TECHNICAL DATA SHEET

CyFlow™ CD32 PE
Anti-Hu; Clone 3D3

REF **AH031575**

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD32
Alternative Names	FcγRII
Clone	3D3
Clonality	monoclonal
Format	PE
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	Purified glycosylated recombinant human FcgammaRIIa2

Specificity

The mouse monoclonal antibody 3D3 recognizes CD32 antigen, a 40 kDa polymorphic transmembrane glycoprotein serving as the low affinity receptor for aggregated IgG. This antibody recognizes CD32 on

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

B cells of all donors, but on platelets, monocytes, and granulocytes of only some donors (131R variant, but not 131H variant).

Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 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.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

CD32 (FcγRII) 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).

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. < PMID: 9455704 >
- 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. < PMID: 16167082 >

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

- 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. < PMID: 18719017 >
- 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. < PMID: 19420354 >
- 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. < PMID: 23933259 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com