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Datasheet for ABIN2749126

anti-Fc gamma RII (CD32) antibody (PE)

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Overview

Quantity:	100 tests
Target:	Fc gamma RII (CD32)
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	PE
Application:	Flow Cytometry (FACS)

Product Details

Immunogen:	purified glycosylated recombinant human FcgammaRIIa2
Clone:	3D3
Isotype:	IgG1 kappa
Specificity:	The mouse monoclonal antibody 3D3 recognizes an extracellular epitope of CD32, a 40 kDa polymorphic transmembrane glycoprotein serving as the low affinity receptor for aggregated IgG. This antibody recognizes CD32 isoforms on B cells of all donors, but on platelets, monocytes, and granulocytes of only some donors (131R variant, but not 131H variant).
Cross-Reactivity (Details):	Human
Purification:	Purified antibody is conjugated with R-phycoerythrin (PE) under optimum conditions. Unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.

Target Details

Target:	Fc gamma RII (CD32)
Alternative Name:	CD32 (CD32 Products)
Background:	Fc fragment of IgG receptor IIa,CD32 (FcgammaRII) is a low affinity receptor for aggregated IgG. It is strongly expressed on monocytes, granulocytes, myeloid and myeloblastic cell lines, and weakly on B cells, CD34+ bone marrow cells, and resting and activated platelets. After binding its ligand, CD32 induces IgG-mediated phagocytosis and oxidative burst in monocytes and neutrophils, whereas in B cells it mediates a negative signal. This polymorphic transmembrane glycoprotein is expressed not only in the activating (CD32a) and inhibitory isoform (CD32b), but also in individual variants with differing avidities for IgG subtypes (e.g. the CD32a131R and CD32a131H allotypes),FCG2, FCGR2A, IGFR2
Gene ID:	2212
UniProt:	P12318

Application Details

Application Notes:	Flow cytometry: The reagent is designed for analysis of human blood cells using 10 µL reagent / 100 µL of whole blood or 10 ⁶ cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.
Comment:	The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Restrictions:	For Research Use only

Handling

Buffer:	Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM 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 at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

Publications

Product cited in:

Os, Bürgler, Ribes, Funderud, Wang, Thompson, Tjønnfjord, Bogen, Munthe: "Chronic lymphocytic leukemia cells are activated and proliferate in response to specific T helper cells." in: **Cell reports**, Vol. 4, Issue 3, pp. 566-77, (2013) ([PubMed](#)).

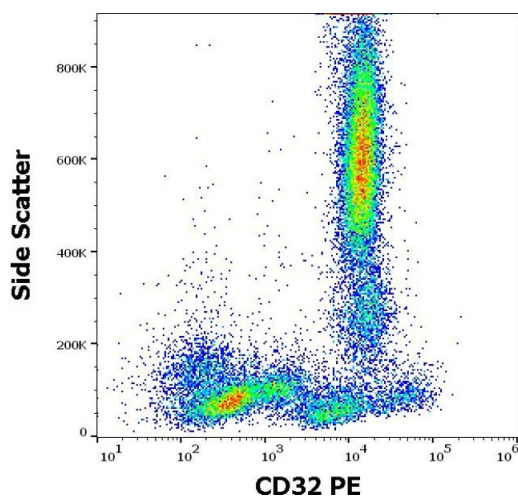
Dai, Jayapal, Tay, Reghunathan, Lin, Too, Lim, Chan, Kemeny, Floto, Smith, Melendez, MacAry: "Differential signal transduction, membrane trafficking, and immune effector functions mediated by FcγRI versus FcγRIIa." in: **Blood**, Vol. 114, Issue 2, pp. 318-27, (2009) ([PubMed](#)).

Dutertre, Bonnin-Gélizé, Pulford, Bourel, Fridman, Teillaud: "A novel subset of NK cells expressing high levels of inhibitory FcγRIIB modulating antibody-dependent function." in: **Journal of leukocyte biology**, Vol. 84, Issue 6, pp. 1511-20, (2008) ([PubMed](#)).

Boruchov, Heller, Veri, Bonvini, Ravetch, Young: "Activating and inhibitory IgG Fc receptors on human DCs mediate opposing functions." in: **The Journal of clinical investigation**, Vol. 115, Issue 10, pp. 2914-23, (2005) ([PubMed](#)).

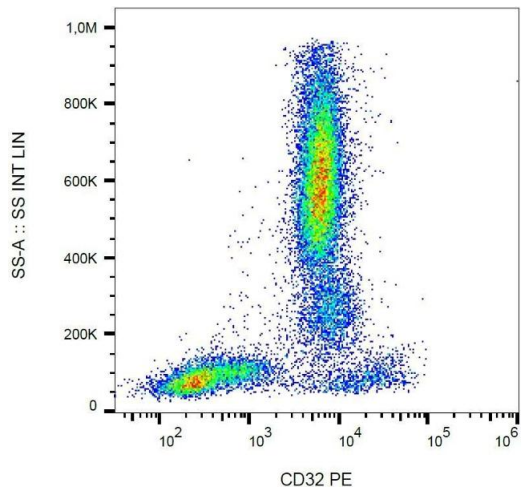
Vely, Gruel, Moncuit, Cochet, Rouard, Dare, Galon, Sautes, Fridman, Teillaud: "A new set of monoclonal antibodies against human Fc gamma RII (CD32) and Fc gamma RIII (CD16): characterization and use in various assays." in: **Hybridoma**, Vol. 16, Issue 6, pp. 519-28, (1998) ([PubMed](#)).

Images



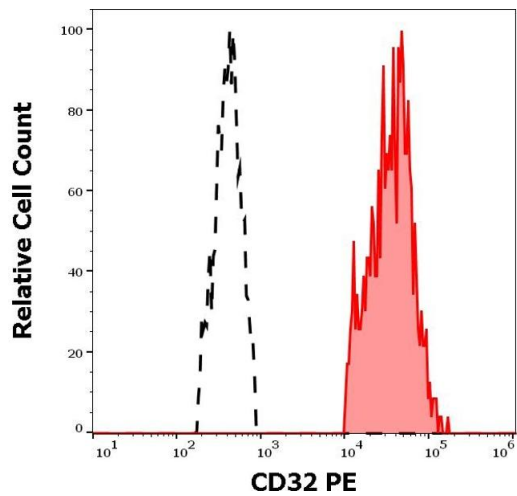
Flow Cytometry

Image 1. Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD32 (3D3) PE antibody (10 µL reagent / 100 µL of peripheral whole blood).



Flow Cytometry

Image 2. Surface staining of human peripheral blood with anti-human CD32 (3D3) PE.



Flow Cytometry

Image 3. Separation of human CD32 positive lymphocytes (red-filled) from CD32 negative lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD32 (3D3) PE antibody (10 µL reagent / 100 µL of peripheral whole blood).