

TECHNICAL DATA SHEET

CyFlow™ CD64 PE-Cy7 Anti-Hu; Clone 10.1

REF CM842320

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD64
Alternative Names	FcγRI
Clone	10.1
Clonality	monoclonal
Format	PE-Cy7
Host / Isotype	Mouse / IgG1
Species Reactivity	Human, Non-Human Primates
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	Rheumatoid synovial fluid cells and fibronectin purified human monocytes

Specificity

The mouse monoclonal antibody 10.1 recognizes α subunit of CD64 antigen, a 72 kDa single chain type I glycoprotein, that is expressed on monocytes/macrophages, dendritic cells, and activated granulocytes.

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Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 4 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (0.4 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

CD64 (FcγRI) is a cell surface receptor for Fc region of IgG. It is composed of specific ligand binding α subunit and promiscuous γ subunit, which is indispensable for tyrosine-based signaling. However, even the α subunit can transduce signals leading to cellular effector functions. The isoform FcγRIa1 binds human IgG with high affinity, has limited myeloid cell distribution, and a relatively large intracellular domain. Products of related genes include FcγRIb and FcγRIc isoforms, but these specify low affinity IgG receptors if functionally expressed at all. Besides a role in antigen clearance, FcγRI (a1) can potentially enhance MHC class I and II antigen presentation in vitro and in vivo.

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

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