Datasheet for ABIN967346

anti-CD93 antibody

1 Image | 7 Publications

Go to Product page

Overview

Quantity:	0.1 mg
Target:	CD93
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CD93 antibody is un-conjugated
Application:	Western Blotting (WB), Flow Cytometry (FACS), Immunoprecipitation (IP)

Product Details

Brand:	BD Pharmingen™
Immunogen:	C1q-binding protein
Clone:	R3
Isotype:	IgM kappa
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us for technical protocols. 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Target Details

Target:	CD93
Alternative Name:	CDw93 (CD93 Products)
Background:	The immunogen used to raise R3 was C1q-binding protein preparation as described. Human C1qRp is a 631 a.a. protein (~66.5 kD) protein that is highly expressed on monocytes/macrophages, neutrophil granulocytes but not on T and B lymphocytes. C1qRp binds C1q, the recognition subunit of the first component (C1) of the complement pathway, as well as MBL (Mannose-binding-lectin) and SPA (Pulmonary Surfactant Protein A). Human C1qRp is involved in the C1q-mediated enhancement of phagocytosis. R3 is suitable to detect C1qRp expression on cells of myeloid lineage by flow cytometry, C1qRp in cellular lysates by Western blotting or immunoprecipitation. Pretreatment of monocytes with R3 neutralizes C1q-mediated enhancement of phagocytosis. In addition, when immobilized, R3 mimics C1q- MBL- or SPA-mediated enhancement of phagocytosis as reported. CDw93 (C1qRp) has been reported to define a human stem cell population with hematopoietic and hepatic potential. Synonyms: C1qRp

Application Details

Application Notes:	Immunofluorescent Staining and Flow Cytometric Analysis: The staining technique and blocking controls are described in detail by C. Prussin and D. Metcalfe. A suitable mouse IgM, kappa isotype control for assessing the level of background staining on human cells is recommended: use at comparable concentrations to antibody of interest (eg, Less or equal than 0.5 µg Ab/1 million cells) (see Figure). Western Blotting and immunoprecipitation: When run under non-reducing conditions, Human C1qRp migrates as a 100 kDa protein, due to high level of glycosylation C1qR migrates as 126 kDa under reducing conditions. The R3 antibody is suitable to detect C1qRp by Western blotting and immunprecipitation as described, however, the antibody is not tested for this application. Reactivity of the antibody with the reduced protein is dramatically decreased. Modulation of monocyte phagocytic activity: Pretreatment of monocytes with R3 neutralizes C1q-mediated enhancement of phagocytosis. In addition, when immobilized, R3 mimics C1q- MBL- or SPA-mediated enhancement of phagocytosis, however, the antibody is not tested for this application.

Application Details

Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	0.5 mg/mL
Buffer:	Aqueous buffered solution containing ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Store undiluted at 4°C.

Publications

Product cited in:

Danet, Luongo, Butler, Lu, Tenner, Simon, Bonnet: "C1qRp defines a new human stem cell population with hematopoietic and hepatic potential." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 99, Issue 16, pp. 10441-5, (2002) (PubMed).

Nepomuceno, Ruiz, Park, Tenner: "C1qRP is a heavily O-glycosylated cell surface protein involved in the regulation of phagocytic activity." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 162, Issue 6, pp. 3583-9, (1999) (PubMed).

Tenner: "C1q receptors: regulating specific functions of phagocytic cells." in: **Immunobiology**, Vol. 199, Issue 2, pp. 250-64, (1999) (PubMed).

Nepomuceno, Tenner: "C1qRP, the C1q receptor that enhances phagocytosis, is detected specifically in human cells of myeloid lineage, endothelial cells, and platelets." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 160, Issue 4, pp. 1929-35, (1998) (PubMed).

Nepomuceno, Henschen-Edman, Burgess, Tenner: "cDNA cloning and primary structure analysis of C1qR(P), the human C1q/MBL/SPA receptor that mediates enhanced phagocytosis in vitro." in: **Immunity**, Vol. 6, Issue 2, pp. 119-29, (1997) (PubMed).

There are more publications referencing this product on: Product page

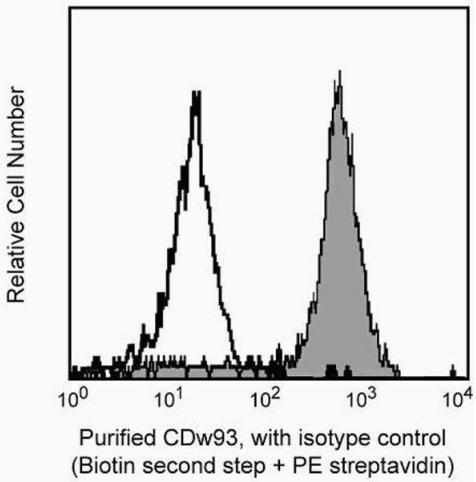

Image 1. Expression of C1qRp by unstimulated human peripheral blood mononuclear cells (PBMC). Human PBMC were stained with mouse anti-human C1qRp antibody (R3, ABIN967346) by using the staining protocol. A histogram overlay shows specific cell staining of gated monocytes with R3 (0.125 µg) followed by biotin-goat-anti-mouse secondary antibody and Streptavidin PE compared to isotype control.