
Application	Flow Cytometry
Clonality	Monoclonal Clone: BRA-10G

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Formulation	PBS pH 7.2, 0.09% sodium azide
Storage Instructions	Store at 2-8°C. Avoid repeated freeze-thaw cycles.
Host	Mouse
Uniprot ID	P13987

Technical Details

Immunogen	Human K562 tumor cells
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	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: User needs to optimize the dilution ratio for this antibody.

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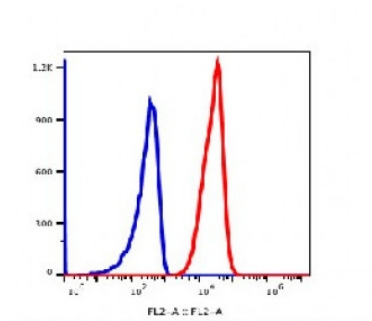
Anti-human CD59 Monoclonal Antibody Biotin Conjugated, Flow Validated (FC00914-Biotin) Images



Lymphocytes gated human PBMCs stained with biotin conjugated mouse anti-human CD59 followed by SA-PE (clone BRA-10G, red histogram). Blue histogram is for the lymphocytes gated PBMCs stained with biotin conjugated mouse IgG1 (MOPC31C) isotype control followed by streptavidin PE.

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