



11-751-C100

## Monoclonal Antibody to CD32 Purified Antibody (0.1 mg)

Clone: 3D3

**Isotype:** Mouse IgG1

Specificity: The mouse monoclonal antibody 3D3 recognizes CD32, a 40 kDa polymorphic

transmembrane glycoprotein serving as the low affinity receptor for aggregated IgG. This antibody recognizes CD32 on B cells of all donors, but on platelets, monocytes, and granulocytes of only some donors (131R variant, but not 131H

variant).

Regulatory Status: RUO

Immunogen: purified glycosylated recombinant human FcgammaRIIa2

Species Reactivity: Human

**Application:** Flow Cytometry

Mass Cytometry

**Purity:** > 95% (by SDS-PAGE)

**Purification:** Purified by protein-A affinity chromatography

Concentration: 1 mg/ml

Storage Buffer: Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4

Storage / Stability: Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial

label.

Expiration: See vial label

Lot Number: See vial label

Background: 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).



## PRODUCT DATA SHEET

## References:

\*Vely F, Gruel N, Moncuit J, Cochet O, Rouard H, Dare S, Galon J, Sautes C, Fridman WH, Teillaud JL: A new set of monoclonal antibodies against human Fc gamma RII (CD32) and Fc gamma RIII (CD16): characterization and use in various assays. Hybridoma. 1997 Dec;16(6):519-28.

\*Boruchov AM, Heller G, Veri MC, Bonvini E, Ravetch JV, Young JW: Activating and inhibitory IgG Fc receptors on human DCs mediate opposing functions. J Clin Invest. 2005 Oct;115(10):2914-23.

\*Dutertre CA, Bonnin-Gélizé E, Pulford K, Bourel D, Fridman WH, Teillaud JL: A novel subset of NK cells expressing high levels of inhibitory FcgammaRIIB modulating antibody-dependent function. J Leukoc Biol. 2008 Dec;84(6):1511-20 \*Os A, Bürgler S, Ribes AP, Funderud A, Wang D, Thompson KM, Tjønnfjord GE, Bogen B, Munthe LA: Chronic lymphocytic leukemia cells are activated and proliferate in response to specific T helper cells. Cell Rep. 2013 Aug 15;4(3):566-77.

\*Dai X, Jayapal M, Tay HK, Reghunathan R, Lin G, Too CT, Lim YT, Chan SH, Kemeny DM, Floto RA, Smith KG, Melendez AJ, MacAry PA: Differential signal transduction, membrane trafficking, and immune effector functions mediated by FcgammaRI versus FcgammaRIIa. Blood. 2009 Jul 9;114(2):318-27.

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