

TECHNICAL DATA SHEET

CyFlow™ CD64 Purified Anti-Hu; Clone 10.1

REF CV129072

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD64
Alternative Names	FcγRI
Clone	10.1
Clonality	monoclonal
Format	Purified
Host / Isotype	Mouse / IgG1
Species Reactivity	Human, Non-Human Primates
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [1 mg/ml]
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

Based on published sources, this antibody is suitable for the following applications:

- Flow cytometry
- Immunoprecipitation
- Western blot
- Immunohistochemistry
- Immunocytochemistry
- Functional assays

Storage Buffer

The reagent is provided in phosphate buffered saline (PBS) solution, pH $\approx$ 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 (Fc γ RI) 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 Fc γ RIa1 binds human IgG with high affinity, has limited myeloid cell distribution, and a relatively large intracellular domain. Products of related genes include Fc γ RIb and Fc γ RIc isoforms, but these specify low affinity IgG receptors if functionally expressed at all. Besides a role in antigen clearance, Fc γ RI (a1) can potentially enhance MHC class I and II antigen presentation in vitro and in vivo.

References

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

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