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antibody and ELISA experts

BOSTER BIOLOGICAL TECHNOLOGY
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Anti-human CD13 ANPEP Monoclonal Antibody FITC Conjugated, Flow Validated

Catalog Number: FC02591-FITC

Introduction

Clone APN1464 recognizes cell surface CD13 antigen, a 150kDa membrane glycoprotein. The CD13 antigen is highly expressed mostly on myeloid-derived hematopoietic cells including granulocytes, monocytes, mast cells, and GM-progenitor cells. CD13 abundantly expresses on most of the malignant cells of myeloid origin such as AML, CML and also on smaller subset of cancer cells of lymphoid origin. Normal lymphocytes, platelets and erythrocytes do not express CD13. CD13 plays important role in metabolism of biologically active peptides, in phagocytosis, and in bactericidal/tumoricidal immune process. It also serves as a receptor for human coronaviruses (HCV).

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 pre-titrated and tested by flow cytometric analysis using human PBMCs. 5ul of this product is found sufficient for staining 1 million cells in a 100ul staining volume or 100ul of whole blood. It is recommended that antibody reactivity be empirically titrated for optimal performance in the application of interest.

About ANPEP

Alanine aminopeptidase, also known as ANPEP or CD13. is an enzyme that is used as a biomarker to detect damage to the kidneys, and that may be used to help diagnose certain kidney disorders. It is mapped to 15q26.1. Aminopeptidase N is located in the small-intestinal and renal microvillar membrane, and also in other plasma membranes. In the small intestine, Aminopeptidase N plays a role in the final digestion of peptides generated from hydrolysis of proteins by gastric and pancreatic proteases, and it is also thought to be involved in the metabolism of regulatory peptides by diverse cell types, including small intestinal and renal tubular epithelial cells, macrophages, granulocytes, and synaptic membranes from the CNS. Petrovic et al showed that CD13 was required for endothelial cell invasion in response to bradykinin. Inhibition of CD13 abrogated internalization of bradykinin receptor B2 and reduced endothelial cell motility.

Overview

Product Name	Anti-human CD13 ANPEP Monoclonal Antibody FITC Conjugated, Flow Validated
Reactive Species	Human
Description	Boster Bio Anti-human CD13 ANPEP Monoclonal Antibody FITC Conjugated, Flow Validated (Catalog# FC02591-FITC). Tested in Flow Cytometry application(s). This antibody reacts with Human.
Conjugate	FITC
Application	Flow Cytometry
Clonality	Monoclonal Clone: APN/1464

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Formulation	PBS pH 7.2, 0.2% (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	P15144

Technical Details

Immunogen	Recombinant human CD13 protein
Predicted Reactive Species	Bovine, Canine
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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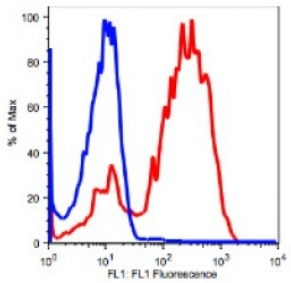
Anti-human CD13 ANPEP Monoclonal Antibody FITC Conjugated, Flow Validated (FC02591-FITC) Images



Lymphocytes gated PBMCs stained with FITC conjugated anti-human CD7 (clone 4H9, red histogram). Lymphocytes gated PBMCs stained with IgG2a FITC isotype control (blue histogram).