

1P-751-T025

Monoclonal Antibody to CD32 Phycoerythrin (PE) conjugated (25 tests)

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

Preparation: 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.

Storage Buffer: The reagent is provided in stabilizing phosphate buffered saline (PBS) solution

containing 15mM sodium azide.

Storage / Stability: Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not

use after expiration date stamped on vial label.

Usage: The reagent is designed for Flow Cytometry analysis of human blood cells using

10 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension.

The content of a vial (0.25 ml) is sufficient for 25 tests.

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.

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*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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